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, 2019

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 001-31922

TEMPUR SEALY INTERNATIONAL, INC.

(Exact name of registrant as specified in its charter)

Delaware

(State or other jurisdiction of incorporation or organization)

33-1022198 (I.R.S. Employer Identification No.)

1000 Tempur Way Lexington, Kentucky 40511 (Address of registrant's principal executive offices) (Zip Code) Registrant's telephone number, including area code: (800) 878-8889 Securities registered pursuant to Section 12(b) of the Act:

<u>Title of Each Class</u>	Trading Symbol(s)	Name of Each Exchange on Which Registered
Common Stock, \$0.01 par value	TPX	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. \square Yes \square No

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (229.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). \square Yes \square 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 🗖 Non-Accelerated filer 🗖 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 \Box

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

The aggregate market value of the common equity held by non-affiliates of the registrant on June 30, 2019, computed by reference to the price at which the common equity was last sold, or the average bid and asked price of such common equity, as of the last business day of the registrants most recently completed second fiscal quarter was approximately \$3,360,947,634.

The number of shares outstanding of the registrant's common stock as of February 17, 2020 was 53,863,131 shares.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant's definitive proxy statement for the 2020 Annual Meeting of Stockholders, which is to be filed subsequent to the date hereof, are incorporated by reference into Part III of this Form 10-K.

TABLE OF CONTENTS

		Page
<u>PART I.</u>		4
ITEM 1.	Business	4
ITEM 1A.	Risk Factors	10
ITEM 1B.	Unresolved Staff Comments	20
ITEM 2.	Properties	21
ITEM 3.	Legal Proceedings	21
ITEM 4.	Mine Safety Disclosures	21
<u>PART II.</u>		22
ITEM 5.	Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities	22
ITEM 6.	Selected Financial Data	25
ITEM 7.	Management's Discussion and Analysis of Financial Condition and Results of Operations	26
ITEM 7A.	Quantitative and Qualitative Disclosures About Market Risk	44
ITEM 8.	Financial Statements and Supplementary Data	44
ITEM 9.	Changes in and Disagreements with Accountants on Accounting and Financial Disclosure	101
ITEM 9A.	Controls and Procedures	101
<u>PART III.</u>		103
ITEM 10.	Directors, Executive Officers and Corporate Governance	103
ITEM 11.	Executive Compensation	103
ITEM 12.	Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters	103
ITEM 13.	Certain Relationships and Related Transactions, and Director Independence	104
ITEM 14.	Principal Accounting Fees and Services	104
PART IV.		104
ITEM 15.	Exhibits and Financial Statement Schedules	104
ITEM 16.	Form 10-K Summary	108
Signatures		108

Special Note Regarding Forward-Looking Statements

This Annual Report on Form 10-K (the "Report"), including the information incorporated by reference herein, contains "forward-looking statements" within the meaning of Section 27A of the Securities Act of 1933, as amended (the "Securities Act"), and Section 21E of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), which includes information concerning one or more of our plans; objectives; goals; strategies and other information that is not historical information. Many of these statements appear, in particular, under the heading "Management's Discussion and Analysis of Financial Condition and Results of Operations" in Part II, ITEM 7 of this Report. When used in this Report, the words "assumes," "estimates," "expects," "guidance," "anticipates," "might," "projects," "plans," "proposed," "targets," "intends," "believes," "will" and variations of such words or similar expressions are intended to identify forward-looking statements. These forward-looking statements are based upon our current expectations and beliefs and various assumptions. There can be no assurance that we will realize our expectations or that our beliefs will prove correct.

Numerous factors, many of which are beyond the Company's control, could cause actual results to differ materially from any that may be expressed herein as forward-looking statements in this Report. These risk factors include the impact of the macroeconomic environment in both the U.S. and internationally on our business segments and expectations regarding growth of the mattress industry; uncertainties arising from global events, natural disasters or pandemics; the effects of strategic investments on our operations, including our efforts to expand our global market share; the ability to develop and successfully launch new products; the efficiency and effectiveness of our advertising campaigns and other marketing programs; the ability to increase sales productivity within existing retail accounts and to further penetrate the retail channel, including the timing of opening or expanding within large retail accounts and the timing and success of product launches, and the related expenses and life cycles of such products; the ability to continuously improve and expand our product line; the ability to maintain efficient, timely and cost-effective production and delivery of products and manage growth generally and in connection with the new or expanded supply agreements with Mattress Firm, Inc., Big Lots, Inc. and Beter Bed Holding N.V.; the effects of consolidation of retailers on revenues and costs; competition in our industry; consumer acceptance of our products; general economic, financial and industry conditions, particularly conditions relating to the financial performance and related credit issues present in the retail sector; financial distress among our business partners, customers and competitors; financial solvency and related problems experienced by other market participants; the Company's ability to execute on its strategy to optimize and integrate assets of Innovative Mattress Solutions, LLC acquired by an affiliate of the Company (Sleep Outfitters); risks associated with the Company's acquisition of 80% ownership of Sherwood Acquisition Holdings, LLC, including the possibility that the expected benefits of the acquisition are not realized when expected or at all; our reliance on information technology and associated risks involving potential security lapses and/or cyber-based attacks; the outcome of pending tax audits or other tax, regulatory or investigation proceedings and pending litigation; changes in foreign tax rates and changes in tax laws generally, including the ability to utilize tax loss carryforwards; our capital structure and debt level, including our ability to meet financial obligations and continue to comply with the terms and financial ratio covenants of our credit facilities; changes in interest rates; effects of changes in foreign exchange rates on our reported earnings; changing commodity costs; disruptions in the supply of raw materials, or loss of suppliers; expectations regarding our target leverage and our share repurchase program; sales fluctuations due to seasonality; the effect of future legislative or regulatory changes, including changes in international trade duties, tariffs and other aspects of international trade policy; our ability to protect our intellectual property; and disruptions to the implementation of our strategic priorities and business plan caused by changes in our executive management team.

Other potential risk factors include the risk factors discussed under the heading "Risk Factors" under Part I, ITEM 1A of this Report. There may be other factors that may cause our actual results to differ materially from the forward-looking statements.

All forward-looking statements attributable to us apply only as of the date of this Report and are expressly qualified in their entirety by the cautionary statements included in this Report. Except as may be required by law, we undertake no obligation to publicly update or revise any of the forward-looking statements, whether as a result of new information, future events, or otherwise.

When used in this Report, except as specifically noted otherwise, the term "Tempur Sealy International" refers to Tempur Sealy International, Inc. only, and the terms "Tempur Sealy," "Company," "we," "our," "ours" and "us" refer to Tempur Sealy International, Inc. and its consolidated subsidiaries. When used in this Report, the term "Tempur" may refer to Tempur-branded products and the term "Sealy" may refer to Sealy-branded products or to Sealy Corporation and its historical subsidiaries, in all cases as the context requires. In addition, when used in this Report, "2019 Credit Agreement" refers to the Company's senior credit facility entered into in 2019; "2016 Credit Agreement" refers to the Company's prior senior credit facility entered into in 2019; "2016 Credit Agreement" refers to the Company's prior senior credit facility entered into in 2012; "2023 Senior Notes" refers to the 5.625% senior notes due 2023 issued in 2015; "2026 Senior Notes" refers to the 5.50% senior notes due 2026 issued in 2016; and "2020 Senior Notes" refers to the 6.875% senior notes due 2020 retired in 2016.

PART I

ITEM 1. BUSINESS

General

We are a vertically integrated global bedding company that develops, manufactures and markets bedding products. Tempur Sealy's stated purpose is "to improve the sleep of more people, every night, all around the world." This commitment manifests itself in everything we do, including a company-wide decision to undertake global efforts to improve our communities and environment. To that end, we have enlisted the same innovative spirit that has guided our world-class bedding business to the top of the industry in our drive to achieve industry-leading sustainability and environmental initiatives.

Our long-term strategy is to drive earnings growth with high return on invested capital and robust free cash flow, which is a non-GAAP financial measure. In order to achieve our long-term strategy while managing the current economic and competitive environments, we focus on developing the most innovative bedding products in all the markets we serve, making significant investments in our iconic global brands and optimizing our worldwide omni-channel distribution. We also intend to generate earnings growth through ongoing investments in research and development and productivity initiatives, which will improve our profitability and create long-term stockholder value.

Tempur Sealy has strong brands across a portfolio of bedding products serving all price points. Our powerful distribution model operates through an omni-channel strategy across both wholesale and direct, with both channels growing worldwide. We have a global manufacturing footprint with approximately 7,400 employees around the world. Tempur Sealy has a strong competitive presence in the bedding marketplace with a leadership position that comes from product and service quality, culture, strategy, and people, backed with financial strength and a disciplined approach to returning value to shareholders.

Our principal executive office is located at 1000 Tempur Way, Lexington, Kentucky 40511 and our telephone number is (800) 878-8889. Tempur Sealy International, Inc. was incorporated under the laws of the State of Delaware in September 2002. Our Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and any amendments to such reports filed with or furnished to the Securities and Exchange Commission ("SEC") pursuant to Sections 13(a) or 15(d) of the Exchange Act, are available free of charge on our website at <u>www.tempursealy.com</u> as soon as reasonably practicable after such reports are electronically filed with the SEC. Our website and its contents are not deemed incorporated by reference into this Report.

The SEC also maintains a website that contains reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC. The website of the SEC is <u>www.sec.gov.</u>

Our Products and Brands

We have a comprehensive offering of products that appeal to a broad range of consumers, some of which are covered by one or more patents and/or patent applications. We also routinely introduce new mattress models, launch new products and update our existing mattress products in each of our segments.

In order to achieve our goal to improve the sleep of more people, every night, all around the world, one of our strategic initiatives is to leverage and strengthen our comprehensive portfolio of iconic brands and products. Our portfolio of product brands includes many highly recognized brands, including Tempur®, Tempur-Pedic®, Sealy® featuring Posturepedic® Technology, Stearns & Foster® and Comfort Revolution®, which are described below:

Tempur-Pedic® - Founded in 1991, the Tempur brand is our specialty innovation category leader designed to provide life changing sleep for our wellness-seeking consumers. Our proprietary Tempur material precisely adapts to the shape, weight and temperature of the consumer and creates fewer pressure points, reduces motion transfer and provides personalized comfort and support. Tempur-Pedic was awarded #1 in Customer Satisfaction for the retail mattress segment in the J.D. Power 2019 Mattress Satisfaction Report. In addition to earning the highest score for overall customer satisfaction, Tempur-Pedic was ranked highest for support, durability, comfort, value, warranty, and contact with customer service.

- Stearns & Foster® The Stearns & Foster brand offers our consumers high quality mattresses built by certified craftsmen who have been specially trained. Founded in 1846, the brand is designed and built with precise engineering and relentless attention to detail and fuses new innovative technologies with time-honored techniques, creating supremely comfortable beds.
- Sealy® featuring Posturepedic® Technology The Sealy brand originated in 1881 in Sealy, Texas, and for over a century has focused on offering trusted comfort, durability and excellent value while maintaining contemporary styles and great support. The Sealy Posturepedic brand, introduced in 1950, was engineered to provide all-over support and body alignment to allow full relaxation and deliver a comfortable night's sleep. In 2017, we united all of our Sealy products under one masterbrand, which features the Posturepedic Technology™ in the Sealy Performance™, Sealy Posturepedic Plus and Sealy Premium™ collections.
- *Cocoon by SealyTM* The Cocoon by Sealy brand, introduced in 2016, is our offering in the below \$1,000 e-commerce space, made with the high quality materials that consumers expect from Sealy, sold online at www.cocoonbysealy.com and delivered in a box directly to consumers' doorsteps.
- *Comfort Revolution*® Comfort Revolution originated in 1986 in West Long Beach, New Jersey. The brand develops, produces, markets and distributes foam and gel bedding products, which we sell through both our Wholesale and Direct channels.

Our portfolio of retail brands includes Tempur-Pedic® retail stores, Sleep Outfitters®, Sleep Solutions OutletTM, SOVA and a variety of other retail brands internationally, which operate in various countries. The retail brands named above are described below:

- *Tempur-Pedic*® *retail stores* Tempur-Pedic® retail stores are designed for the approximately 20% of U.S. consumers, based on our research, that prefer to purchase directly from the manufacturer, and for those seeking a more personalized and educational sales experience. These retail boutiques are strategically located in high traffic, premium retail centers with customer demographics that closely align to the Tempur-Pedic customer profile. As of December 31, 2019 we had 56 retail stores. We expect to open approximately 20 stores in 2020.
- Sleep Outfitters® Sleep Outfitters is a regional bedding retailer with 97 stores across five states in the U.S. Sleep Outfitters is a specialty mattress retailer that serves consumers across all price points with its extensive selection of Tempur-Pedic®, Sealy® and Stearns & Foster® products.
- *Sleep Solutions Outlet*TM Sleep Solutions Outlet stores serve as a channel of high quality comfort returns, as well as discontinued or factory close-out mattresses and bases. There are a limited number of stores across the U.S. that sell these products, which reduces our disposal costs, and helps reduce the volume of products disposed of via landfill, thereby favorably impacting the environment.
- *SOVA* SOVA is a highly respected and well established premium bedding chain in Sweden. Our stores are connected to the urban areas of Stockholm, Gothenburg and Malmoe. The assortment primarily focuses on premium to super premium brands and well trained sales staff targeting to sell quality beds with a very high average selling price.

In addition to our highly recognized product and retail brands, in January 2020 we acquired a majority ownership in Sherwood Acquisition Holdings, LLC ("Sherwood Bedding"), a major manufacturer in the U.S. private label and original equipment manufacturer ("OEM") bedding market. Sherwood Bedding operates four domestic manufacturing facilities and is a Top 10 U.S. bedding producer. With our majority ownership in Sherwood Bedding, we have a complete suite of product offerings, from Sherwood Bedding's non-branded private label products to our well-known branded products from Tempur-Pedic, Stearns & Foster, Sealy featuring Posturepedic Technology and Cocoon by Sealy.

In 2019, we launched the all-new Tempur-Breeze® products as well as a new Stearns & Foster lineup in North America. The new Breeze line includes ProBreezeTM and LuxeBreezeTM models offering the most innovative cooling system in the market, re-designed to deliver all night cooling comfort. The new Breeze products complete the largest Tempur rollout in our history. The new Stearns & Foster design utilizes the finest materials and legendary craftsmanship, featuring a premium, timeless look. Our all new IntelliCoil® HD innerspring incorporates 20% more coils, allowing sleepers to find their perfect level of support. This lineup, also features for the first time, the proprietary memory foam engineered exclusively for Stearns & Foster by Tempur-Pedic.

In 2020, we are completing the national launch of the innovative Tempur-Ergo® Smart Base Collection with Sleeptracker® technology and we are launching the all-new Sealy Posturepedic Plus mattress lineup. The smart base collection is our solution for those that want to improve their health and wellness by sleeping more soundly. The Tempur-Ergo Smart Base with Sleeptracker® technology is a completely integrated sleep system that features automatic snore detection and response, personalized sleep analytics and coaching and smart home connectivity and voice control. The new Sealy Posturepedic Plus mattress line features the impressive all-new Posturepedic Plus technology which offers improved comfort, best-in-class cooling capabilities and increased support.

Omni-Channel Distribution

Our primary selling channels are Wholesale and Direct. These channels align to the margin characteristics of our business and our marketplace.

One of Tempur Sealy's long-term initiatives is to be wherever the consumer wants to shop and our wholesale business strategy brings this key business initiative to life by growing our share with existing customers, gaining new business and expanding into new channels of distribution. In 2018, we focused on growing our relationships with existing third-party retailers. The resulting growth has been broad-based, spanning multiple channels of bedding retail including furniture, big-box, specialty and online-only. Our Wholesale channel includes all third party retailers, including third party distribution, hospitality and healthcare, and represented 87.5% of net sales in 2019. We have also identified new business opportunities. In 2019, we announced three new or expanded third-party retail relationships in the U.S. and Europe. This resulted in the largest expansion of stores in our history.

In 2019, we entered into a supply agreement with Mattress Firm, Inc. ("Mattress Firm"), the largest specialty mattress retailer in North America, to reintroduce Tempur-Pedic, Stearns & Foster, and Sealy branded products into approximately 2,500 Mattress Firm stores across the U.S. This agreement reunites some of the strongest bedding brands with more than three million people a year that find their right sleep solution at Mattress Firm. The reintroduction of products into Mattress Firm stores commenced in the fourth quarter of 2019 and is expected to be completed early in the first quarter of 2020.

In 2019, we also announced the recent expansion of our long-term supply agreement with Big Lots, Inc. ("Big Lots"), a 1,400-store retailer in the U.S. This agreement is expected to grow the sales of entry-level Sealy products and to drive unit volume, primarily in the below \$1,000 retail price point. Our launch of Sealy products with Big Lots was completed in 2019.

We also recently extended our European retail distribution network by reaching a supply agreement with Beter Bed Holding, one of Europe's leading bedding retailers. The launch of new products with Beter Bed Holding was completed in 2019 in over 100 stores.

In addition, in 2020 we are expanding our Direct channel to strengthen our distribution footprint to provide alternatives to allow the customer to shop on their preferred terms - whether online, in company-owned stores or through our thousands of third-party retailers. Our Direct channel includes company-owned stores, e-commerce and call centers and represented 12.5% of net sales in 2019. The Direct channel growth rate has surpassed the Wholesale growth rate over the last few years, and we anticipate the Direct channel to continue to grow as a percentage of net sales in future years.

For consumers that prefer to purchase directly from the manufacturer (our research indicates approximately 20%), and for those seeking a more personalized and educational sales experience, we appeal to this consumer through our Tempur-Pedic retail stores. As of December 31, 2019 we had 56 stores throughout the U.S. that provide a low-pressure environment to explore the comprehensive line up of our Tempur-Pedic products. Our retail boutiques are strategically located in high traffic, premium retail centers with customer demographics that closely align to the Tempur-Pedic customer profile. Each showroom features knowledgeable, non-commissioned Brand Ambassadors who educate potential customers on Tempur-Pedic products in a relaxed, comfortable environment.

Going forward, our strategy for opening additional locations of Tempur-Pedic retail stores will remain consistent with our previous expansion approach. We plan to open approximately 20 Tempur-Pedic retail stores in 2020.

In addition to our high-end Tempur-Pedic retail stores, we operate Sleep Outfitters, a regional bedding retailer that had 97 stores across Kentucky, Tennessee, Ohio, West Virginia and Alabama in 2019. Sleep Outfitters is a specialty mattress retailer that serves consumers across all price points with its extensive selection of Tempur-Pedic®, Sealy® and Stearns & Foster® products.

Our third-party retailers, Tempur-Pedic and Sleep Outfitters retail stores reach the vast majority of consumers who still prefer to touch and feel a mattress and speak to a retail sales associate, prior to making a purchase decision. However, our consumer insights also demonstrate that there is a growing segment of the population that prefers to purchase products online and, to a lesser degree, via a call center. As such, having an omni-channel presence is more important than ever, with most customers completing research and shopping both online and in-stores before making their purchase decision.

For customers that prefer the convenience of making purchases online and having their bedding products delivered right to their front door, we have evolved our distribution model to include multiple online options to reach those that want to purchase our products without the need to go into a brick-and-mortar store.

Tempur Sealy's Direct channel expansion has evolved over the past two years, increasing our presence to be within reach of consumers no matter how they choose to shop. Our expanded direct channel distribution complements our wholesale business, and we believe this balanced approach enhances the overall sales potential and profitability of Tempur Sealy.

Marketing

Our overall marketing strategy is to drive consumer demand through the use of effective marketing. We invest across multiple media platforms to build brand awareness and drive consumer interest in our products. The majority of our advertising programs are created on a centralized basis through our in-house advertising organization. We plan to drive net sales through continued investments in new products, marketing and other initiatives.

We advertise nationally on television, digitally and through consumer and trade print. In addition, we participate in cooperative advertising on a shared basis with some of our retail customers. Throughout the year, we invested in a series of strategic marketing initiatives, which included new product introductions, advertising and in-store marketing investments.

Seasonality

We believe that sales of products to furniture and bedding stores are typically subject to modest seasonality inherent in the bedding industry, with sales expected to be generally lower in the second and fourth quarters. Sales in a particular quarter can also be impacted by competitive industry dynamics. Additionally, the U.S. bedding industry generally experiences increases in sales around holidays and promotional periods.

Operations

Manufacturing and Distribution

Our products are currently manufactured and distributed through our global network of facilities. For a list of our principal manufacturing and distribution facilities, please refer to ITEM 2, "Properties".

Suppliers

We obtain the raw materials used to produce our pressure-relieving Tempur® material and components used in the manufacture of Tempur products from outside sources. We currently acquire chemicals and proprietary additives for Tempur products as well as other components such as textiles from a number of suppliers with manufacturing locations around the world. These supplier relationships may be modified in order to maintain quality, cost, and delivery expectations. We do not consider ourselves dependent upon any single outside vendor as a source of raw materials for Tempur products and believe that sufficient alternate sources of supply for the same or similar raw materials are available. Additionally, we source our adjustable bed bases and foundations from third party manufacturers. We do not consider ourselves dependent upon any single outside manufacturers as a source of these products.

Sealy product raw materials consist mainly of polyethylene foam, textiles and steel innerspring components that we purchase from various suppliers. In the U.S. and Canada, we source the majority of our requirements for polyurethane foam components and spring components for our Sealy and Stearns & Foster mattress units and adjustable bed bases from a key supplier for each component. We also purchase a significant portion of our Sealy foundation parts from third party sources. All critical components are purchased under supply agreements. We do not consider ourselves to be dependent in the long term upon any single outside vendor as a source of supply to our bedding business, and we believe over time that sufficient alternate sources of supply for the same, similar or alternate components are available. However, if a key supplier for an applicable component failed to supply components in the amount we require, this could significantly interrupt production of our products and increase our production costs in the near term.

Research and Development

We have four research and development centers, three in the U.S. and one in Denmark, that conduct technology and product development. Additionally, we have a product testing facility that conducts hundred of consumer tests annually. We believe our consumer-research driven approach to innovation results in best-in-class products that benefit the consumer.

Industry and Competition

We compete in the global bedding industry. The bedding industry is comprised of mattresses and foundations, pillows and accessories. The mattress market category is comprised of traditional innerspring mattresses and non-innerspring mattresses, which includes visco-elastic and foam mattresses, innerspring/foam hybrid mattresses, airbeds and latex mattresses. The foundation category is comprised of traditional foundations and adjustable foundations. Additionally, the pillow market is comprised of traditional foam and feather pillows, as well as pillows made of visco-elastic, latex, foam, sponge, rubber and down. The primary distribution channels for mattresses and foundations are retail furniture and bedding stores, department stores, wholesale clubs and the internet.

We operate in two segments: North America and International. Corporate operating expenses are not included in either of the segments and are presented separately as a reconciling item to consolidated results. These segments are strategic business units that are managed separately based on geography. Our North America segment consists of Tempur and Sealy manufacturing and distribution subsidiaries and licensees located in the U.S. and Canada. Our International segment consists of Tempur and Sealy manufacturing and distribution subsidiaries, joint ventures and licensees located in Europe, Asia-Pacific and Latin America.

We encounter competition from a number of bedding manufacturers in both the highly concentrated domestic and highly fragmented international markets. Participants in each of these markets compete primarily on price, quality, brand name recognition, product availability and product performance. Mattress and pillow manufacturers and retailers are seeking to increase their channels of distribution and are looking for new ways to reach the consumer, including the recent expansion in the number of U.S. and international companies pursuing online direct-to-consumer models for foam mattresses. In addition, retailers in both the U.S. and internationally are increasingly seeking to integrate vertically in the furniture and bedding industries, including by offering their own brands of mattresses and pillows.

Entry-level bedding imports from China significantly increased during 2018 and are competing against our value priced Sealy products in the U.S. market. We believe these imports are being sold below cost. In September 2018, we and other industry participants filed petitions with the U.S. International Trade Commission and the U.S. Department of Commerce, alleging that many of these Chinese imports are being dumped into the U.S. market at prices below cost. As a result of these petitions, the U.S. International Trade Commission and the U.S. Department of Commerce, alleging that many of these Chinese imports are being dumped into the U.S. market at prices below cost. As a result of these petitions, the U.S. International Trade Commission and the U.S. Department of Commerce in October 2019, imposing a range of tariffs on these imports from 57% to 1,731%, subject to an affirmative determination by the U.S. International Trade Commission. On December 9, 2019, the U.S. International Trade Commission affirmatively determined that the imports of mattresses from China materially injured an industry in the U.S. Overall, we view the outcome of the case as a positive to the industry as it puts the domestic manufacturers on the same level as the Chinese imports. However, low-priced imports into the U.S. from other countries in Asia have risen dramatically during the progression of the case. Nevertheless, we believe our focus on internal initiatives to deliver the highest quality product and highest levels of manufacturing reliability and customer service continue to be the reason that existing retailers lean into our portfolio of products.

The international market is served by a large number of manufacturers, primarily operating on a regional and local basis. These manufacturers offer a broad range of mattress and pillow products.

The highly competitive nature of the mattress and pillow industries means we are continually subject to the risk of loss of market share, loss of significant customers, reductions in margins, and the inability to acquire new customers.

Intellectual Property

Patents, Trademarks and Licensing

We hold U.S. and foreign patents and patent applications regarding certain elements of the design and function of many of our mattress and pillow products.

As of December 31, 2019, we held trademark registrations worldwide, which we believe have significant value and are important to the marketing of our products to retailers. Tempur® and Tempur-Pedic® are trademarks registered with the U.S. Patent and Trademark Office. In addition, we have U.S. applications pending for additional trademarks. Several of our trademarks have been registered, or are the subject of pending applications, in various foreign countries. Each U.S. trademark registration is renewable indefinitely as long as the trademark remains in use. We also own numerous trademarks, trade names, service marks, logos and design marks, including Sealy®, Stearns & Foster® and Sealy Posturepedic®. In addition, we license the Bassett® trade name in various territories under a long-term agreement.

We derive income from royalties by licensing Sealy® brands, technology and trademarks to other manufacturers. Under the license arrangements, licensees have the right to use certain trademarks and current proprietary and/or patented technology that we utilize. We also provide our licensees with product specifications, research and development, statistical services and marketing programs. For the year ended December 31, 2019, our licensing activities as a whole generated unaffiliated net royalties of approximately \$22.6 million.

Governmental Regulation

Our operations are subject to international, federal, state, and local consumer protection and other regulations, primarily relating to the mattress and pillow industry. These regulations vary among the states, countries, and localities in which we do business. The regulations generally impose requirements as to the proper labeling of bedding merchandise, restrictions regarding the identification of merchandise as "new" or otherwise, controls as to hygiene and other aspects of product handling and sale and penalties for violations. The U.S. Consumer Product Safety Commission ("CPSC") has adopted rules relating to fire retardancy standards for the mattress industry. Many foreign jurisdictions also regulate fire retardancy standards. Future changes to these standards may require modifications to our products to comply with such changes. We are also subject to environmental and health and safety requirements with regard to the manufacture of our products and the conduct of our operations and facilities. We have made and will continue to make capital and other expenditures necessary to comply with these requirements. Currently these expenditures are immaterial to our financial results. For a discussion of the risks associated with our compliance programs in connection with these regulations, please refer to "Risk Factors" under Part I, Item 1A of this Report.

Our principal waste products are foam and fabric scraps, wood, cardboard and other non-hazardous materials derived from product component supplies and packaging. We also periodically dispose of small amounts of used machine lubricating oil and air compressor waste oil, primarily by recycling. In the U.S., we are subject to federal, state and local laws and regulations relating to environmental health and safety, including the Federal Water Pollution Control Act and the Comprehensive Environmental Response, Compensation and Liability Act. We believe that we are in compliance with all applicable international, federal, state and local environmental statutes and regulations. We do not expect that compliance with international, federal, state or local provisions that have been enacted or adopted regulating the discharge of materials into the environment, or otherwise relating to the protection of the environment, will have a material effect upon our capital expenditures, earnings or competitive position. We are not aware of any pending federal environmental legislation that would have a material impact on our operations, and have not been required to make, and do not expect to make, any material capital expenditures for environmental control facilities in the foreseeable future.

In connection with sales of our products, we often collect and process personal data from our customers. As such, we are subject to certain regulations relating to information technology security and personal data protection and privacy. For example, in 2018, the European Union adopted the General Data Protection Regulation ("GDPR"), which took effect in May 2018. The GDPR imposed a new and expanded set of ongoing compliance requirements on companies, including us, that process personal data from citizens living in the European Union ("EU"). In addition, there are country-specific data privacy laws in Europe which tend to follow the principles laid out in the GDPR, but in some cases, impose additional requirements on data controllers. In addition, several U.S. states have recently introduced legislation that mirror some of the protections provided by the GDPR. California's Consumer Privacy Act ("CCPA") came into effect on January 1, 2020 and granted consumers in California certain rights related to the access to, deletion of, and sharing of their personal information that is collected by businesses, including us.

We have implemented a global compliance system and have put reasonable measures in place to facilitate adherence to the continuing compliance requirements of data privacy laws such as the GDPR and CCPA.

Employees

As of December 31, 2019, we had approximately 7,400 Tempur Sealy employees, approximately 5,400 of which are located in North America and 2,000 in the rest of the world. We increased headcount in 2019 to handle our unit volume increases. Approximately 28.0% of our employees are represented by various labor unions with separate collective bargaining agreements. Due to the large number of collective bargaining agreements, we are periodically in negotiations with certain of the unions representing our employees. We consider our overall relations with our workforce to be satisfactory. Our current collective bargaining agreements, which are typically one to three years in length, expire at various times beginning in 2020 through 2022. As of December 31, 2019, our North America segment employed approximately 400 individuals covered under collective bargaining agreements expiring in 2020 and our International segment employed approximately 400 individuals covered under collective bargaining agreements expiring in 2020.

ITEM 1A. RISK FACTORS

The following risk factors and other information included in this Report should be carefully considered. Please also see "Special Note Regarding Forward-Looking Statements" on page 3.

Set forth below are descriptions of certain risks relating to our business.

Unfavorable economic and market conditions could reduce our sales and profitability and as a result, our operating results may be adversely affected.

Our business is affected by general business and economic conditions, and these conditions could have an impact on future demand for our products. The global economy has stabilized somewhat since the financial crisis, but we expect economic conditions specific to our markets to remain challenging. Further, economic and market conditions are inherently complex and subject to change, and any deterioration in those conditions may give households less confidence to make discretionary purchases.

There could be a number of other effects from these economic developments on our business, some of which we have already experienced, including reduced consumer demand for products; liquidity problems among our customers and related market participants; insolvency of and bankruptcy filings by our customers and related market participants resulting in increased provisions for credit losses and/or write downs of existing assets; liquidity problems and/or insolvency of our key suppliers resulting in product delays; inability of retailers and consumers to obtain credit to finance purchases of our products; decreased consumer confidence; decreased retail demand, including order delays or cancellations; counterparty failures negatively impacting our treasury operations; inability for us, our customers and our suppliers to accurately forecast future product demand trends; and adverse movements in foreign currency exchange rates. If such conditions are experienced in future periods, our industry, business and results of operations may be severely impacted.

Our sales growth is dependent upon our ability to implement strategic initiatives and actions taken to increase sales growth may not be effective.

Our ability to generate sales growth is dependent upon a number of factors, including the following:

- our ability to continuously improve our products to offer new and enhanced consumer benefits and better quality;
- the ability of our current and future product launches to increase net sales;
- the effectiveness of our advertising campaigns and other marketing programs to build product and brand awareness, driving traffic to our distribution channels and increasing sales;
- our ability to continue to expand into new distribution channels and optimize our existing channels;
- our ability to continue to successfully execute our strategic initiatives;
- our ability to manage growth and limit cannibalization associated with new or expanded supply agreements;
- the level of consumer acceptance of our products at optimal price points;
- our ability to successfully mitigate the impact of headwinds facing our business, including increased commodity prices and the influx of low-end, imported beds that compete with certain of our products;
- our ability to successfully integrate potential acquisition opportunities; and
- general economic factors that impact consumer confidence, disposable income or the availability of consumer financing.

Our new product launches may not be successful due to development delays, failure of new products to achieve anticipated levels of market acceptance and significant costs associated with failed product introductions, which could adversely affect our revenues and profitability.

Each year we invest significant time and resources in research and development to improve our product offerings and launch new products. In 2019, we launched several new products including Tempur-Breeze®, new Stearns & Foster product lines and new compressed bedding products. There are a number of risks that are inherent in our new product line introductions, including that the anticipated level of market acceptance may not be realized, which could negatively impact our sales. Further, introduction costs, the speed of the rollout of the product and manufacturing inefficiencies may be greater than anticipated, each of which could impact profitability.

We operate in a highly competitive industry and if we are unable to compete successfully, we may lose customers and our sales may decline.

Participants in the mattress and pillow industries compete primarily on price, quality, brand name recognition, product availability and product performance across a range of distribution channels.

A number of our significant competitors offer mattress and pillow products that compete directly with our products. The effectiveness of our competition relative to our performance, including by established manufacturers or new entrants into the market, could have a material adverse effect on our business, financial condition and/or operating results. For example, market participants continue to improve their channels of distribution to optimize their reach to the consumer, including by pursuing online direct-to-consumer models for foam mattresses and offering their own lines of mattresses. In addition, retailers in the U.S. and internationally have integrated vertically in the furniture and bedding industries, and it is possible that such vertical integration may provide conditions that would negatively impact our net sales and results of operations. The pillow industry in particular is characterized by a large number of competitors, none of which is dominant. As such, conditions that substantially increase a single participant's market share would likely be detrimental to our financial performance. The highly competitive nature of the mattress and pillow industries means we are continually subject to the risk of loss of market share, loss of significant customers, reductions in margins, and the inability to acquire new customers.

Because we depend on certain significant customers, a decrease or interruption in their business with us would reduce our sales and results of operations.

No customer represented 10.0% or more of our net sales for 2019.

The credit environment in which our customers operate has been relatively stable over the past few years. However, there have been signs of deterioration in the U.S. retail sector, both nationally and regionally. Regional retail customers in the U.S. continue to file for bankruptcy protection. We expect that some additional retailers that carry our products may consolidate, undergo restructurings or reorganizations, experience financial difficulty, or realign their affiliations, any of which could decrease the number of stores that carry our products or increase the ownership concentration in the retail industry. An increase in the concentration of our sales to large customers may negatively affect our profitability due to the impact of volume and other incentive programs related to these customers. Furthermore, if sales to our large customers grow, our credit exposure to these customers may also increase. Some of these retailers may decide to carry only a limited number of brands of mattress products, which could affect our ability to sell products to them on favorable terms, if at all. A substantial decrease or interruption in business from these significant customers could result in the loss of future business and could reduce revenue, liquidity and profitability. In addition, the timing of large purchases by these customers could have an increasingly significant impact on our quarterly net sales and earnings.

We rely significantly on information technology and any failure, inadequacy, interruption or security lapse of that technology, including cyber-based attacks, could harm our ability to effectively operate our business.

Consistent with other manufacturing and retail operations, we are increasingly dependent on information technology, including the Internet, for the storage, processing, and transmission of our electronic, business-related information assets. We leverage our internal information technology, infrastructures, and those of our service providers, to enable, sustain and support our global business interests. As such, our ability to effectively manage our business depends significantly on our information systems. The failure of our current systems, or future upgrades, to operate effectively or to integrate with other systems, or a breach in security of these systems could cause reduced efficiency of our operations, and remediation of any such failure, problem or breach could reduce our liquidity and profitability. Any disruptions caused by the failure of these systems could adversely impact our day-to-day business and decision making and could have a material adverse effect on our performance.

We are subject to laws and regulations relating to information technology security and personal data protection and privacy. For example, the GDPR, which took effect in May 2018, and the CCPA, which took effect in January 2020, have imposed new and expanded compliance requirements on companies, including us, that process personal data from citizens living in the EU and California. In addition, there are country-specific data privacy laws in Europe and elsewhere in the world, and state-specific data privacy laws forthcoming in the U.S., which broadly follow the principles laid out in the GDPR and the CCPA, but in some cases, impose additional requirements on businesses like ours. We are actively working to ensure ongoing compliance with all data privacy regulations to which we are subject, which involves substantial costs. Despite our ongoing efforts to bring our practices into compliance with the GDPR and the CCPA, we may not be successful due to various factors within or outside of our control. Failure to comply with GDPR, CCPA, country-specific or U.S. state-specific laws could result in costly investigations and litigation, expose us to potentially significant penalties, and result in negative publicity that could damage our reputation and credibility.

Historically, we have successfully implemented a new enterprise resource planning, or "ERP," system across several of our global subsidiaries. We are currently implementing the new ERP in certain significant U.S. subsidiaries with key go-live dates in 2020 and 2021. This new system replaces a substantial portion of our legacy systems that have supported our operations in the past. If we are unable to successfully continue the implementation of the replacement system, it could lead to a disruption in our business and unanticipated additional use of capital and other resources, which may adversely impact our results of operations. In addition, if the cost of implementing this ERP system increases above our estimates, this could have a significant adverse effect on our profitability.

We rely on third party technology service providers in the ordinary course of our Direct channel. The services provided include website infrastructure and hosting services, digital advertising platforms, private label credit card financing program and credit card payment authorization and capture services in support of our business, all of which are customarily provided by third party technology service providers for similarly-situated retail business operations. Like others in the industry, we experience cyber-based attacks and incidents from time to time. In the event that we or our service providers are unable to prevent or detect and remediate cyber-based attacks or other security incidents in a timely manner, our operations could be disrupted or we may incur financial or reputational losses arising from the theft, misuse, unauthorized disclosure or destruction of our information assets.

We entered into the Advance Pricing Agreement Program to resolve a tax matter in Denmark, and a failure to resolve the matter or a change in factors or circumstances could adversely impact our income tax expense, effective tax rate and cash flows.

In the third quarter of 2018, we entered into the Advance Pricing Agreement Program (the "APA Program") for the tax years 2012 through 2022. In the APA Program the U.S. Internal Revenue Service ("IRS"), on our behalf, will negotiate directly with the Danish Tax Authority ("SKAT") with respect to the royalty to be paid by a U.S. subsidiary of the Company to the Company's Danish subsidiary for the right to utilize certain intangible assets owned by the Danish subsidiary. The objective of the APA Program is for the two tax authorities to reach a mutual agreement regarding the royalty to be paid for such years. We expect the outcome of the APA Program to result in an increase in the royalty resulting in additional taxable income in Denmark for the Danish subsidiary and a decrease in U.S. taxable income for the U.S. subsidiary. As it relates to the Danish tax position, we have accrued Danish tax and interest for this matter as an uncertain income tax position. Conversely, as it relates to the U.S. position we have recorded a deferred tax asset for the associated correlative U.S. tax benefit. However, if this matter is not resolved successfully or there is a change in facts or circumstances, we may be required to further increase our uncertain income tax provision or decrease our deferred tax asset related to this matter, which could have a material impact on the Company's reported earnings. For a description of these matters and additional information please refer to Note 15, "Income Taxes," to the accompanying Consolidated Financial Statements.

Changes in tax laws and regulations or other factors could cause our income tax rate to increase, potentially reducing net income and adversely affecting cash flows, and fluctuations in our tax obligations and effective tax rate may result in volatility of our financial results and stock price.

We are subject to taxation in various jurisdictions around the world and at any one time multiple tax years are subject to audit by various taxing jurisdictions. In preparing financial statements, we calculate our annual effective income tax rate based on current tax laws and regulations and the estimated taxable income within each of these jurisdictions. Our effective income tax rate, however, may be higher due to numerous factors, including, but not limited to, changes in accounting methods or policies, tax laws or regulations, the tax litigation environment in each such jurisdiction, and the outcome of pending or future audits, whether the result of litigation or negotiations with taxing authorities. Each such item may result in a tax liability that differs from our original estimate. An effective income tax rate that is significantly higher than currently anticipated could have an adverse effect on our net income and cash flows. In addition, there could be ongoing variability in our quarterly tax rates as events occur and exposures are evaluated, which could adversely affect our quarterly results of operations and stock price.

Additionally, the global tax environment is becoming more complex, with government tax authorities becoming increasingly more aggressive in asserting claims for taxes. Any resulting changes in tax laws or regulations could increase our effective income tax rate or impose new restrictions, costs or prohibitions on our current practices and reduce our net income and adversely affect our cash flows.

In addition to the increased activity of taxing authorities with respect to income tax, taxing authorities are also becoming more aggressive in asserting claims for indirect taxes such as import duties and value added tax. These types of claims present risks and uncertainties similar to those discussed above. We believe we are in compliance with all tax laws and regulations that govern such indirect taxes in each of the jurisdictions in which we do business. However, because the claims taxing authorities assert often involve the question of internal product pricing, which is inherently subjective in nature, any such claim may require us to litigate the matter to defend our position or to negotiate a settlement on the matter with the taxing authorities that differs from the amount of potential exposure recorded in the financial statements.

Our leverage may limit our flexibility and increase our risk of default.

We operate in the ordinary course of our business with a certain amount of leverage. Our degree of leverage could have important consequences to our investors, such as:

- increasing our vulnerability to adverse economic, industry or competitive developments;
- requiring a substantial portion of our cash flow from operations to be dedicated to the payment of principal and interest on our indebtedness, thereby reducing our ability to use our cash flow to fund our operations, capital expenditures and other business opportunities;
- making it more difficult for us to satisfy the obligations related to our indebtedness;
- restricting us from making strategic acquisitions or investments or causing us to make non-strategic divestitures;
- limiting our ability to obtain additional financing for working capital, capital expenditures, product development, debt service requirements, acquisitions and general corporate or other purposes;
- limiting our flexibility in planning for, or reacting to, changes in our business or the industry in which we operate, placing us at a competitive disadvantage compared to our competitors who are less highly leveraged and who, therefore, may be able to take advantage of opportunities that our leverage prevents us from exploiting;
- exposing us to variability in interest rates, as a substantial portion of our indebtedness is and will be at variable rates; and
- limiting our ability to return capital to our stockholders, including through share repurchases.

In addition, the instruments governing our debt contain customary financial and other restrictive covenants, which limit our operating flexibility and could prevent us from taking advantage of business opportunities and reduce our flexibility to respond to changing business and economic conditions. These covenants could put us at a competitive disadvantage. Failure to comply with our debt covenants may result in a default or event of default under the related credit document. If such default or event of default is not cured or waived, as applicable, we may suffer adverse effects on our operations, business or financial condition, including acceleration of the maturity date of all amounts outstanding under our debt facilities. For further discussion regarding our debt covenants and compliance, refer to "Management's Discussion and Analysis" included in Part II, ITEM 7 of this Report and Note 8, "Debt," in our Consolidated Financial Statements included in Part II, ITEM 8 of this Report.

We may be unable to sustain our profitability, which could impair our ability to service our indebtedness and make investments in our business and could adversely affect the market price for our stock and increase our leverage.

Our ability to service our indebtedness depends on our ability to maintain our profitability. We may not be able to maintain our profitability on a quarterly or annual basis in future periods. Further, our profitability will depend upon a number of factors, including without limitation:

- general economic conditions in the markets in which we sell our products and the related impacts on consumers and retailers;
- the level of competition in the mattress and pillow industry;
- our ability to successfully identify and respond to emerging trends in the mattress and pillow industry;
- our ability to successfully launch new products;
- our ability to effectively sell our products through our distribution channels, including our new distribution channels, in volumes sufficient to drive growth and leverage our cost structure and advertising spending;
- our ability to reduce costs, including our ability to align our cost structure with sales in the existing economic environment;
- our ability to successfully manage our relationships with our major customers and navigate any financial difficulties those customers may experience from time to time;
- our ability to absorb fluctuations in commodity costs;
- our ability to maintain efficient, timely and cost-effective production and utilization of our manufacturing capacity;
- our ability to maintain efficient, timely and cost-effective delivery of our products; and
- our ability to maintain public recognition of our brands.

We are vulnerable to interest rate risk with respect to our debt, which could lead to an increase in interest expense.

Our variable rate debt agreements, including our 2019 Credit Agreement, use the London Interbank Offered Rate (LIBOR) as a reference rate. In July 2017, the United Kingdom's Financial Conduct Authority, which regulates LIBOR, announced that it intends to phase out LIBOR by the end of 2021. It is unclear if at that time LIBOR will cease to exist or if new methods of calculating LIBOR will be established such that it continues to exist after 2021. If LIBOR ceases to exist or is no longer representative of the underlying market after 2021, our variable rate debt agreements with interest rates that are indexed to LIBOR will use various alternative methods to calculate the applicable interest rate, which could result in increases in interest rates on such debt and adversely impact our interest expense, results of operations and cash flows. Further, we may need to amend our variable rate debt agreements to replace LIBOR with a new reference rate. The U.S. Federal Reserve, in conjunction with the Alternative Reference Rates Committee, a steering committee comprised of large U.S. financial institutions, is considering replacing U.S. dollar LIBOR with a new index calculated by short term repurchase agreements, backed by Treasury securities called the Secured Overnight Financing Rate (SOFR). At this time, it is not possible to predict whether SOFR will attain market traction as a LIBOR replacement. Furthermore, it is not possible to predict the effect of these changes, the discontinuation of LIBOR, other reforms, or the establishment of alternative reference rates on our borrowing costs, the availability of variable rate financing or the capital markets generally. For information regarding our sensitivity to changes in interest rates, refer to "Quantitative and Qualitative Disclosures About Market Risk" included in Part II, ITEM 7A of this Report.

We may be adversely affected by fluctuations in exchange rates, which could affect our results of operations, the costs of our products and our ability to sell our products in foreign markets.

Approximately 25.6% of our net sales were generated outside of the U.S. in 2019. We conduct our business in a wide variety of currencies and are therefore subject to market risk relating to changes in foreign exchange rates. If the U.S. dollar strengthens relative to the Euro or other foreign currencies where we have operations, for example, there will be a negative impact on our operating results upon translation of those foreign operating results into the U.S. dollar. In 2019, foreign currency exchange rate changes negatively impacted our net income by approximately 1.9% and negatively impacted adjusted EBITDA, which is a non-U.S. GAAP financial measure, by approximately 1.1%. In 2020, we expect that foreign exchange translation may negatively impact our results of operations. Changes in foreign currency exchange rates could have an adverse impact on our financial condition, results of operations and cash flows. Except for the use of foreign exchange forwards contracts described immediately below, we do not hedge the translation of foreign currency operating results into the U.S. dollar.

We use foreign exchange forward contracts to manage a portion of the exposure to the risk of the eventual net cash inflows and outflows resulting from foreign currency denominated transactions among certain subsidiaries. These hedging transactions may not succeed or may be only partially successful in managing our foreign currency exchange rate risk. Refer to "Management's Discussion and Analysis" included in Part II, ITEM 7 of this Report and "Quantitative and Qualitative Disclosures About Market Risk" included in Part II, ITEM 7A of this Report for further discussion on the impact of foreign exchange rates on our operations.

We are subject to fluctuations in the cost of raw materials, and increases in these costs would reduce our liquidity and profitability.

The bedding industry has been challenged by volatility in the price of petroleum-based and steel products, which affects the cost of polyurethane foam, polyester, polyethylene foam and steel innerspring component parts. The price and availability of these raw materials are subject to market conditions affecting supply and demand. Given the significance of the cost of these materials to our products, volatility in the prices of the underlying commodities can significantly affect profitability. To the extent we are unable to absorb higher costs, or pass any such higher costs to our customers, our gross margin could be negatively affected, which could result in a decrease in our liquidity and profitability.

Loss of suppliers and disruptions in the supply of our raw materials could increase our costs of sales and reduce our ability to compete effectively.

We acquire raw materials and certain components from a number of suppliers with manufacturing locations around the world. If we were unable to obtain raw materials and certain components from these suppliers for any reason, we would have to find replacement suppliers. Any substitute arrangements for raw materials and certain components might not be on terms as favorable to us. In addition, we outsource the procurement of certain goods and services from suppliers in foreign countries. If we were no longer able to outsource through these suppliers, we could source them elsewhere, which may be at a higher cost. We maintain relatively small supplies of our raw materials and outsourced goods at our manufacturing facilities, and any disruption in the on-going shipment of supplies to us could interrupt production of our products, which could result in a decrease of our sales or could cause an increase in our cost of sales, either of which could decrease our liquidity and profitability.

Sealy product raw materials consist mainly of polyurethane foam, polyester, polyethylene foam and steel innerspring components that we purchase from various suppliers. In the U.S. and Canada, we source the majority of our requirements for polyurethane foam components and spring components for our Sealy and Stearns & Foster mattress units from a key supplier for each component. All critical components are purchased under supply agreements. We also purchase a significant portion of our Sealy foundation parts from third party sources under supply agreements. We do not consider ourselves to be dependent in the long term upon any single outside vendor as a source of supply to our bedding business, and we believe over time that sufficient alternative sources of supply for the same, similar or alternative components are available. However, if a key supplier for an applicable component failed to supply components in the amount we require this could significantly interrupt production of our products and increase our production costs in the near term. Such a disruption could occur for a variety of reasons, including changes in international trade duties and other aspects of international trade policy, natural disasters, pandemics and political events. For further information relating to this risk in particular, please refer to the discussion under the heading "*We are subject to risks from our international operations, such as complying with U.S. and foreign laws, foreign exchange exposure, tariffs, increased costs, political risks and our ability to expand in certain international markets, which could impair our ability to compete and our profitability."*

Our ability to expand and effectively manage our Tempur-Pedic® retail stores could affect our sales and results of operations.

As of December 31, 2019, we had opened 56 Tempur-Pedic® retail stores. Our ability to continue to open new Tempur-Pedic® retail stores in a timely and efficient manner, and effectively operate all of these retail stores, depends upon numerous factors. Some of these factors are beyond our control, including, but not limited to our ability to identify suitable locations, our ability to negotiate favorable lease terms, our ability to hire, train and retain skilled retail store personnel, and economic factors that impact consumer confidence, disposable income or the availability of consumer financing. There is no assurance that our retail store expansion strategy will continue to be profitable. If we are unable to open additional Tempur-Pedic® retail stores, or if our existing retail stores are not profitable, this could adversely affect our sales and results of operations.

Table of Contents

We cannot guarantee that we will repurchase our common stock pursuant to our share repurchase program or that our share repurchase program will enhance long-term stockholder value. Share repurchases could also increase the volatility of the price of our common stock and could diminish our cash reserves.

Our Board of Directors has authorized a share repurchase program pursuant to which we are authorized to repurchase shares of our common stock. We did not repurchase any shares under our share repurchase program during the year ended December 31, 2018. As of December 31, 2019, we had repurchased an aggregate of 1.3 million shares for approximately \$102.3 million under our share repurchase program and had approximately \$124.6 million remaining under our share repurchase program. In February 2020, our Board of Directors authorized an increase, of over \$190.0 million, to our share repurchase authorization of our common stock to \$300.0 million. Although our Board of Directors has authorized the share repurchase program, the share repurchase program does not obligate us to repurchase any specific dollar amount or to acquire any specific number of shares and may be suspended or terminated at any time. Shares may be repurchased from time to time, in the open market or through private transactions, subject to market conditions, in compliance with applicable state and federal securities laws. The timing and amount of repurchases, if any, will depend upon several factors, including market and business conditions, restrictions in our debt agreements, the trading price of our common stock and the nature of other investment opportunities. In addition, repurchases of our common stock pursuant to our share repurchase program could affect the market price of our common stock or increase its volatility. For example, the existence of a share repurchase program could cause our stock price to be higher than it would be in the absence of such a program and could potentially reduce the market liquidity for our stock. Additionally, our share repurchase program could diminish our cash reserves, which may impact our ability to finance future growth and to pursue possible future strategic opportunities and acquisitions. There can be no assurance that any share repurchases will enhance stockholder value because the market price of our common stock may decline below the levels at which we determine to repurchase our stock. Although our share repurchase program is intended to enhance long-term stockholder value, there is no assurance that it will do so and short-term stock price fluctuations could reduce the program's effectiveness.

Our operating results are subject to fluctuations, including as a result of seasonality, which could make sequential quarter-toquarter comparisons an unreliable indication of our performance and adversely affect the market price of our common stock.

A significant portion of our net sales are attributable to our Wholesale channel, particularly net sales to furniture and bedding stores. We believe that our sales of products to furniture and bedding stores are typically subject to modest seasonality inherent in the bedding industry, with sales expected to be generally lower in the second and fourth quarters. Our sales in a particular quarter can be impacted by new product launches. Additionally, the U.S. bedding industry generally experiences increases in sales around holidays and promotional periods. This seasonality means that a sequential quarter-to-quarter comparison may not be a good indication of our performance or of how we will perform in the future.

We are subject to risks from our international operations, such as complying with U.S. and foreign laws, foreign exchange exposure, tariffs, increased costs, political risks and our ability to expand in certain international markets, which could impair our ability to compete and our profitability.

We are a global company, selling our products in approximately 100 countries worldwide. We generated approximately 25.6% of our net sales outside of the U.S. in the year ended December 31, 2019.

We also participate in international license and joint venture arrangements with independent third parties. Our international operations are subject to the customary risks of operating in an international environment, including complying with U.S. laws affecting operations outside of the U.S. such as the Foreign Corrupt Practices Act; complying with foreign laws and regulations, including disparate anti-corruption laws and regulations; risks associated with varying local business customs; and the potential imposition of trade or foreign exchange restrictions, tariffs and other tax increases, fluctuations in exchange rates, inflation and unstable political situations and labor issues. We are also limited in our ability to independently expand in certain international markets where we have granted licenses to manufacture and sell Sealy® bedding products. Fluctuations in the rate of exchange between currencies in which we do business may affect our financial condition or results of operations. Additionally, changes in international trade duties and other aspects of international trade policy, both in the U.S. and abroad, could materially impact our business.

Our business operations and financial results may be impacted by the United Kingdom's ("UK") departure from the EU, commonly referred to as Brexit. Brexit may, among other things, result in certain adverse tax consequences for us relating to the movement of products and related matters between the UK and EU.

Table of Contents

If we are not able to protect our trade secrets or maintain our trademarks, patents and other intellectual property, we may not be able to prevent competitors from developing similar products or from marketing in a manner that capitalizes on our trademarks, and this loss of a competitive advantage could decrease our profitability and liquidity.

We rely on patents and trade secrets to protect the design, technology and function of our products. To date, we have not sought U.S. or international patent protection for our principal product formula for Tempur® material and certain of our manufacturing processes. Accordingly, we may not be able to prevent others from developing certain visco-elastic material and products that are similar to or competitive with our products. Our ability to compete effectively with other companies also depends, to a significant extent, on our ability to maintain the proprietary nature of our owned and licensed intellectual property. We own a significant number of patents or have patent applications pending on some aspects of our products and certain manufacturing processes. However, the principal product formula and manufacturing processes for our Tempur® material are not patented and we must maintain these as trade secrets in order to protect this intellectual property. We own U.S. and foreign registered trademarks and service marks and have applications for the registration of trademarks and service marks pending domestically and abroad. We also license certain intellectual property rights from third parties.

Certain of our trademarks are currently registered in the U.S. and are registered or pending in foreign jurisdictions. Certain other trademarks are the subject of protection under common law. However, those rights could be circumvented, or violate the proprietary rights of others, or we could be prevented from using them if challenged. A challenge to our use of our trademarks could result in a negative ruling regarding our use of our trademarks, their validity or their enforceability, or could prove expensive and time consuming in terms of legal costs and time spent defending against such a challenge. Any loss of trademark protection could result in a decrease in sales or cause us to spend additional amounts on marketing, either of which could decrease our liquidity and profitability. In addition, if we incur significant costs defending our trademarks, that could also decrease our liquidity and profitability. In addition, we may not have the financial resources necessary to enforce or defend our trademarks. Furthermore, our patents may not provide meaningful protection and patents may never issue from pending applications. It is also possible that others could bring claims of infringement against us, as our principal product formula and manufacturing processes are not patented, and that any licenses protecting our intellectual property could be terminated. If we were unable to maintain the proprietary nature of our intellectual property and our significant current or proposed products, this loss of a competitive advantage could result in decreased sales or increased operating costs, either of which would decrease our liquidity and profitability.

In addition, the laws of certain foreign countries may not protect our intellectual property rights and confidential information to the same extent as the laws of the U.S. or the EU. Third parties, including competitors, may assert intellectual property infringement or invalidity claims against us that could be upheld. Intellectual property litigation, which could result in substantial cost to and diversion of effort by us, may be necessary to protect our trade secrets or proprietary technology, or for us to defend against claimed infringement of the rights of others and to determine the scope and validity of others' proprietary rights. We may not prevail in any such litigation, and if we are unsuccessful, we may not be able to obtain any necessary licenses on reasonable terms or at all.

The loss of the services of any members of our executive management team could impair our ability to execute our business strategy and as a result, reduce our sales and profitability.

We depend on the continued services of our executive management team. The loss of key personnel could have a material adverse effect on our ability to execute our business strategy and on our financial condition and results of operations. We do not maintain key-person insurance for members of our executive management team.

Deterioration in labor relations could disrupt our business operations and increase our costs, which could decrease our liquidity and profitability.

As of December 31, 2019, we had approximately 7,400 full-time employees. Our Asia joint venture also employs approximately 1,200 full-time employees. Approximately 28.0% of our employees are represented by various labor unions with separate collective bargaining agreements or government labor union contracts for certain international locations. Our North American collective bargaining agreements, which are typically three years in length, expire at various times during any given three year period. Due to the large number of collective bargaining agreements, we are periodically in negotiations with certain of the unions representing our employees. We may at some point be subject to work stoppages by some of our employees and, if such events were to occur, there may be a material adverse effect on our operations and profitability. Further, we may not be able to renew our various collective bargaining agreements on a timely basis or on favorable terms, or at all. Any significant increase in our labor costs could decrease our liquidity and profitability and any deterioration of employee relations, slowdowns or work stoppages at any of our locations, whether due to union activities, employee turnover or otherwise, could result in a decrease in our net sales or an increase in our costs, either of which could decrease our liquidity and profitability.

We may face exposure to product liability claims and premises liability claims, which could reduce our liquidity and profitability and reduce consumer confidence in our products.

We face an inherent business risk of exposure to product liability claims if the use of any of our products results in personal injury or property damage. In the event that any of our products prove to be defective, we may be required to recall, redesign or even discontinue those products. We maintain insurance against product liability claims, but such coverage may not continue to be available on terms acceptable to us or be adequate for liabilities actually incurred. A successful claim brought against us in excess of available insurance coverage could impair our liquidity and profitability, and any claim or product recall that results in significant adverse publicity against us could result in consumers purchasing fewer of our products, which would also impair our liquidity and profitability.

We also face inherent business risks by operating physical stores that are open to the public. By opening retail stores, we have increased our exposure to premises liability claims. We maintain insurance against premises liability claims, but such coverage may not continue to be available on terms acceptable to us or be adequate for liabilities actually incurred. A successful claim brought against us in excess of available insurance coverage could impair our liquidity and profitability, and any claim or product recall that results in significant adverse publicity against us could adversely affect our reputation or result in consumers purchasing fewer of our products, which would also impair our liquidity and profitability.

Regulatory requirements, including, but not limited to, trade, environmental, health and safety requirements, may require costly expenditures and expose us to liability.

Our products and our marketing and advertising programs are subject to regulation in the U.S. by various federal, state and local regulatory authorities, including the Federal Trade Commission and the U.S. Food and Drug Administration. In addition, other governments and agencies in other jurisdictions regulate the sale and distribution of our products. These rules and regulations may change from time to time, or may conflict. There may be continuing costs of regulatory compliance including continuous testing, additional quality control processes and appropriate auditing of design and process compliance. For example, the CPSC and many foreign jurisdictions have adopted rules relating to fire retardancy standards for the mattress industry. Further, some states and the U.S. Congress continue to consider fire retardancy regulations that may be different or more stringent than the CPSC standard. Adoption of multi-layered regulatory regimes, particularly if they conflict with each other, could increase our costs, alter our manufacturing processes and impair the performance of our products which may have an adverse effect on our business. We are also subject to various health and environmental provisions, such as California Proposition 65 (the Safe Drinking Water and Toxic Enforcement Act of 1986) and 16 CFR Part 1633 (Standard for the Flammability (Open Flame) of Mattress Sets).

Our marketing and advertising practices could also become the subject of proceedings before regulatory authorities or the subject of claims by other parties and could require us to alter or end these practices or adopt new practices that are not as effective or are more expensive.

In addition, we are subject to federal, state and local laws and regulations relating to pollution, environmental protection and occupational health and safety. We may not be in complete compliance with all such requirements at all times. We have made and will continue to make capital and other expenditures to comply with environmental and health and safety requirements. If a release of hazardous substances occurs on or from our properties or any associated offsite disposal location, or if contamination from prior activities is discovered at any of our properties, we may be held liable and the amount of such liability could be material. As a manufacturer of bedding and related products, we use and dispose of a number of substances, such as glue, lubricating oil, solvents and other petroleum products, as well as certain foam ingredients, that may subject us to regulation under numerous foreign, federal and state laws and regulations governing the environment. Among other laws and regulations, we are subject in the U.S. to the Federal Water Pollution Control Act, the Comprehensive Environmental Response, Compensation and Liability Act, the Resource Conservation and Recovery Act, the Clean Air Act and related state and local statutes and regulations.

Our operations could also be impacted by a number of pending legislative and regulatory proposals to address greenhouse gas emissions in the U.S. and other countries. Certain countries have adopted the Kyoto Protocol. New greenhouse gas reduction targets have been established under the Kyoto Protocol, as amended, and certain countries, including Denmark, have adopted the new reduction targets. This and other international initiatives under consideration could affect our International operations. These actions could increase costs associated with our operations, including costs for raw materials, pollution control equipment and transportation. Because it is uncertain what laws will be enacted, we cannot predict the potential impact of such laws on our future consolidated financial condition, results of operations, or cash flows.

We have made and will continue to make capital and other expenditures to comply with environmental and health and safety requirements. In the event contamination is discovered with respect to one or more of our current or former properties, government authorities or third parties may bring claims related to these properties, which could have a material effect on our profitability.

Our pension plans are currently underfunded and we may be required to make cash payments to the plans, reducing our available cash.

We maintain certain defined benefit pension plans. In addition, hourly employees working at certain of Sealy's domestic manufacturing facilities are covered by union sponsored retirement and health and welfare plans. These plans cover both active employees and retirees. The plans are currently underfunded, and under certain circumstances, including the decision to close or sell a facility, we could be required to pay amounts with respect to this underfunding. Such events may significantly impair our profitability and liquidity and the possibility of having to make these payments could affect our decision on whether to close or sell a particular facility. For more information, refer to Note 10, "Retirement Plans," in our Consolidated Financial Statements included in Part II, ITEM 8 of this Report.

Challenges to our pricing or promotional allowance policies or practices could adversely affect our operations.

Certain of our retail pricing and promotional allowance policies or practices are subject to antitrust regulations in the U.S. and abroad. If antitrust regulators or private parties in any jurisdiction in which we do business initiate investigations or claims that challenge our pricing or promotional allowance policies or practices, our efforts to respond could force us to divert management resources and we could incur significant unanticipated costs. If such an investigation or claim were to result in a charge that our practices or policies were in violation of applicable antitrust or other laws or regulations, we could be subject to significant additional costs of defending such charges in a variety of venues and, ultimately, if there were a finding that we were in violation of antitrust or other laws or regulations, may be trebled) could decrease our liquidity and profitability, and any investigation or claim that requires significant management attention or causes us to change our business practices could disrupt our operations or increase our costs, also resulting in a decrease in our liquidity and profitability. An antitrust class action or individual suit against us could result in potential liabilities, substantial costs, treble damages, and the diversion of our management's attention and resources, regardless of the outcome.

Our stock price is likely to continue to be volatile, your investment could decline in value, and we may incur significant costs from class action litigation.

The trading price of our common stock is likely to continue to be volatile and subject to wide price fluctuations. The trading price of our common stock may fluctuate significantly in response to various factors, including but not limited to:

- actual or anticipated variations in our quarterly and annual operating results, including those resulting from seasonal variations in our business;
- general economic conditions, such as unemployment, changes in short-term and long-term interest rates and fluctuations in both debt and equity capital markets;
- terrorist attacks in the U.S. or against U.S. targets, actual or threated acts of war (declared or undeclared) or the escalation of current hostilities involving the U.S. or its allies;
- natural disasters or pandemics disrupting our businesses or suppliers;
- introductions or announcements of technological innovations or new products by us or our competitors;
- disputes or other developments relating to proprietary rights, including patents, litigation matters, and our ability to patent, or otherwise protect, our products and technologies;
- changes in estimates by securities analysts of our financial performance or the financial performance of our competitors or major customers or statements by others in the investment community relating to such performance;
- the use or non-use of our share repurchase program;
- bankruptcies of any of our nationally or regionally-significant customers;
- loss of any of our major customers;
- conditions or trends in the mattress industry generally;
- additions or departures of key personnel;
- announcements by us or our competitors or significant retailer customers of significant acquisitions, strategic partnerships, joint ventures or capital commitments;
- announcements by our competitors or our major customers of their quarterly operating results or announcements by our competitors or our major customers of their views on trends in the bedding industry;

- regulatory developments in the U.S. and abroad;
- changes in international trade policy and economic and political factors in the U.S. and abroad;
- public announcements or filings with the SEC indicating that significant stockholders, directors or officers are buying or selling shares of our common stock; and
- the declaration or suspension of a cash dividend.

In addition, the stock market in general has experienced significant price and volume fluctuations that have often been unrelated or disproportionate to operating performance. These broad market factors may seriously harm the market price of our common stock, regardless of our operating performance.

In the past, following periods of volatility in the market price of a company's securities, securities class action litigation has often been instituted. A securities class action suit against us could result in potential liabilities, substantial costs, and the diversion of our management's attention and resources, regardless of the outcome. See "Legal Proceedings" included in Part I, ITEM 3 of this Report.

Future sales of our common stock may depress our stock price.

The market price of our common stock could decline as a result of sales of substantial amounts of our common stock in the public market, or the perception that these sales could occur. In addition, these factors could make it more difficult for us to raise funds through future offerings of common stock. All shares of our common stock are freely transferable without restriction or further registration under the Securities Act, except for certain shares of our common stock which were purchased by our executive officers, directors, principal stockholders, and some related parties.

We have stockholders who presently beneficially own more than 5.0% of our outstanding capital stock. Sales or other dispositions of our shares by these major stockholders may depress our stock price.

Delaware law and our certificate of incorporation and bylaws contain anti-takeover provisions, any of which could delay or discourage a merger, tender offer, or assumption of control of the Company not approved by our Board of Directors that some stockholders may consider favorable.

Provisions of Delaware law and our certificate of incorporation and by-laws could hamper a third party's acquisition of us, or discourage a third party from attempting to acquire control of us. You may not have the opportunity to participate in these transactions. These provisions could also limit the price that investors might be willing to pay in the future for shares of our common stock. These provisions include:

- our ability to issue preferred stock with rights senior to those of the common stock without any further vote or action by the holders of our common stock;
- the requirements that our stockholders provide advance notice and certain disclosures when nominating our directors; and
- the inability of our stockholders to convene a stockholders' meeting without the chairperson of the Board of Directors, the president, or a majority of the Board of Directors first calling the meeting.

Our Board of Directors could determine in the future that adoption of a stockholder rights agreement is in the best interest of our stockholders and any such stockholder rights agreement, if adopted, could render more difficult, or discourage, a merger, tender offer, or assumption of control of the Company that is not approved by our Board of Directors.

ITEM 1B. UNRESOLVED STAFF COMMENTS

None.

ITEM 2. PROPERTIES

The following table sets forth certain information regarding our principal facilities by segment at December 31, 2019.

Name	Location	Approximate Square Footage	Title	Type of Facility
North America				
Tempur Production USA, LLC	Albuquerque, New Mexico	800,000	Leased (a)	Manufacturing
Sealy Mattress Manufacturing Co., LLC	Hagerstown, Maryland	615,600	Leased	Manufacturing
Sealy Mattress Manufacturing Co., LLC	Plainfield, Indiana	614,000	Leased	Manufacturing
Tempur Production USA, LLC	Duffield, Virginia	581,000	Owned	Manufacturing
Comfort Revolution, LLC	Belmont, MS	432,000	Leased	Manufacturing
Sealy Mattress Manufacturing Co., LLC	City of Industry, California	430,000	Leased	Manufacturing
Sealy Mattress Manufacturing Co., LLC	Conyers, Georgia	300,000	Owned	Manufacturing
Sealy Mattress Manufacturing Co., LLC	Green Island, New York	257,000	Leased	Manufacturing
Sealy Mattress Manufacturing Co., LLC	Richmond, California	241,000	Owned	Manufacturing
Sealy Mattress Manufacturing Co., LLC	Orlando, Florida	225,050	Leased	Manufacturing
Sealy Mattress Manufacturing Co., LLC	Brenham, Texas	220,500	Owned	Manufacturing
Tempur Production USA, LLC	Mountain Top, Pennsylvania	210,000	Leased	Manufacturing
Sealy Mattress Manufacturing Co., LLC	Trinity, North Carolina	180,000	Owned	Manufacturing
Sealy Canada, Ltd	Alberta, Canada	144,500	Owned	Manufacturing
Sealy Mattress Manufacturing Co., LLC	Medina, Ohio	140,000	Owned	Manufacturing
Sealy Mattress Manufacturing Co., LLC	Lacey, Washington	134,000	Leased	Manufacturing
Sealy Mattress Manufacturing Co., LLC	Kansas City, Kansas	122,000	Leased	Manufacturing
Sealy Mattress Manufacturing Co., LLC	Phoenix, Arizona	120,000	Leased	Manufacturing
Sealy Canada, Ltd	Toronto, Canada	120,000	Leased	Manufacturing
Sealy Canada, Ltd	Quebec, Canada	88,000	Owned	Manufacturing
Sealy Mattress Manufacturing Co., LLC	Denver, Colorado	82,000	Owned	Manufacturing
International				
Dan-Foam ApS	Aarup, Denmark	523,000	Owned (a)	Manufacturing
Sealy Mattress Company Mexico, S. de R.L. de C.V.	Toluca, Mexico	130,500	Owned	Manufacturing

(a) We have granted a mortgage or otherwise encumbered our interest in this facility as collateral for secured indebtedness.

In addition to the properties listed above, we have other facilities in the U.S. and other countries, the majority under leases with one to ten year terms. The manufacturing facility in Albuquerque, New Mexico is leased as part of the related industrial revenue bond financing. We have an option to repurchase the property for one dollar upon termination of the lease.

We believe that our existing properties are suitable for the conduct of our business, are adequate for our present needs and will be adequate to meet our future needs.

ITEM 3. LEGAL PROCEEDINGS

Information regarding legal proceedings can be found in Note 14, "Commitments and Contingencies," of the Notes to the Consolidated Financial Statements, included in Part II, ITEM 8 of this Report, "Financial Statements and Supplementary Data," and is incorporated herein by reference.

ITEM 4. MINE SAFETY DISCLOSURES

None.

PART II

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

Market for Registrant's Common Equity

Our sole class of common equity is our \$0.01 par value common stock, which trades on the New York Stock Exchange ("NYSE") under the symbol "TPX." Trading of our common stock commenced on the NYSE on December 18, 2003. Prior to that time, there was no public trading market for our common stock.

As of February 17, 2020, we had approximately 73 stockholders of record of our common stock.

Dividends

We do not pay a dividend. The decision to pay a dividend in future periods is reviewed by our Board of Directors on a periodic basis. Further, we are subject to certain customary restrictions on dividends under our 2019 Credit Agreement and Indentures. See Note 8, "Debt," in our Consolidated Financial Statements, included in Part II, ITEM 8 of this Report, for a discussion of the 2019 Credit Agreement and Indentures.

Issuer Purchases of Equity Securities

Our Board of Directors authorized a share repurchase program in 2016 pursuant to which we were authorized to repurchase shares of our common stock for a total repurchase price of not more than \$800.0 million. We did not repurchase any shares under our share repurchase program during the year ended December 31, 2018. As of December 31, 2019, we had repurchased under the share repurchase program an aggregate of 1.3 million shares for approximately \$102.3 million and had approximately \$124.6 million remaining under the program. In February 2020, the Board of Directors authorized an increase, of over \$190.0 million, to our share repurchase authorization of Tempur Sealy International's common stock to \$300.0 million.

Share repurchases under this program may be made through open market transactions, negotiated purchases or otherwise, at times and in such amounts as management deems appropriate. The timing and actual number of shares repurchased will depend on a variety of factors including price, financing, regulatory requirements and other market conditions. The program does not require the repurchase of any minimum number of shares and may be suspended, modified or discontinued at any time without prior notice. Repurchases may be made under a Rule 10b5-1 plan, which would permit shares to be repurchased when we might otherwise be precluded from doing so under federal securities laws.

The following table sets forth purchases of our common stock for the three months ended December 31, 2019:

Period	(a) Total number of shares purchased		(b) Average price paid per share	(c) Total number of shares purchased as part of publicly announced plans or programs	(d) Maximum number of shares (or approximate dollar value of shares) that may yet be purchased under the plans or programs (in millions)
October 1, 2019 - October 31, 2019	218,360	(1)	\$78.61	217,065	\$157.6
November 1, 2019 - November 30, 2019	206,308	(1)	\$85.69	205,337	\$140.0
December 1, 2019 - December 31, 2019	177,464	(1)	\$86.44	177,464	\$124.6
Total	602,132			599,866	

(1) Includes shares withheld upon the vesting of certain equity awards to satisfy tax withholding obligations. The shares withheld were valued at the closing price of the common stock on the New York Stock Exchange on the vesting date or prior business day.

Equity Compensation Plan Information

Equity compensation plan information required by this Item is incorporated by reference from Part III, ITEM 12 of this Report.

Performance Graph

The following Performance Graph and related information shall not be deemed to be "soliciting material" or to be "filed" with the Securities and Exchange Commission, nor shall such information be incorporated by reference into any future filing under the Securities Act or Exchange Act, except to the extent that the Company specifically incorporates it by reference into such filing.

The following table compares cumulative stockholder returns for us over the last five years to the Standard & Poor's ("S&P") 500 Stock Composite Index, and a peer group. The S&P 500 Composite Index is a capitalization weighted index of 500 stocks intended to be a representative sample of leading companies in leading industries within the U.S. economy. We selected these stocks based on market size, liquidity and industry group representation. We believe the peer group discussed below closely reflects our business and, as a result, provides a meaningful comparison of stock performance.

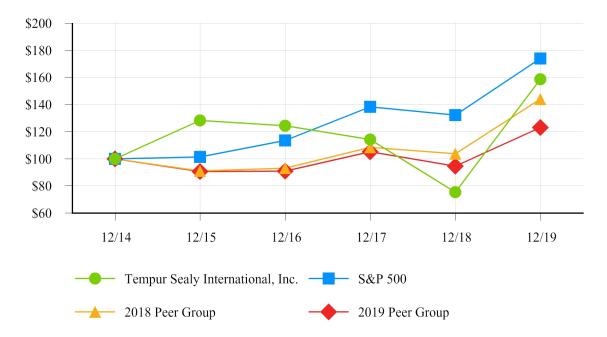
The peer issuers included in this graph are set forth below in the table. In 2018, HNI Corporation was added to the peer group. In 2019, lululemon athletica inc. and Tupperware Brands Corporation were removed from the peer group due to no longer meeting our market capitalization criteria.

2019 Peer Group

Brunswick Corporation (BC)	Hasbro, Inc. (HAS)	RH (RH)
Carter's, Inc. (CRI)	HNI Corporation (HNI)	Sleep Number Corporation (SNBR)
Columbia Sportswear Company (COLM)	La-Z-Boy Incorporated (LZB)	Steelcase Inc. (SCS)
Deckers Outdoor Corporation (DECK)	Leggett & Platt, Incorporated (LEG)	Under Armour, Inc. (UA)
Gildan Activewear Inc. (GIL)	Herman Miller, Inc. (MLHR)	Williams-Sonoma, Inc. (WSM)
Hanesbrands Inc. (HBI)	Polaris Industries Inc. (PII)	Wolverine World Wide, Inc. (WWW)

2018 Peer Group

Brunswick Corporation (BC)	HNI Corporation (HNI)	Sleep Number Corporation (SNBR)
Carter's, Inc. (CRI)	La-Z-Boy Incorporated (LZB)	Steelcase Inc. (SCS)
Columbia Sportswear Company (COLM)	Leggett & Platt, Incorporated (LEG)	Tupperware Brands Corporation (TUP)
Deckers Outdoor Corporation (DECK)	lululemon athletica inc. (LULU)	Under Armour, Inc. (UA)
Gildan Activewear Inc. (GIL)	Herman Miller, Inc. (MLHR)	Williams-Sonoma, Inc. (WSM)
Hanesbrands Inc. (HBI)	Polaris Industries Inc. (PII)	Wolverine World Wide, Inc. (WWW)
Hasbro, Inc. (HAS)	RH (RH)	



COMPARISON OF 5 YEAR CUMULATIVE TOTAL RETURN

	12/3	12/31/2014		31/2015	12/	31/2016	12/	31/2017	12/	31/2018	12/31/2019	
Tempur Sealy International, Inc.	\$	100.00	\$	128.32	\$	124.35	\$	114.17	\$	75.40	\$	158.55
S&P 500		100.00		101.38		113.51		138.29		132.23		173.86
2018 Peer Group		100.00		91.04		93.08		108.42		103.73		144.04
2019 Peer Group		100.00		90.71		90.94		105.21		94.63		123.06

ITEM 6. SELECTED FINANCIAL DATA

The following table sets forth our selected historical consolidated financial and operating data for the periods indicated. Our Consolidated Financial Statements as of December 31, 2019 and 2018 and for each of the three years in the period ended December 31, 2019 are included in Part II, ITEM 8 of this Report.

ement of Income Data:	2019	2018	 2017	 2016	 2015
Net sales	\$ 3,106.0	\$ 2,702.9	\$ 2,700.6	\$ 3,079.7	\$ 3,089.3
Cost of sales	1,763.8	1,582.2	1,579.6	1,790.2	1,864.4
Gross profit	1,342.2	1,120.7	1,121.0	1,289.5	1,224.9
Operating expense, net ⁽¹⁾	995.5	864.4	825.5	876.1	918.3
Operating income	346.7	256.3	 295.5	413.4	306.6
Interest expense, net	85.7	92.3	87.3	82.9	94.0
Loss on extinguishment of debt	_	—		47.2	
Other (income) expense, net	(4.5)	(1.0)	(7.2)	(0.3)	9.7
Income before income taxes from continuing operations	265.5	165.0	215.4	283.6	202.9
Income tax provision ⁽²⁾	(74.7)	(49.6)	(43.8)	(86.3)	(125.2)
Income from continuing operations	190.8	115.4	171.6	197.3	77.7
Loss from discontinued operations, net of tax	(1.4)	(17.8)	(30.9)	(12.3)	(12.0
Net income before non-controlling interests	189.4	97.6	140.7	185.0	65.7
Less: net (loss) income attributable to non-controlling interests	(0.1)	(2.9)	(10.7)	(5.6)	1.2
Net income attributable to Tempur Sealy International, Inc.	\$ 189.5	\$ 100.5	\$ 151.4	\$ 190.6	\$ 64.5
nce Sheet Data (at end of period):					
Cash and cash equivalents	\$ 64.9	\$ 45.8	\$ 41.1	\$ 64.6	\$ 153.0
Total assets	3,061.8	2,715.4	2,694.0	2,698.8	2,652.0
Total debt, net	1,468.0	1,576.5	1,644.6	1,779.0	1,420.8
Finance leases and other debt	72.0	69.7	108.5	109.1	34.0
Redeemable non-controlling interest		—	2.2	7.6	12.4
Total stockholders' equity (deficit)	360.4	217.5	112.5	(41.9)	267.8
er Financial and Operating Data:					
Dividends per common share	\$ —	\$ —	\$ 	\$ 	\$
Depreciation and amortization ⁽³⁾	116.5	111.9	94.0	88.6	92.6
Net cash provided by operating activities from continuing operations	314.8	207.5	256.5	168.1	231.6
Net cash used in investing activities from continuing operations	(90.2)	(71.2)	(65.7)	(61.9)	(58.9
Net cash used in financing activities from continuing operations	(203.2)	(107.0)	(175.2)	(185.1)	(90.7
Basic earnings per common share for continuing operations	3.50	2.17	3.37	3.44	1.24
Diluted earnings per common share for continuing operations	3.45	2.15	3.33	3.39	1.22

(1) Operating expense, net includes \$29.8 million and \$21.2 million of customer-related charges in connection with certain customer bankruptcies in 2019 and 2018, respectively, and \$14.4 million associated with the termination of our relationship with Mattress Firm in 2017.

(2) Income tax provision for 2015 includes approximately \$60.7 million related to changes in estimate related to the uncertain tax position regarding the Danish Tax Matter, as defined in Note 15, "Income Taxes," in our Consolidated Financial Statements included in Part II, ITEM 8 of this Report. The income tax provision for 2017 includes the provisional impact of the U.S. Tax Reform Act.

(3) Includes \$26.8 million, \$24.8 million, \$13.3 million, \$16.2 million, \$22.5 million in non-cash, stock-based compensation expense related to restricted stock units, performance restricted stock units, deferred stock units and stock options in 2019, 2018, 2017, 2016, and 2015, respectively.

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

The following discussion and analysis should be read in conjunction with Part II, ITEM 6 of this Report and the audited Consolidated Financial Statements and accompanying notes thereto included elsewhere in this Report. In addition, prior period amounts have been revised to reflect certain Latin American subsidiaries as discontinued operations. Unless otherwise noted, all of the financial information in this Report is consolidated financial information for the Company. The forward-looking statements in this discussion regarding the mattress and pillow industries, our expectations regarding our future performance, liquidity and capital resources and other non-historical statements in this discussion are subject to numerous risks and uncertainties. See "Special Note Regarding Forward-Looking Statements." and Part I, ITEM 1A of this Report. Our actual results may differ materially from those contained in any forward-looking statements. For results of operations comparisons relating to years ending December 31, 2018 and 2017, refer to our annual report on Form 10-K, Part II, ITEM 7: Management's Discussion and Analysis of Financial Conditions and Results of Operations filed with the Securities and Exchange Commission on February 25, 2019.

In this discussion and analysis, we discuss and explain the consolidated financial condition and results of operations for the years ended December 31, 2019 and 2018, including the following topics:

- an overview of our business and strategy;
- results of operations including our net sales and costs in the periods presented as well as changes between periods;
- expected sources of liquidity for future operations; and
- our use of certain non-GAAP financial measures.

Business Overview

General

We develop, manufacture and market bedding products, which we sell globally. Our product brand portfolio includes many highly recognized and iconic brands in the industry, including Tempur®, Tempur-Pedic®, Sealy® featuring Posturepedic® Technology, Stearns & Foster® and Comfort Revolution®. Our comprehensive suite of bedding products offers a variety of products to consumers across a broad range of channels and price points.

Our distribution model operates through an omni-channel strategy across two distribution channels in each operating business segment: Wholesale and Direct. Our Wholesale channel consists of third party retailers, including third party distribution, hospitality and healthcare. Our Direct channel includes company-owned stores, e-commerce and call centers.

We continue to make strategic investments, including the introduction of new products; investments to increase our global brand awareness; investments in research and development and productivity initiatives; and various other actions aimed at further strengthening our business. In 2020, we expect to increase our investments in research and development, as well as to spend a record amount of advertising dollars to promote our worldwide brands.

Full year net income for 2019 increased 89% and full year earnings per share ("EPS") increased 88% to \$3.42. We believe investments we have made over the past four years strengthening the long-term foundation of our company investments have enhanced our competitive position. The combination of our powerful omni-channel distribution platform coupled with our market leading brands and products continues to drive market share gains and solid financial performance.

Our results for 2019 included the following significant accomplishments:

- · Completed the launch of the all-new line of Tempur-Pedic products
- · Announced that we were expanding our distribution with new supply agreements
- Executed the largest expansion of new stores in our history.

Business Segments

We operate in two segments: North America and International. Corporate operating expenses are not included in either of the segments and are presented separately as a reconciling item to consolidated results. These segments are strategic business units that are managed separately based on geography. Our North America segment consists of Tempur and Sealy manufacturing and distribution subsidiaries and licensees located in the U.S. and Canada. Our International segment consists of Tempur and Sealy manufacturing and distribution subsidiaries, joint ventures and licensees located in Europe, Asia-Pacific and Latin America. We evaluate segment performance based on net sales, gross profit and operating income.

Product Launches

During the first half of 2019, we completed the rollout of our higher-end Tempur-Breeze, which completed the largest Tempur-Pedic rollout in our history. Additionally, we completed the launch of our Stearns & Foster products. In our North America segment in 2020, we will introduce the Tempur-Ergo Smart Base Collection with Sleeptracker technology and a new Sealy Posturepedic Plus line. We have successfully extended our product life cycle and therefore expect to have favorable launch costs in 2020.

Expanded Distribution Channels

In 2019, we announced three new or expanded third-party retail relationships in the U.S. and Europe. This resulted in the largest expansion of stores in our history.

We announced that we entered into a supply agreement with Mattress Firm, the largest specialty mattress retailer in North America, to reintroduce Tempur-Pedic, Stearns & Foster and Sealy branded products into approximately 2,500 Mattress Firm stores across the U.S. The reintroduction of products into Mattress Firm stores commenced in the fourth quarter of 2019 and is expected to be completed in the first quarter of 2020.

We also announced the recent expansion of our long-term supply agreement with Big Lots, a 1,400-store retailer in the U.S. This agreement is expected to grow the sales of entry-level Sealy products and to drive unit volume, primarily in the below \$1,000 retail price point. Our launch of Sealy products with Big Lots was completed in 2019.

In 2019, we also expanded our European retail distribution network by reaching a supply agreement with Beter Bed Holding, one of Europe's leading bedding retailers. The launch of new products with Beter Bed Holding was completed in 2019 in over 100 stores.

As a result of these new and expanded agreements, we expect significantly higher volume in our North America segment operations in 2020.

Expanding Retail Footprint

We are focused on developing our North America distribution network by opening more Tempur-Pedic retail stores and expanding our online availability. As of December 31, 2019, we had 56 Tempur-Pedic retail stores in operation. We plan to open approximately 20 new retail stores in 2020. We expect to recover our initial cash investment on each store after twelve months. We expect these retail stores to complement our existing third-party retail partners by increasing our products' brand awareness in the local markets. We also plan to expand our offerings in our own e-commerce platform and with third-party online retailers where our market share is still very low. Online bedding sales have increased significantly, as a growing segment of consumers prefer to purchase bedding products in this way. During 2019, we have experienced strong growth in both our e-commerce business and our company-owned stores. In 2020, we expect to continue to expand our Direct channel through new stores and by capturing share online.

Acquisition of Innovative Mattress Solutions, LLC ("iMS")

On April 1, 2019, we acquired substantially all of the net assets of iMS in a transaction valued at approximately \$24 million, including assumed liabilities of approximately \$11 million as of March 31, 2019 (referred to as the "Sleep Outfitters Acquisition"). The acquisition of this regional bedding retailer furthers our North American retail strategy, which is focused on meeting customer demand through geographic representation and sales expertise. During the second quarter of 2019, we completed the integration of Sleep Outfitters into the North America segment. Sleep Outfitters, previously a third party retailer, had historically been part of our Wholesale channel. Sleep Outfitters' sales have been reclassified into our Direct channel beginning in the second quarter of 2019.

Acquisition of Sherwood Bedding

On January 31, 2020, we acquired an 80% ownership interest in a newly formed limited liability company containing substantially all of the assets of the Sherwood Bedding business for a cash purchase price of approximately \$40 million. Sherwood Bedding is a major manufacturer in the U.S. private label and OEM bedding market and this acquisition of a majority interest marks our entrance into the private label category. In 2020, we expect this acquisition to contribute to our cash flow and profits.

Customer-Related Charges

The global economic environment continues to be challenging, and there have been signs of deterioration in the U.S. retail sector. Over the past two years, a national department store retail customer and various regional retail customers have filed for U.S. bankruptcy protection. In the fourth quarter of 2019, we recorded \$29.8 million of customer-related charges in connection with the bankruptcy of Mattress PAL Holding, LLC ("Mattress PAL") and resulting significant liquidity issues of Mattress PAL's affiliates to fully reserve trade receivables and other assets associated with this account. This customer represented less than 1% of our global net sales in 2019. Similarly, in the fourth quarter of 2018, prior to the Sleep Outfitters Acquisition, we recorded \$21.2 million of customer-related charges in connection with the bankruptcy of iMS to fully reserve trade receivables and other assets associated with this account.

2019 Results of Operations

A summary of our results for the year ended December 31, 2019 include:

- Total net sales increased 14.9% to \$3,106.0 million from \$2,702.9 million in 2018.
- Gross margin was 43.2% in 2019 as compared to 41.5% in 2018. Adjusted gross margin, which is a non-GAAP financial measure, was 41.9% in 2018. There were no adjustments to gross margin in 2019.
- Operating income was \$346.7 million, or 11.2% of net sales, as compared to \$256.3 million, or 9.5% of net sales, in 2018. Adjusted operating income, which is a non-GAAP financial measure was \$392.2 million, or 12.6% of net sales, as compared to \$307.6 million, or 11.4% of net sales, in 2018.
- Net income was \$189.5 million as compared to \$100.5 million in 2018. Adjusted net income, which is a non-GAAP financial measure, was \$221.9 million as compared to \$163.0 million in 2018.
- EBITDA, which is a non-GAAP financial measure, increased 31.5% to \$468.4 million as compared to \$356.1 million in 2018. Adjusted EBITDA, which is a non-GAAP financial measure, increased 19.6% to \$508.1 million as compared to \$424.7 million in 2018.
- EPS was \$3.42 as compared to \$1.82 in 2018. Adjusted EPS, which is a non-GAAP financial measure, was \$4.01 as compared to \$2.96 in 2018.

For a discussion and reconciliation of non-GAAP financial measures as discussed above to the corresponding GAAP financial results, refer to the non-GAAP financial information set forth below under the heading "Non-GAAP Financial Information."

We may refer to net sales or earnings or other historical financial information on a "constant currency basis," which is a non-GAAP financial measure. These references to constant currency basis do not include operational impacts that could result from fluctuations in foreign currency rates. To provide information on a constant currency basis, the applicable financial results are adjusted based on a simple mathematical model that translates current period results in local currency using the comparable prior corresponding period's currency conversion rate. This approach is used for countries where the functional currency is the local country currency. This information is provided so that certain financial results can be viewed without the impact of fluctuations in foreign currency rates, thereby facilitating period-to-period comparisons of business performance. Constant currency information is not recognized under GAAP, and it is not intended as an alternative to GAAP measures. Refer to Part II, ITEM 7A of this Report for a discussion of our foreign currency exchange rate risk.

The following table sets forth the various components of our Consolidated Statements of Income, and expresses each component as a percentage of net sales:

(in millions, except percentages and	Year Ended December 31,											
per common share amounts)		2019			2018							
Net sales	\$	3,106.0	100.0%	\$	2,702.9	100.0%						
Cost of sales		1,763.8	56.8		1,582.2	58.5						
Gross profit		1,342.2	43.2		1,120.7	41.5						
Selling and marketing expenses		666.3	21.5		587.8	21.7						
General, administrative and other expenses		315.3	10.2		273.0	10.1						
Customer-related charges		29.8	1.0		21.2	0.8						
Equity income in earnings of unconsolidated affiliates		(15.9)	(0.5)		(17.6)	(0.7)						
Operating income		346.7	11.2	_	256.3	9.5						
Other expense, net:												
Interest expense, net		85.7	2.8		92.3	3.4						
Other income, net		(4.5)	(0.1)		(1.0)	—						
Total other expense, net		81.2	2.6		91.3	3.4						
Income from continuing operations before income taxes		265.5	8.5		165.0	6.1						
Income tax provision		(74.7)	(2.4)		(49.6)	(1.8)						
Income from continuing operations		190.8	6.1		115.4	4.3						
Loss from discontinued operations, net of tax		(1.4)	_		(17.8)	(0.6)						
Net income before non-controlling interests		189.4	6.1		97.6	3.6						
Less: Net loss attributable to non-controlling interests		(0.1)			(2.9)	(0.1)						
Net income attributable to Tempur Sealy International, Inc.	\$	189.5	6.1%	\$	100.5	3.7%						
Earnings per common share:												
Basic												
Earnings per share for continuing operations	\$	3.50		\$	2.17							
Loss per share for discontinued operations		(0.02)			(0.32)							
Earnings per share	\$	3.48		\$	1.85							
Diluted												
Earnings per share for continuing operations	\$	3.45		\$	2.15							
Loss per share for discontinued operations		(0.03)			(0.33)							
Earnings per share	\$	3.42		\$	1.82							
Weighted average common shares outstanding:												
Basic		54.5			54.4							
Diluted		55.4			55.1							

	Year Ended December 31,													
	Consolidated					North America				International				
(in millions)		2019		2018	2019		2018		2019		2018			
Net sales by channel														
Wholesale	\$	2,717.1	\$	2,452.1	\$	2,273.5	\$	1,989.1	\$	443.6	\$	463.0		
Direct		388.9		250.8		259.8		147.1		129.1		103.7		
Total net sales	\$	3,106.0	\$	2,702.9	\$	2,533.3	\$	2,136.2	\$	572.7	\$	566.7		

NET SALES

Year ended December 31, 2019 compared to year ended December 31, 2018

Net sales increased 14.9%, and on a constant currency basis increased 16.0%. The change in net sales was driven by the following:

- North America net sales increased \$397.1 million, or 18.6%. Net sales in the Wholesale channel increased \$284.4 million, or 14.3%, primarily driven by new Tempur product introductions and the expansion of our retail distribution network. Net sales in our Direct channel increased \$112.7 million, or 76.6%, primarily driven by growth from company-owned stores, including the Sleep Outfitters Acquisition, and our e-commerce business. Excluding Sleep Outfitters, the Wholesale channel increased approximately 17% and the Direct channel increased approximately 35%. On a constant currency basis, North America net sales increased 18.8%.
- *International* net sales increased \$6.0 million, or 1.1%. On a constant currency basis, our International net sales increased 5.3%, primarily driven by Direct channel growth. Net sales in the Wholesale channel decreased 0.1% on a constant currency basis, primarily driven by country specific conditions. Net sales in the Direct channel increased 29.5% on a constant currency basis, primarily driven by growth from company-owned stores.

GROSS PROFIT

		Year Ended December 31,											
		201	9		201	Margin Change							
(in millions, except percentages)	Gr	oss Profit	Gross Margin	Gro	oss Profit	Gross Margin	2019 vs 2018						
North America	\$	1,035.2	40.9%	\$	823.4	38.5%	2.4%						
International		307.0	53.6%		297.3	52.5%	1.1%						
Consolidated	\$	1,342.2	43.2%	\$	1,120.7	41.5%	1.7%						

Costs associated with net sales are recorded in cost of sales and include the costs of producing, shipping, warehousing, receiving and inspecting goods during the period, as well as depreciation and amortization of long-lived assets used in the manufacturing process.

Our gross margin is primarily impacted by the relative amount of net sales contributed by our Tempur and Sealy products. Our Sealy products have a significantly lower gross margin than our Tempur products. Our Sealy mattress products range from value to premium priced offerings, and gross margins are typically higher on premium products compared to value priced offerings. Our Tempur products are exclusively premium priced products. As sales of our Sealy products increase relative to sales of our Tempur products, our gross margins will be negatively impacted in both our North America and International segments.

Our gross margin is also impacted by fixed cost leverage based on manufacturing unit volumes; the cost of raw materials; operational efficiencies due to the utilization in our manufacturing facilities; product, channel and geographic mix; foreign exchange fluctuations; volume incentives offered to certain retail accounts; participation in our retail cooperative advertising programs; and costs associated with new product introductions. Future changes in raw material prices could have a significant impact on our gross margin. In 2020, we expect a modest impact on gross margin due to lower commodity costs. Our margins are also impacted by the growth in our Wholesale channel as sales in our Wholesale channel are at wholesale prices whereas sales in our Direct channel are at retail prices.

Year ended December 31, 2019 compared to year ended December 31, 2018

Gross margin improved 170 basis points. The principal factors impacting gross margin for each segment are discussed below.

- North America gross margin improved 240 basis points. The improvement in gross margin was primarily driven by favorable pricing of 130 basis points, favorable product and brand mix of 110 basis points and lower commodity costs. Additionally, in 2018, we also recorded \$6.1 million of restructuring charges related to our acquisition of the remaining interest in a joint venture and \$5.6 million of supply chain transition costs to consolidate certain manufacturing and distribution facilities, resulting in a favorable impact of 50 basis points in 2019. These improvements were partially offset by increased floor model expenses.
- *International* gross margin improved 110 basis points. The improvement in gross margin was primarily driven by lower commodity costs and channel mix.

OPERATING EXPENSES

Selling and marketing expenses include advertising and media production associated with the promotion of our brands, other marketing materials such as catalogs, brochures, videos, product samples, direct customer mailings and point of purchase materials, and sales force compensation. We also include in selling and marketing expense certain new product development costs, including market research and new product testing.

General, administrative and other expenses include salaries and related expenses, information technology, professional fees, depreciation and amortization of long-lived assets not used in the manufacturing process, expenses for administrative functions and research and development costs.

						Yea	ar Ended l	Decei	mber 31,						
		2019		2018	2019		2018		2019		2018		2019		2018
(in millions)		Conso	lidat	ed	North A	America Intern			national			Corporate			
Operating expenses:	_														
Advertising	\$	280.5	\$	259.3	\$ 244.1	\$	220.5	\$	36.4	\$	38.8	\$	—	\$	_
Other selling and marketing		385.8		328.5	249.3		194.4		125.3		125.7		11.2		8.4
General, administrative and other		315.3		273.0	167.2		137.6		45.8		42.9		102.3		92.5
Customer-related charges		29.8		21.2	29.8		20.9		_		_		_		0.3
Total operating expense	\$	1,011.4	\$	882.0	\$ 690.4	\$	573.4	\$	207.5	\$	207.4	\$	113.5	\$	101.2

Year ended December 31, 2019 compared to year ended December 31, 2018

Operating expenses increased \$129.4 million, or 14.7%, and were flat as a percentage of net sales. The primary drivers of changes in operating expenses by segment are discussed below.

- North America operating expenses increased \$117.0 million, or 20.4%, and increased 50 basis points as a percentage of
 net sales. The increase in operating expenses was primarily driven by advertising and other selling and marketing
 investments, variable compensation expense and incremental operating expense associated with a higher number of
 company-owned stores. In the fourth quarter of 2019, we recorded \$29.8 million of customer-related charges in connection
 with the bankruptcy of Mattress PAL and resulting significant liquidity issues of Mattress PAL's affiliates to fully reserve
 trade receivables and other assets associated with this account. Additionally, in the fourth quarter of 2019, we recorded
 an \$8.9 million charge related to the donation of common stock at fair market value to certain public charities. In the
 fourth quarter of 2018, prior to the Sleep Outfitters Acquisition, we recorded \$21.2 million of customer-related charges
 in connection with the bankruptcy of iMS to fully reserve trade receivables and other assets associated with this account.
 Additionally, in 2018, we recorded \$4.1 million of restructuring charges related to our acquisition of the remaining interest
 in a joint venture and \$7.3 million of supply chain transition costs which represent charges incurred to consolidate certain
 manufacturing and distribution facilities.
- *International* operating expenses increased \$0.1 million and decreased 40 basis points as a percentage of net sales. The increase in operating expenses was primarily driven by an increase in variable compensation expense, offset by \$8.2 million of costs associated with our International simplification efforts, which were not repeated in 2019.

• *Corporate* operating expenses increased \$12.3 million, or 12.2%. The increase in operating expenses was primarily driven by increased variable compensation expense.

Research and development expenses for the year ended December 31, 2019 were \$23.0 million compared to \$21.9 million for the year ended December 31, 2018, an increase of \$1.1 million, or 5.0%.

OPERATING INCOME

	Year Ended December 31,									
		201	9		201	Margin Change				
(in millions, except percentages)		erating ncome	Operating Margin	Operating Income		Operating Margin	2019 vs 2018			
North America	\$	344.8	13.6%	\$	250.0	11.7%	1.9%			
International		115.4	20.2%		107.5	19.0%	1.2%			
		460.2			357.5					
Corporate expenses		(113.5)			(101.2)					
Total operating income	\$	346.7	11.2%	\$	256.3	9.5%	1.7%			

Year ended December 31, 2019 compared to year ended December 31, 2018

Operating income increased \$90.4 million and operating margin improved 170 basis points. The increase was driven by the following:

- *North America* operating income increased \$94.8 million and operating margin improved 190 basis points, primarily driven by the improvement in gross margin of 240 basis points. In 2018, we recorded \$10.2 million of restructuring charges related to our acquisition of the remaining interest in a joint venture, as well as incremental bad debt expense related to the bankruptcy of a department store retailer, which were not repeated in 2019. These improvements were offset by increased advertising and other selling and marketing investments and variable compensation expense. In the fourth quarter of 2019, we recorded \$29.8 million of customer-related charges in connection with the bankruptcy of Mattress PAL and resulting significant liquidity issues of Mattress PAL's affiliates to fully reserve trade receivables and other assets associated with this account. In the fourth quarter of 2018, prior to the Sleep Outfitters Acquisition, we recorded \$21.2 million of customer-related charges in connection with the bankruptcy of iMS to fully reserve trade receivables and other assets associated with this account. Additionally, we recorded an \$8.9 million charge related to the donation of common stock at fair market value to certain public charities.
- *International* operating income increased \$7.9 million and operating margin improved 120 basis points. The improvement in operating margin was driven by the improvement in gross margin of 110 basis points. In 2018, we recorded \$8.5 million of costs associated with our International simplification efforts, including headcount reduction, professional fees and store closures, which were not repeated in 2019. These improvements were offset by an increase in variable compensation expense.
- *Corporate* operating expenses increased \$12.3 million, which negatively impacted our consolidated operating margin by 40 basis points. The increase in operating expenses was primarily driven by an increase in variable compensation expense.

INTEREST EXPENSE, NET

	Year Ended December 31,				Percent change				
(in millions, except percentages)		2019		2018	2019 vs 2018				
Interest expense, net	\$	85.7	\$	92.3	(7.2)%				

Year ended December 31, 2019 compared to year ended December 31, 2018

Interest expense, net, decreased \$6.6 million, or 7.2%. The decrease in interest expense, net, was driven by reduced average levels of outstanding debt and lower interest rates on our variable rate debt.

INCOME TAXES

	Year Ended December 31,				Percent change			
(in millions, except percentages)	2019		2018		2019 vs 2018			
Income tax	\$	74.7	\$	49.6	50.6 %			
Effective tax rate		28.1%		30.1%	(2.0)%			

Income tax provision includes income taxes associated with taxes currently payable and deferred taxes, and includes the impact of net operating losses for certain of our foreign operations.

Year ended December 31, 2019 compared to year ended December 31, 2018

Our income tax provision increased \$25.1 million due to an increase in income before income taxes and as the result of discrete items. Our 2019 effective tax rate decreased as compared to 2018 by 200 basis points. The effective tax rate as compared to the U.S. federal statutory tax rate for the year ending December 31, 2019 included a net unfavorable impact of discrete items primarily related to the sale of a certain interest in our Asia-Pacific joint venture and the impact of certain stock compensation. The effective tax rate as compared to the U.S. federal statutory tax rate for the year ended December 31, 2018 included a net favorable impact of the settlement of the previously-disclosed Danish Tax Matter for the years 2001 - 2011, the favorable impact of the U.S. Tax Reform Act as reflected on our 2017 U.S. income tax return filed in 2018 and the unfavorable impact of an increase in our uncertain tax position related to the Danish Tax Matter for years after 2011.

Refer to Note 15, "Income Taxes," in our Consolidated Financial Statements included in Part II, ITEM 8 of this Report for further information.

Liquidity and Capital Resources

Liquidity

Our principal sources of funds are cash flows from operations, borrowings made pursuant to our credit facilities and cash and cash equivalents on hand. Principal uses of funds consist of payments of principal and interest on our debt facilities, share repurchases, capital expenditures and working capital needs. At December 31, 2019, we had working capital of \$126.9 million, including cash and cash equivalents of \$64.9 million, as compared to working capital of \$136.4 million including \$45.8 million in cash and cash equivalents as of December 31, 2018.

Cash Provided by (Used in) Continuing Operations

The table below presents net cash provided by (used in) operating, investing and financing activities from continuing operations for the years ended December 31, 2019 and 2018.

	Year Ended December 31,							
(in millions)		2019	2018					
Net cash provided by (used in) continuing operations:								
Operating activities	\$	314.8	\$	207.5				
Investing activities		(90.2)		(71.2)				
Financing activities		(203.2)		(107.0)				

Cash provided by operating activities from continuing operations increased \$107.3 million in 2019 as compared to 2018. The increase in cash provided by operating activities was primarily driven by the increase in cash earnings offset in part by a decrease in working capital. Accounts receivable and inventory were principal uses of cash, which reflect higher sales levels and volumes, the impact of the new and expanded retail relationships, and new product introductions. Accrued expenses and other liabilities were a source of cash in 2019 as a result of increased accruals for variable compensation and other expenses such as advertising given higher revenues and earnings.

Cash used in investing activities from continuing operations increased \$19.0 million in 2019 as compared to 2018. The increase in cash used in investing activities was primarily due to cash used for the Sleep Outfitters Acquisition and planned capital expenditures.

Cash used in financing activities from continuing operations increased \$96.2 million in 2019 as compared to 2018. In 2019, we repurchased \$105.7 million of our common stock, which included repurchases of \$102.3 million under our share repurchase program and \$3.4 million which was withheld to satisfy tax withholding obligations related to stock compensation. In 2018, we repurchased \$4.6 million of our common stock which was withheld to satisfy tax withholding obligations related to stock compensation. In 2018, we repurchased \$4.6 million of our common stock which was withheld to satisfy tax withholding obligations related to stock compensation. We did not repurchase any shares under our share repurchase program during 2018. Proceeds from exercise of stock options increased \$13.2 million as compared to the same period in 2018. In 2019, we had net repayments of \$104.3 million on our credit facilities, as compared to net repayments of \$100.9 million in 2018.

Cash Used in Discontinued Operations

The table below presents net cash used in operating, investing and financing activities from discontinued operations for the years ended December 31, 2019 and 2018:

	Yea	Year Ended December 31,						
(in millions)		2019	2018					
Net cash (used in) provided by discontinued operations:								
Operating activities	\$	(2.0) \$	(24.4)					
Investing activities		—	2.1					
Financing activities		_	_					

Cash used in discontinued operations decreased \$22.4 million in 2019 as compared to 2018, primarily due to the payment of non-income tax obligations and related interest expense in 2018.

Capital Expenditures

Capital expenditures totaled \$88.2 million for the year ended December 31, 2019 and \$73.6 million for the year ended December 31, 2018. We currently expect our 2020 capital expenditures to be approximately \$100 to \$110 million, which includes investments in our U.S. ERP projects, domestic manufacturing facilities and our Tempur-Pedic retail stores.

Indebtedness

Our total debt decreased to \$1,547.0 million as of December 31, 2019 from \$1,653.8 million as of December 31, 2018. In the first half of 2019, we prepaid \$75.0 million on the Term A facility under the 2016 Credit Agreement. Refer to Note 8, "Debt," in our Consolidated Financial Statements included in Part II, ITEM 8 for further discussion of our debt.

On October 16, 2019, we entered into the 2019 Credit Agreement, which provides for a \$425.0 million revolving credit facility, a \$425.0 million term loan facility and an accordion feature for additional borrowings. Refer to Note 8, "Debt," in our Consolidated Financial Statements included in Part II, ITEM 8 for further discussion of the accordion feature of the 2019 Credit Agreement. We used the proceeds under the term loan facility to refinance outstanding borrowings under the 2016 Credit Agreement and terminated the existing revolving credit commitments. As of October 16, 2019, the terms of the 2019 Credit Agreement replaced the terms of the 2016 Credit Agreement.

As of December 31, 2019, our ratio of consolidated indebtedness less netted cash to adjusted EBITDA, which is a non-GAAP financial measure, in accordance with our 2019 Credit Agreement was 2.92 times, within the terms of the financial covenants for the maximum consolidated total net leverage ratio as set forth in the 2019 Credit Agreement, which limits this ratio to 5.00 times. As of December 31, 2019, we were in compliance with all of the financial covenants in our debt agreements.

Our debt agreements contain certain covenants that limit restricted payments, including share repurchases and dividends. The 2019 Credit Agreement, 2023 Senior Notes and 2026 Senior Notes contain similar limitations which, subject to other conditions, allow unlimited restricted payments at times when the ratio of consolidated indebtedness less netted cash to adjusted EBITDA remains below 3.5 times. In addition, these agreements permit limited restricted payments under certain conditions when the ratio of consolidated indebtedness less netted cash to adjusted EBITDA is above 3.5 times. The limit on restricted payments under the 2019 Credit Agreement, 2023 Senior Notes and 2026 Senior Notes is in part determined by a basket that grows at 50% of adjusted net income each quarter, reduced by restricted payments that are not otherwise permitted.

For additional information, refer to "Non-GAAP Financial Information" below for the calculation of the ratio of consolidated indebtedness less netted cash to adjusted EBITDA calculated in accordance with our 2019 Credit Agreement. Both consolidated indebtedness and adjusted EBITDA as used in discussion of the 2019 Credit Agreement are terms that are not recognized under GAAP and do not purport to be alternatives to net income as a measure of operating performance or total debt.

Share Repurchase Program

Our Board of Directors authorized a share repurchase program in 2016 pursuant to which we were authorized to repurchase shares of our common stock for a total repurchase price of not more than \$800.0 million. We did not repurchase any shares under our share repurchase program during 2018. For the year ended 2019, we repurchased 1.3 million shares under our share repurchase program for approximately \$102.3 million. As of December 31, 2019, we had approximately \$124.6 million remaining under our share repurchase program. In February 2020, the Board of Directors authorized an increase, of over \$190.0 million, to our share repurchase authorization of Tempur Sealy International's common stock to \$300.0 million. Share repurchases under this program may be made through open market transactions, negotiated purchases or otherwise, at times and in such amounts as management deems appropriate. These repurchases may be funded by operating cash flows and/or borrowings under our debt arrangements. The timing and actual number of shares repurchased will depend on a variety of factors including price, financing and regulatory requirements and other market conditions. The program is subject to certain limitations under our debt agreements. The program does not require the purchase of any minimum number of shares and may be suspended, modified or discontinued at any time without prior notice. Repurchases may be made under a Rule 10b5-1 plan, which would permit shares to be repurchased when we might otherwise be precluded from doing so under federal securities laws.

Future Liquidity Sources and Uses

Our primary sources of liquidity are cash flows from operations and borrowings, as needed, under our debt facilities. We expect that ongoing requirements for debt service and capital expenditures will be funded from these sources. As of December 31, 2019, we had \$1,547.0 million in total debt outstanding, and our adjusted EBITDA, which is a non-GAAP financial measure, was \$508.1 million for the year ended December 31, 2019. Our debt service obligations could, under certain circumstances, have material consequences to our stockholders. Total cash interest payments related to our borrowings are expected to be approximately \$80 to \$85 million in 2020.

On October 16, 2019, we entered into the 2019 Credit Agreement with a syndicate of banks. The 2019 Credit Agreement provides for a \$425.0 million revolving credit facility, a \$425.0 million term loan facility, and an incremental facility in an aggregate amount of up to \$550.0 million plus the amount of certain prepayments plus an additional unlimited amount subject to compliance with a maximum consolidated secured leverage ratio test. The 2019 Credit Agreement has a \$60.0 million sub-facility for the issuance of letters of credit. We expect to use the revolving credit facility from time to time to finance working capital needs and for general corporate purposes.

Our business continues to generate significant cash flows from operations. Based upon the current level of operations, we believe that cash generated from operations and amounts available under our credit facilities will be adequate to meet our anticipated debt service requirements, capital expenditures and working capital needs for the foreseeable future. There can be no assurance, however, that our business will generate sufficient cash flow from operations or that future borrowings will be available under our debt facilities or otherwise enable us to service our indebtedness or to make anticipated capital expenditures. In 2020, we expect to be within our target range for our ratio of consolidated indebtedness less netted cash of 2.5 times to 3.5 times. We expect to continue to use excess cash flows from operations for share repurchases and debt repayment. We may also consider other capital allocations, such as acquisitions or other investments.

At December 31, 2019, total cash and cash equivalents were \$64.9 million, of which \$28.9 million was held in the U.S. and \$36.0 million was held by subsidiaries outside of the U.S. The amount of cash and cash equivalents held by subsidiaries outside of the U.S. and not readily convertible into the U.S. Dollar or other major foreign currencies is not material to our overall liquidity or financial position.

Contractual Obligations

Our contractual obligations and other commercial commitments as of December 31, 2019 are summarized below:

(in millions)	Payment Due By Period												
Contractual Obligations	 2020 2021 2022 2023				2024	After 2024							
Debt ⁽¹⁾	\$ 29.2	\$	21.3	\$	21.3	\$	481.8	\$	329.3	\$	600.0	\$	1,482.9
Letters of credit	23.6		_				_				_		23.6
Interest payments ⁽²⁾	74.0		72.8		70.2		64.5		42.6		53.0		377.1
Operating leases	62.1		54.5		46.6		36.2		29.0		74.5		302.9
Finance lease obligations ⁽³⁾	8.5		8.7		7.1		5.5		4.2		30.1		64.1
Pension obligations	1.1		1.1		1.2		1.2		1.3		31.0		36.9
Total ⁽⁴⁾	\$ 198.5	\$	158.4	\$	146.4	\$	589.2	\$	406.4	\$	788.6	\$	2,287.5

(1) Debt excludes finance lease obligations and deferred financing costs.

(2) Interest payments represent obligations under our debt outstanding as of December 31, 2019, applying December 31, 2019 interest rates and assuming scheduled payments are paid as contractually required through maturity.

(3) The payments due for finance lease obligations excludes \$20.3 million in future payments for interest.

(4) Uncertain tax positions are excluded from this table given the timing of payments cannot be reasonably estimated.

Non-GAAP Financial Information

We provide information regarding adjusted net income, adjusted EPS, adjusted operating income (expense), adjusted operating margin, EBITDA, adjusted EBITDA, free cash flow, consolidated indebtedness and consolidated indebtedness less netted cash, which are not recognized terms under GAAP and do not purport to be alternatives to net income, earnings per share, operating income (expense), operating margin and net cash provided by operating activities as a measure of operating performance or an alternative to total debt as a measure of liquidity. We believe these non-GAAP financial measures provide investors with performance measures that better reflect our underlying operating margin. The adjustments we make to derive the non-GAAP financial measures include adjustments to exclude items that may cause short-term fluctuations in the nearest GAAP financial measure, but which we do not consider to be the fundamental attributes or primary drivers of our business.

We believe that exclusion of these items assists in providing a more complete understanding of our underlying results from continuing operations and trends, and we use these measures along with the corresponding GAAP financial measures to manage our business, to evaluate our consolidated and business segment performance compared to prior periods and the marketplace, to establish operational goals and to provide continuity to investors for comparability purposes. Limitations associated with the use of these non-GAAP measures include that these measures do not present all of the amounts associated with our results as determined in accordance with GAAP. These non-GAAP financial measures should be considered supplemental in nature and should not be construed as more significant than comparable financial measures defined by GAAP. Because not all companies use identical calculations, these presentations may not be comparable to other similarly titled measures of other companies. For more information about these non-GAAP financial measures and a reconciliation to the nearest GAAP financial measure, please refer to the reconciliations on the following pages.

Key Highlights

	Year Ended December 31,							
(in millions, except percentages)		2019		2018	% Change	% Change Constant Currency ⁽¹⁾		
Net sales	\$	3,106.0	\$	2,702.9	14.9%	16.0%		
Net income	\$	189.5	\$	100.5	88.6%	92.1%		
EBITDA ⁽¹⁾	\$	468.4	\$	356.1	31.5%	33.2%		
Adjusted EBITDA ⁽¹⁾	\$	508.1	\$	424.7	19.6%	21.0%		
EPS	\$	3.42	\$	1.82	87.9%	91.2%		
Adjusted EPS ⁽¹⁾	\$	4.01	\$	2.96	35.5%	37.5%		

(1) Non-GAAP financial measure. Please refer to the reconciliations in the following tables.

Adjusted Net Income and Adjusted EPS

A reconciliation of net income to adjusted net income and the calculation of adjusted EPS is provided below. We believe that the use of these non-GAAP financial measures provides investors with additional useful information with respect to the impact of various adjustments as described in the footnotes below. The following table sets forth the reconciliation of our reported net income to adjusted net income and the calculation of adjusted EPS for the years ended December 31, 2019 and 2018.

		Year Ended December 31,							
(in millions, except per common share amounts)	2	2019	2018						
Net income	\$	189.5 \$	100.5						
Loss from discontinued operations, net of tax ⁽¹⁾		1.4	17.8						
Customer-related charges ⁽²⁾		29.8	21.2						
Charitable stock donation ⁽³⁾		8.9	_						
Acquisition-related costs and other ⁽⁴⁾		6.1	—						
Credit facility amendment ⁽⁵⁾		0.7	_						
Other income ⁽⁶⁾		(7.2)	_						
Restructuring costs ⁽⁷⁾			24.9						
Supply chain transition costs (8)			7.3						
Tax adjustments ⁽⁹⁾		(7.3)	(8.7)						
Adjusted net income	\$	221.9 \$	163.0						
Adjusted earnings per share, diluted	\$	4.01 \$	2.96						
Diluted shares outstanding		55.4	55.1						

- (1) Certain subsidiaries in the International business segment are accounted for as discontinued operations and have been designated as unrestricted subsidiaries in the 2019 Credit Agreement. Therefore, these subsidiaries are excluded from our adjusted financial measures for covenant compliance purposes.
- (2) In the fourth quarter of 2019, we recorded \$29.8 million of customer-related charges in connection with the bankruptcy of Mattress PAL and resulting significant liquidity issues of Mattress PAL's affiliates to fully reserve trade receivables and other assets associated with this account. In the fourth quarter of 2018, we recorded \$21.2 million of customer-related charges in connection with the bankruptcy of iMS to fully reserve trade receivables and other assets associated with this account.
- (3) In the fourth quarter of 2019, we recorded an \$8.9 million charge related to the donation of common stock at fair market value to certain public charities.
- (4) In the first half of 2019, we recorded \$6.1 million of acquisition-related and other costs, primarily related to post acquisition restructuring charges and professional fees incurred in connection with the acquisition of substantially all of the net assets of iMS by an affiliate of ours.
- (5) In the fourth quarter of 2019, we incurred \$0.7 million of professional fees in connection with the amendment of the senior secured credit facility.
- (6) In the first quarter of 2019, we recorded \$7.2 million of other income related to the sale of our interest in a subsidiary of the Asia-Pacific joint venture.
- (7) In 2018, we recorded \$24.9 million of restructuring costs, which included \$1.3 million of other expense, net. These costs included \$11.5 million of charges related to the operational alignment of a joint venture that was wholly owned in the North America business segment, which included \$6.1 million in cost of sales and \$1.3 million of other expense, net. Restructuring costs also included \$8.5 million of expenses in the International business segment related to International simplification efforts, which included \$0.3 million in cost of sales. Corporate recorded \$4.9 million of professional fees related to restructuring activities.
- (8) In 2018, we recorded \$7.3 million of supply chain transition costs which represent charges incurred to consolidate certain manufacturing and distribution facilities, including \$5.6 million in cost of sales and \$0.8 million of other expense.
- (9) Adjusted income tax provision represents the tax effects associated with the aforementioned items and other discrete income tax events.

Adjusted Gross Profit and Gross Margin and Adjusted Operating Income (Expense) and Operating Margin

A reconciliation of gross profit and gross margin to adjusted gross profit and adjusted gross margin, respectively, and operating income (expense) and operating margin to adjusted operating income (expense) and adjusted operating margin, respectively, are provided below. We believe that the use of these non-GAAP financial measures provides investors with additional useful information with respect to the impact of various adjustments as described in the footnotes below. The following table sets forth the reconciliation of our reported gross profit and operating income (expense) to the calculation of adjusted operating income (expense) for the year ended December 31, 2019. We had no adjustments to gross profit for the year ended December 31, 2019.

	FULL YEAR 2019												
(in millions, except percentages)		nsolidated	Margin	North America		Margin	International		Margin	Corporate			
Net sales \$ 3,106.0		\$	2,533.3		\$	572.7		\$					
Gross profit	\$	1,342.2	43.2%	\$	1,035.2	40.9%	\$	307.0	53.6%	\$	—		
Operating income (expense)	\$	346.7	11.2%	\$	344.8	13.6%	\$	115.4	20.2%	\$	(113.5)		
Adjustments:													
Customer-related charges ⁽¹⁾		29.8			29.8			—			—		
Charitable stock donation ⁽²⁾		8.9			8.9			—			—		
Acquisition-related costs and other (3)		6.1			1.7			0.3			4.1		
Credit facility amendment (4)		0.7			—			—			0.7		
Total Adjustments		45.5			40.4			0.3			4.8		
Adjusted operating income (expense)	\$	392.2	12.6%	\$	385.2	15.2%	\$	115.7	20.2%	\$	(108.7)		

(1) In the fourth quarter of 2019, we recorded \$29.8 million of customer-related charges in connection with the bankruptcy of Mattress PAL and resulting significant liquidity issues of Mattress PAL's affiliates to fully reserve trade receivables and other assets associated with this account.

(2) In the fourth quarter of 2019, we recorded an \$8.9 million charge related to the donation of common stock at fair market value to certain public charities.

(3) In the first half of 2019, we recorded \$6.1 million of acquisition-related and other costs, primarily related to post acquisition restructuring charges and professional fees incurred in connection with the acquisition of substantially all of the net assets of iMS by an affiliate of ours.

(4) In the fourth quarter of 2019, we incurred \$0.7 million of professional fees in connection with the amendment of the senior secured credit facility.

The following table sets forth the reconciliation of our reported gross profit and operating income (expense) to the calculation of adjusted gross profit and adjusted operating income (expense) for the year ended December 31, 2018:

	FULL YEAR 2018												
(in millions, except percentages)	Сог	nsolidated	Margin	1	North America	Margin	Int	ernational	Margin	C	orporate		
Net sales	\$	2,702.9		\$	2,136.2		\$	566.7		\$	—		
Gross profit	\$	1,120.7	41.5%	\$	823.4	38.5%	\$	297.3	52.5%	\$	—		
Adjustments:													
Restructuring costs ⁽¹⁾		6.4			6.1			0.3			—		
Supply chain transition costs (2)		5.6			5.6			—			_		
Total adjustments		12.0			11.7			0.3			_		
Adjusted gross profit	\$	1,132.7	41.9%	\$	835.1	39.1%	\$	297.6	52.5%	\$			
Operating income (expense)	\$	256.3	9.5%	\$	250.0	11.7%	\$	107.5	19.0%	\$	(101.2)		
Adjustments:													
Restructuring costs ⁽¹⁾		23.6			10.2			8.5			4.9		
Customer-related charges ⁽³⁾		21.2			20.9			_			0.3		
Supply chain transition costs ⁽²⁾		6.5			6.5			_			_		
Total adjustments		51.3			37.6			8.5			5.2		
Adjusted operating income (expense)	\$	307.6	11.4%	\$	287.6	13.5%	\$	116.0	20.5%	\$	(96.0)		

(1) In 2018, we recorded \$24.9 million of restructuring costs, which included \$1.3 million of other expense, net. These costs included \$11.5 million of charges related to the operational alignment of a joint venture that was wholly owned in the North America business segment, which included \$6.1 million in cost of sales and \$1.3 million of other expense, net. Restructuring costs also included \$8.5 million of expenses in the International business segment related to International simplification efforts, which included \$0.3 million in cost of sales. Corporate recorded \$4.9 million of professional fees related to restructuring activities.

(2) In 2018, we recorded \$7.3 million of supply chain transition costs which represent charges incurred to consolidate certain manufacturing and distribution facilities, including \$5.6 million in cost of sales and \$0.8 million of other expense.

(3) In the fourth quarter of 2018, we recorded \$21.2 million of customer-related charges in connection with the bankruptcy of iMS to fully reserve trade receivables and other assets associated with this account.

EBITDA, Adjusted EBITDA, Consolidated Indebtedness Less Netted Cash and Free Cash Flow

The following reconciliations are provided below:

- Net income to EBITDA and adjusted EBITDA
- · Ratio of consolidated indebtedness less netted cash to adjusted EBITDA
- Total debt, net to consolidated indebtedness less netted cash
- Net cash provided by operating activities to free cash flow

We believe that presenting these non-GAAP measures provides investors with useful information with respect to our operating performance, cash flow generation and comparisons from period to period, as well as general information about our progress in reducing our leverage. The following table sets forth the reconciliation of our reported net income to the calculations of EBITDA and adjusted EBITDA for the years ended December 31, 2019 and 2018:

		Year Ended						
Interest expense, net Income tax provision Depreciation and amortization BITDA Adjustments: Loss from discontinued operations, net of tax ⁽¹⁾ Customer-related charges ⁽²⁾ Charitable stock donation ⁽³⁾ Acquisition-related costs and other ⁽⁴⁾ Credit facility amendment ⁽⁵⁾ Other income ⁽⁶⁾ Restructuring costs ⁽⁷⁾ Supply chain transition costs ⁽⁸⁾ djusted EBITDA	Decem	ıber 31, 2019	Dece	mber 31, 2018				
Net income	\$	189.5	\$	100.5				
Interest expense, net		85.7		92.3				
Income tax provision		74.7		49.6				
Depreciation and amortization		118.5		113.7				
EBITDA	\$	468.4	\$	356.1				
Adjustments:								
Loss from discontinued operations, net of tax (1)		1.4		17.8				
Customer-related charges ⁽²⁾		29.8		21.2				
Charitable stock donation ⁽³⁾		8.9		—				
Acquisition-related costs and other ⁽⁴⁾		6.1		—				
Credit facility amendment ⁽⁵⁾		0.7		_				
Other income ⁽⁶⁾		(7.2)		_				
Restructuring costs ⁽⁷⁾				22.3				
Supply chain transition costs ⁽⁸⁾		_		7.3				
Adjusted EBITDA	\$	508.1	\$	424.7				
Consolidated indebtedness less netted cash	\$	1,483.6	\$	1,644.6				
Ratio of consolidated indebtedness less netted cash to adjusted EBITDA		2.92 times		3.87 times				

- (1) Certain subsidiaries in the International business segment are accounted for as discontinued operations and have been designated as unrestricted subsidiaries in the 2019 Credit Agreement. Therefore, these subsidiaries are excluded from our adjusted financial measures for covenant compliance purposes.
- (2) In the fourth quarter of 2019, we recorded \$29.8 million of customer-related charges in connection with the bankruptcy of Mattress PAL and resulting significant liquidity issues of Mattress PAL's affiliates to fully reserve trade receivables and other assets associated with this account. In the fourth quarter of 2018, we recorded \$21.2 million of customer-related charges in connection with the bankruptcy of iMS to fully reserve trade receivables and other assets associated with this account.
- (3) In the fourth quarter of 2019, we recorded an \$8.9 million charge related to the donation of common stock at fair market value to certain public charities.
- (4) In the first half of 2019, we recorded \$6.1 million of acquisition-related and other costs, primarily related to post acquisition restructuring charges and professional fees incurred in connection with the acquisition of substantially all of the net assets of iMS by an affiliate of ours.
- (5) In the fourth quarter of 2019, we incurred \$0.7 million of professional fees in connection with the amendment of the senior secured credit facility.
- (6) In the first quarter of 2019, we recorded \$7.2 million of other income related to the sale of our interest in a subsidiary of the Asia-Pacific joint venture.
- (7) In 2018, we recorded \$24.9 million of restructuring costs, including \$2.6 million of depreciation expense and \$1.3 million of other expense, net. These costs included \$11.5 million of charges related to the operational alignment of a joint venture that was wholly owned in the North America business segment, which included \$6.1 million in cost of sales and \$1.3 million of other expense, net. Restructuring costs also included \$8.5 million of expenses in the International business segment related to International simplification efforts, which included \$0.3 million in cost of sales. Corporate recorded \$4.9 million of professional fees related to restructuring activities.
- (8) In 2018, we recorded \$7.3 million of supply chain transition costs which represent charges incurred to consolidate certain manufacturing and distribution facilities, including \$5.6 million in cost of sales and \$0.8 million of other expense.

On October 16, 2019, we entered into the 2019 Credit Agreement with a syndicate of banks. Under the 2019 Credit Agreement, the definition of adjusted EBITDA contains certain restrictions that limit adjustments to net income when calculating adjusted EBITDA. For the year ended December 31, 2019, our adjustments to net income when calculating adjusted EBITDA did not exceed the allowable amount under the 2019 Credit Agreement.

The ratio of adjusted EBITDA under the 2019 Credit Agreement to consolidated indebtedness less netted cash was 2.92 times for the trailing twelve months ended December 31, 2019. The 2019 Credit Agreement requires us to maintain a ratio of consolidated indebtedness less netted cash to adjusted EBITDA of less than 5.00:1.00 times.

The following table sets forth the reconciliation of our reported total debt to the calculation of consolidated indebtedness less netted cash as of December 31, 2019 and 2018. "Consolidated Indebtedness" and "Netted Cash" are terms used in the 2019 Credit Agreement for purposes of certain financial covenants.

(in millions)	Decem	December 31, 2019		nber 31, 2018
Total debt, net	\$	1,540.0	\$	1,646.2
Plus: Deferred financing costs ⁽¹⁾		7.0		7.6
Consolidated indebtedness		1,547.0		1,653.8
Less: Netted cash ⁽²⁾		63.4		32.9
Consolidated indebtedness less netted cash	\$	1,483.6	\$	1,644.6

(1) We present deferred financing costs as a direct reduction from the carrying amount of the related debt in the Consolidated Balance Sheets. For purposes of determining total debt for financial covenant purposes, we added these costs back to total debt, net as calculated per the Consolidated Balance Sheets.

(2) Netted cash includes cash and cash equivalents for domestic and foreign subsidiaries designated as restricted subsidiaries in the 2019 Credit Agreement.

The following table sets forth the reconciliation of our net cash from operating activities to free cash flow for the years ended December 31, 2019 and 2018:

	Year E	ıded Dec	cember 31,
(in millions)	2019		2018
Net cash provided by operating activities	\$	\$14.8 \$	207.5
Subtract: Purchases of property, plant and equipment		88.2	73.6
Free cash flow	\$	26.6 \$	133.9

Critical Accounting Policies and Estimates

Our management is responsible for our financial statements and has evaluated the accounting policies to be used in their preparation. Our management believes these policies are reasonable and appropriate. The following discussion identifies those accounting policies that we believe are critical in the preparation of our financial statements, the judgments and uncertainties affecting the application of those policies and the possibility that materially different amounts will be reported under different conditions or using different assumptions.

The preparation of financial statements in conformity with GAAP requires that management make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of commitments and contingencies at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Our actual results could differ from those estimates.

Revenue Recognition. Sales of product are recognized when the obligations under the terms of the contract with the customer are satisfied, which is generally when control of the product has transferred to the customer. Transferring control of each product sold is considered a separate performance obligation. We transfer control and recognize a sale when the product ships to the customer or when the customer receives the product based upon agreed shipping terms. Each unit sold is considered an independent, unbundled performance obligation. We do not have any additional performance obligations other than product sales that are material in the context of the contract. We extend volume discounts to certain customers and reflect these amounts as a reduction of net sales.

We estimate the liability for sales returns at the time of sale, based on our level of historical sales returns. We allow returns following a sale, depending on the channel and promotion. Our level of sales returns differs by channel, with our Direct channel typically experiencing the higher rate of returns.

We record an allowance for doubtful accounts receivable for amounts due from third parties that we do not expect to collect. We estimate the allowance based on historical write-off experience and current economic conditions and also consider factors such as customer credit, past transaction history with the customer and changes in customer payment terms when determining whether the collection of a receivable is reasonably assured.

The credit environment in which our customers operate has been relatively stable over the past few years. Historically, less than 1.0% of net sales ultimately prove to be uncollectible. However, there have been signs of deterioration in the U.S. retail sector. Total bad debt expense was \$29.3 million in 2019, \$31.3 million in 2018 and \$9.8 million in 2017.

We regularly review the adequacy of our allowance for doubtful accounts based on the latest information available and accrue losses from uncollectible receivables when such losses can reasonably be estimated. The allowance for doubtful accounts is our best estimate of the amount of probable credit losses in our existing accounts receivable. The allowance for doubtful accounts included in accounts receivable, net in the accompanying Consolidated Balance Sheets was \$71.9 million and \$47.6 million as of December 31, 2019 and 2018, respectively. If circumstances change, for example, due to the occurrence of higher-than-expected defaults or a significant adverse change in a major customer's ability to meet our financial obligations, estimates of the recoverability of receivable amounts due could be reduced.

Our revenue recognition accounting methodology contains uncertainties because it requires management to make assumptions and to apply judgment to estimate the amount and timing of future sales returns and uncollectible accounts. Our estimate of the amount and timing of sales returns and uncollectible accounts is based primarily on historical transaction experience.

We have not made any material changes in the accounting methodology we use to measure the estimated liability for sales returns and exchanges or doubtful accounts during the past three fiscal years. We do not believe there is a reasonable likelihood that there will be a material change in the future estimates or assumptions we use to establish the liability for sales returns and exchanges and doubtful accounts. However, if actual results are not consistent with our estimates or assumptions, we may be exposed to losses or gains that could be material.

On January 1, 2020, we adopted Accounting Standards Update ("ASU") No. 2016-13, Financial Instruments - Credit Losses (Topic 326), which requires entities to estimate expected lifetime credit losses on financial assets and provide expanded disclosures. The ASU replaced the incurred loss impairment methodology with one that reflects expected credit losses and requires consideration of a broader range of reasonable and supportable information to inform credit loss estimates. The adoption of the standard did not have a significant impact on our financial statements or our critical accounting policies.

Income Taxes. Accounting for income taxes requires recognition of deferred tax liabilities and assets for the expected future tax consequences of events that have been included in the financial statements or tax returns. Under this method, deferred tax assets and liabilities are determined based on the difference between the financial statement and tax bases of assets and liabilities.

We recognize deferred tax assets in our Consolidated Balance Sheets, and these deferred tax assets typically represent items deducted currently from operating income in the financial statements that will be deducted in future periods in tax returns. A valuation allowance is recorded against certain deferred tax assets to reduce the consolidated deferred tax asset to an amount that will, more likely than not, be realized in future periods. At December 31, 2019 the valuation allowance of \$30.0 million was primarily related to certain tax attributes and various foreign jurisdictions. The valuation allowance is based, in part, on our estimate of future taxable income, the expected utilization of foreign and state tax loss carryforwards, and credits and the expiration dates of such tax loss carryforwards.

We did not recognize certain tax benefits from uncertain tax positions within the provision for income taxes. We may recognize a tax benefit only if it is more likely than not the tax position will be sustained on examination by the taxing authorities, based on the technical merits of the position. The tax benefits recognized in the financial statements from such positions are then measured based on the largest benefit that has a greater than 50% likelihood of being realized upon settlement. At December 31, 2019, our estimated gross unrecognized tax benefits were \$104.5 million of which \$96.8 million, if recognized, would favorably impact our future earnings. Due to uncertainties in any tax audit outcome, our estimates of the ultimate settlement of our unrecognized tax positions may change and the actual tax benefits may differ significantly from the estimates.

We have been involved in a dispute with SKAT regarding the Danish Tax Matter for tax years 2001 through current. The royalty is paid by the U.S. subsidiary for the right to utilize certain intangible assets owned by the Danish subsidiary in the U.S. production process.

During 2018, we negotiated a settlement with SKAT for the tax years 2001 through 2011 (the "Settlement Years"). In addition, we have entered into the APA Program for the tax years 2012 through 2022 in which the IRS, on our behalf, will negotiate directly with SKAT the royalty to be paid by the U.S. subsidiary to the Danish Subsidiary. We maintain an uncertain income tax liability for both the Settlement Years and for the tax years 2012 through 2019 that are included in the APA Program. If we are required to further increase the uncertain tax liability for either or both periods based on a change in facts and circumstances, it could have a material impact on our reported earnings. Further, if the IRS and SKAT are unable to reach a mutually acceptable agreement with respect to the tax years included in the APA Program, we could be required to make a significant payment to SKAT for Danish tax related to such years, which could have a material adverse effect on our results of operations and liquidity.

Our liability for the Danish Tax Matter uncertain tax position is derived using a cumulative probability analysis with possible outcomes based on an evaluation of the facts and circumstances and applying the technical requirements applicable to U.S., Danish, and the international transfer pricing standards, taking into account both the U.S. and Danish income tax implications of such outcomes. For a description of these matters and additional information please refer to Note 15, "Income Taxes," to the accompanying Consolidated Financial Statements.

Goodwill and Indefinite-Lived Intangible Assets. Goodwill and indefinite-lived intangible assets are evaluated for impairment annually as of October 1 and whenever events or circumstances make it more likely than not that impairment may have occurred.

We test goodwill for impairment by comparing the book values to the fair value at the reporting unit level. Our reporting units are our North America and International segments. We test individual indefinite-lived intangible assets by comparing the book values of each asset to the estimated fair value. If the fair value exceeds the carrying amount, then no impairment exists. If the carrying amount exceeds the fair value, further analysis is performed to measure the impairment loss.

The fair value of each reporting unit is determined by using an income approach, which uses a discounted cash flow approach and a market approach. The fair value of each indefinite-lived intangible asset is determined using an income approach. Significant management judgment is necessary to evaluate the impact of operating and macroeconomic changes on each reporting unit. The significant estimates and assumptions include projected sales growth, gross profit rates, selling, general and administrative rates, working capital requirements, capital expenditures and terminal growth rates, discount rates per reporting unit, and the selection of peer company multiples. We determine discount rates separately for each reporting unit using the weighted average cost of capital, which includes a calculation of cost of equity, which is developed using the capital asset pricing model and comparable company betas (a measure of systemic risk), and cost of debt. We also use comparable market earnings multiple data and our market capitalization to corroborate our reporting unit valuations.

We have not made any material changes in our reporting units or the accounting methodology we use to assess impairment loss on goodwill and indefinite-lived intangible assets.

The most recent annual impairment tests performed as of October 1, 2019 indicated that the fair values of each of our reporting units and indefinite-lived intangible assets were substantially in excess of their carrying values. Despite that excess, however, impairment charges could still be required if a divestiture decision were made or other significant economic event were made or occurred with respect to one of our reporting units. Subsequent to our October 1, 2019 annual impairment test, no indications of impairment were identified.

We do not believe there is a reasonable likelihood that there will be a material change in the future estimates or assumptions we use to test for impairment losses on goodwill and indefinite-lived intangible assets. However, if actual results are not consistent with our estimates or assumptions, we may be exposed to an impairment charge that could be material.

Impact of Recently Issued Accounting Pronouncements

Refer to Note 2, "Recently Issued Accounting Pronouncements," in our Consolidated Financial Statements included in Part II, ITEM 8 of this Report for a full description of recent accounting pronouncements, including the expected dates of adoption and estimated effects on results of operations and financial condition, which is incorporated herein by reference.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Foreign Currency Exposures

We manage a portion of our exposure in foreign currency transactions through the use of foreign exchange forward contracts. Refer to Note 1(f), "Derivative Financial Instruments," to the accompanying Consolidated Financial Statements for a summary of our foreign exchange forward contracts as of December 31, 2019.

As a result of our global operations, our earnings are exposed to changes in foreign currency exchange rates. Many of our foreign businesses operate in functional currencies other than the U.S. dollar. As the U.S. dollar strengthens relative to the Euro or other foreign currencies where we have operations, there will be a negative impact on our operating results upon translation of those foreign operating results into the U.S. dollar. Foreign currency exchange rate changes negatively impacted our adjusted EBITDA, which is a non-GAAP financial measure, by approximately 1.1% in the year ended December 31, 2019. We do not hedge the translation of foreign currency operating results into the U.S. dollar.

We hedge a portion of our currency exchange exposure relating to foreign currency transactions with foreign exchange forward contracts. A sensitivity analysis indicates the potential loss in fair value on foreign exchange forward contracts outstanding at December 31, 2019, resulting from a hypothetical 10.0% adverse change in all foreign currency exchange rates against the U.S. dollar, is approximately \$9.1 million. Such losses would be largely offset by gains from the revaluation or settlement of the underlying assets and liabilities that are being protected by the foreign exchange forward contracts.

In the fourth quarter of 2018, we converted \$75 million of our 5.50% fixed-rate USD-denominated 2026 Senior Notes, including the semi-annual interest payments thereunder, to fixed-rate DKK denominated debt at an average rate of 2.131%. During January 2019, we converted an additional \$25 million of our 5.50% fixed-rate USD-denominated 2026 Senior Notes, including the semi-annual interest payments thereunder, to fixed-rate DKK denominated debt at an average rate of 2.316%. We have designated these cross currency swap agreements as qualifying hedging instruments and are accounting for these as net investment hedges.

Effective June 30, 2018, we determined that the economy in Argentina is highly inflationary. Beginning July 1, 2018, the U.S. Dollar is the functional currency for our subsidiaries in Argentina. Remeasurement adjustments in a highly inflationary economy and other transactional gains and losses are reflected in net earnings and were not material for the year ended December 31, 2019. These subsidiaries are included in loss from discontinued operations, net of tax, on our Consolidated Statements of Income and are not material as of December 31, 2019.

Interest Rate Risk

On December 31, 2019, we had variable-rate debt of \$432.9 million. Holding other variables constant, including levels of indebtedness, a one hundred basis point increase in interest rates on our variable-rate debt would cause an estimated reduction in income before income taxes of \$4.3 million. We continue to evaluate the interest rate environment and look for opportunities to improve our debt structure and minimize our interest rate risk and expense.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

INDEX TO HISTORICAL FINANCIAL STATEMENTS

Report of Ernst & Young LLP, Independent Registered Public Accounting Firm	45
Consolidated Statements of Income for the years ended December 31, 2019, 2018 and 2017	47
Consolidated Statements of Comprehensive Income for the years ended December 31, 2019, 2018 and 2017	48
Consolidated Balance Sheets as of December 31, 2019 and 2018	49
Consolidated Statements of Stockholders' Equity for the years ended December 31, 2019, 2018 and 2017	50
Consolidated Statements of Cash Flows for the years ended December 31, 2019, 2018 and 2017	51
Notes to the Consolidated Financial Statements	52

Report of Independent Registered Public Accounting Firm

To the Stockholders and the Board of Directors of Tempur Sealy International, Inc. and Subsidiaries

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Tempur Sealy International, Inc. and Subsidiaries (the Company) as of December 31, 2019 and 2018, the related consolidated statements of income, comprehensive income, stockholders' equity and cash flows for each of the three years in the period ended December 31, 2019, and the related notes and financial statement schedule listed in the Index at Item 15(a) (collectively referred to as the "consolidated financial statements"). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company at December 31, 2019 and 2018, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2019, in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of December 31, 2019, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 Framework), and our report dated February 21, 2020, expressed an unqualified opinion thereon.

Adoption of Accounting Standards

As discussed in Note 1 to the consolidated financial statements, the Company changed its method of accounting for revenue in 2018 and changed its method of accounting for leases in 2019.

Basis for Opinion

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

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

Critical Audit Matter

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

	Danish Tax Matter Uncertain Tax Position
Description of the Matter	As described in Note 15 to the consolidated financial statements, the Company's liability for the Danish Tax Matter uncertain tax position, including interest and penalties, was approximately \$166.7 million as of December 31, 2019. The Company's liability for the Danish Tax Matter uncertain tax position is derived using the cumulative probability analysis with possible outcomes based on an evaluation of the facts and circumstances and applying the technical requirements applicable to U.S., Danish, and international transfer pricing standards, taking into account both the U.S. and Danish income tax implications of such outcomes.
	Auditing the measurement of the liability for the Danish Tax Matter uncertain tax position was complex and highly judgmental due to the significant judgment to measure the largest amount of benefit that is more likely than not to be realized upon ultimate settlement.
How We Addressed the Matter in Our Audit	We obtained an understanding, evaluated the design, and tested the operating effectiveness of controls over the Company's process to measure the liability for the Danish Tax Matter uncertain tax position. For example, we tested management's review of inputs and calculations of the liability for the Danish Tax Matter uncertain tax position.
	To test the Company's measurement of the liability for the Danish Tax Matter uncertain tax position, we involved our tax professionals to evaluate the pricing conclusions reached by the Company. For example, we compared the transfer pricing methodology utilized by management to alternative methodologies. We also reviewed the Company's correspondence with the relevant tax authorities and any third-party professional and legal advice obtained by the Company. In addition, we used our knowledge of international, domestic and local income tax laws, as well as settlement activity from the relevant income tax authorities, to evaluate the Company's measurement of the liability for the Danish Tax Matter uncertain tax position.

/s/ Ernst & Young LLP

We have served as the Company's auditor since 2002.

Louisville, Kentucky February 21, 2020

TEMPUR SEALY INTERNATIONAL, INC. AND SUBSIDIARIES CONSOLIDATED STATEMENTS OF INCOME

(in millions, except per common share amounts)

	Year Ended December 31,						
		2019		2018		2017	
Net sales	\$	3,106.0	\$	2,702.9	\$	2,700.6	
Cost of sales		1,763.8		1,582.2		1,579.6	
Gross profit		1,342.2		1,120.7		1,121.0	
Selling and marketing expenses		666.3		587.8		586.1	
General, administrative and other expenses		315.3		273.0		261.4	
Customer-related charges		29.8		21.2		14.4	
Equity income in earnings of unconsolidated affiliates		(15.9)		(17.6)		(15.6)	
Royalty income, net of royalty expense		_		_		(20.8)	
Operating income		346.7		256.3		295.5	
Other expense, net:							
Interest expense, net		85.7		92.3		87.3	
Other income, net		(4.5)		(1.0)		(7.2)	
Total other expense, net		81.2		91.3		80.1	
Income from continuing operations before income taxes		265.5		165.0		215.4	
Income tax provision		(74.7)		(49.6)		(43.8)	
Income from continuing operations		190.8		115.4		171.6	
Loss from discontinued operations, net of tax		(1.4)		(17.8)		(30.9)	
Net income before non-controlling interests		189.4		97.6		140.7	
Less: Net loss attributable to non-controlling interests		(0.1)		(2.9)		(10.7)	
Net income attributable to Tempur Sealy International, Inc.	\$	189.5	\$	100.5	\$	151.4	
Earnings per common share:							
Basic							
Earnings per share for continuing operations	\$	3.50	\$	2.17	\$	3.37	
Loss per share for discontinued operations		(0.02)		(0.32)		(0.57)	
Earnings per share	\$	3.48	\$	1.85	\$	2.80	
Diluted							
Earnings per share for continuing operations	\$	3.45	\$	2.15	\$	3.33	
Loss per share for discontinued operations		(0.03)		(0.33)		(0.56)	
Earnings per share	\$	3.42	\$	1.82	\$	2.77	
Weighted average common shares outstanding:							
Basic		54.5		54.4		54.0	
Diluted		55.4		55.1		54.7	

Table of Contents

TEMPUR SEALY INTERNATIONAL, INC. AND SUBSIDIARIES CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

(in millions)

Yea	r End	ed December	31,	
2019		2018		2017
\$ 189.4	\$	97.6	\$	140.7
9.5		(18.9)		29.1
(1.9)		(0.9)		(0.5)
—		—		(0.6)
7.6		(19.8)		28.0
 197.0		77.8		168.7
(0.1)		(2.9)		(10.7)
\$ 197.1	\$	80.7	\$	179.4
\$ 	2019 \$ 189.4 9.5 (1.9) 7.6 197.0 (0.1)	2019 \$ 189.4 \$ 9.5 (1.9) 7.6 197.0 (0.1)	2019 2018 \$ 189.4 \$ 97.6 9.5 (18.9) (1.9) (0.9) 7.6 (19.8) 197.0 77.8 (0.1) (2.9)	\$ 189.4 \$ 97.6 \$ 9.5 (18.9) (0.9) (0.9) — — —

TEMPUR SEALY INTERNATIONAL, INC. AND SUBSIDIARIES CONSOLIDATED BALANCE SHEETS

(in millions)

	Deceml	ber 31, 2019	December 31, 2018			
ASSETS						
Current Assets:						
Cash and cash equivalents	\$	64.9	\$	45.8		
-	\$	372.0	\$	43.8 321.5		
Accounts receivable, net						
Inventories		260.5		222.3		
Prepaid expenses and other current assets		202.8		215.8		
Total Current Assets		900.2		805.4		
Property, plant and equipment, net		435.8		420.8		
Goodwill		732.3		723.0		
Other intangible assets, net		641.4		649.3		
Operating lease right-of-use assets		245.4		_		
Deferred income taxes		14.1		22.6		
Other non-current assets		92.6		94.3		
Total Assets	\$	3,061.8	\$	2,715.4		
LIABILITIES AND STOCKHOLDERS' EQUITY						
Current Liabilities:						
Accounts payable	\$	251.7	\$	253.0		
Accrued expenses and other current liabilities		473.2		359.2		
Income taxes payable		11.0		9.7		
Current portion of long-term debt		37.4		47.1		
Total Current Liabilities		773.3		669.0		
Long-term debt, net		1,502.6		1,599.1		
Long-term operating lease obligations		205.4				
Deferred income taxes		102.1		117.5		
Other non-current liabilities		118.0		112.3		
Total Liabilities		2,701.4		2,497.9		
Stockholders' Equity:						
Common stock, \$0.01 par value, 300.0 million shares authorized; 99.2 million shares		1.0		1.0		
issued as of December 31, 2019 and 2018				1.0		
Additional paid in capital		575.7		532.1		
Retained earnings		1,703.3		1,513.8		
Accumulated other comprehensive loss Treasury stock at cost; 45.4 million and 44.7 million shares as of December 31, 2019		(87.7)		(95.3		
and 2018, respectively		(1,832.8)		(1,737.0		
Total stockholders' equity, net of non-controlling interest in subsidiaries		359.5		214.6		
Non-controlling interest in subsidiaries		0.9		2.9		
Total Stockholders' Equity		360.4		217.5		
Total Liabilities and Stockholders' Equity	\$	3,061.8	\$	2,715.4		

TEMPUR SEALY INTERNATIONAL, INC. AND SUBSIDIARIES CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY (in millions)

			Tempur Sealy International, Inc. Stockholders' Equity													
		eemable	Comm	on St	ock	Treasu	ry Stock					Accumulated	Non-			
	cont	Non- trolling terest	Shares Issued	A	t Par	Shares Issued	At Cost	Additional Paid in Capital		Retained Earnings	С	Other omprehensive Loss) Income	controlling Interest in Subsidiaries		Total Stockholders' Equity (Deficit)	
Balance, December 31, 2016	\$	7.6	99.2	\$	1.0	44.8	\$ (1,700.0)	\$ 4	92.8	\$ 1,264.8	\$	(103.5)	\$ 3.	\$	(41.9)	
Net income										151.4					151.4	
Net loss attributable to non-controlling interests		(5.4)											(5.1	5)	(5.3)	
Acquisition of non-controlling interest in subsidiary									(3.2)				2		(0.9)	
Adjustment to pension liability, net of tax of \$(0.3)												(0.5)			(0.5)	
Derivative instruments accounted for as hedges, net of tax of \$(0.1)												(0.6)			(0.6)	
Foreign currency adjustments												29.1			29.1	
Exercise of stock options						(0.3)	4.5		8.3						12.8	
Issuances of PRSUs, RSUs, and DSUs						(0.2)	3.2		(3.2)						—	
Treasury stock repurchased						0.6	(40.1)								(40.1)	
Treasury stock repurchased - PRSU/RSU/DSU releases						0.1	(4.8)								(4.8)	
Amortization of unearned stock-based compensation									13.3						13.3	
Balance, December 31, 2017	\$	2.2	99.2	\$	1.0	45.0	\$ (1,737.2)	\$ 5	08.0	\$ 1,416.2	\$	(75.5)	\$	\$	112.5	
Adoption of accounting standards effective January 1, 2018										(2.9)) \$	(0.5)			(3.4)	
Net income										100.5					100.5	
Net loss attributable to non-controlling interests		(2.7)											(0.2	2)	(0.2)	
Acquisition of non-controlling interest in subsidiary													3.		3.1	
Adjustment to pension liability, net of tax of \$(0.1)												(0.4)			(0.4)	
Foreign currency adjustments												(18.9)			(18.9)	
Exercise of stock options						(0.2)	2.1		2.5						4.6	
Issuances of PRSUs, RSUs, and DSUs						(0.2)	2.7		(2.7)						—	
Treasury stock repurchased - PRSU/RSU/DSU releases						0.1	(4.6)								(4.6)	
Amortization of unearned stock-based compensation									24.8						24.8	
Acquisition of non-controlling interest		0.5							(0.5)						(0.5)	
Balance, December 31, 2018	\$	_	99.2	\$	1.0	44.7	\$ (1,737.0)	\$ 5	32.1	\$ 1,513.8	\$	(95.3)	\$ 2.9	\$	217.5	
Net income										189.5					189.5	
Net loss attributable to non-controlling interests													(0.)	(0.1)	
Repurchase of interest in subsidiary													(1.9)	(1.9)	
Adjustment to pension liability, net of tax of (0.7)												(1.9)			(1.9)	
Foreign currency adjustments												9.5			9.5	
Exercise of stock options						(0.3)	4.8		13.0						17.8	
Issuances of PRSUs, RSUs, and DSUs						(0.3)	3.7		(3.7)						_	
Treasury stock repurchased						1.3	(102.3)								(102.3)	
Treasury stock repurchased - PRSU/RSU/DSU releases						0.1	(3.4)								(3.4)	
Amortization of unearned stock-based compensation							. /		26.8						26.8	
Charitable stock donation						(0.1)	1.4		7.5						8.9	
Balance, December 31, 2019	\$		99.2	\$	1.0	45.4	\$ (1,832.8)	\$ 5	75.7	\$ 1,703.3	\$	(87.7)	\$ 0.9	\$	360.4	

Table of Contents

TEMPUR SEALY INTERNATIONAL, INC. AND SUBSIDIARIES CONSOLIDATED STATEMENTS OF CASH FLOWS

(in millions)		r 31,		
	2019	2018	2017	
CASH FLOWS FROM OPERATING ACTIVITIES FROM CONTINUING OPERATIONS:				
Net income before non-controlling interests	\$ 189.4	\$ 97.6	\$	140.7
Loss from discontinued operations, net of tax	1.4	17.8		30.9
Adjustments to reconcile net income to net cash provided by operating activities:				
Depreciation and amortization	89.7	87.1		80.7
Amortization of stock-based compensation	26.8	24.8		13.3
Amortization of deferred financing costs	2.4	2.3		2.2
Bad debt expense	29.3	31.3		9.8
Charitable stock donation	8.9	_		((1.1
Deferred income taxes	(7.1)	6.0		(61.1
Dividends received from unconsolidated affiliates Equity income in earnings of unconsolidated affiliates	13.4 (15.9)	14.8		11.3
	(13.9)	(17.6) 3.3		(15.6
Loss on sale of assets Foreign currency adjustments and other				
Changes in operating assets and liabilities, net of effect of business acquisitions:	(5.2)	(2.1)		(2.9
Accounts receivable	(76.0)	(46.3)		21.0
Inventories	(28.2)	()		16.3
Prepaid expenses and other assets	11.3	(14.4)		(15.2
Operating leases, net	8.6	(14.4)		(15.2
Accounts payable	(4.8)			3.8
Accrued expenses and other liabilities	67.3	43.2		(4.9
Income taxes, net	2.5	(24.4)		24.0
Net cash provided by operating activities from continuing operations	314.8	207.5		256.5
CASH FLOWS FROM INVESTING ACTIVITIES FROM CONTINUING OPERATIONS:				
Purchases of property, plant and equipment	(88.2)	(73.6)		(66.6
Acquisitions, net of cash acquired	(17.1)	(73.0)		(00.0
Other	15.1	2.4		0.9
Net cash used in investing activities from continuing operations	(90.2)	(71.2)		(65.7
	(20.2)	(71.2)		(05.7
CASH FLOWS FROM FINANCING ACTIVITIES FROM CONTINUING OPERATIONS:				
Proceeds from borrowings under long-term debt obligations	1,242.8	1,094.9		332.9
Repayments of borrowings under long-term debt obligations	(1,347.1)	(1,195.8)	(1,4	471.5
Proceeds from exercise of stock options	17.8	4.6		12.8
Treasury stock repurchased	(105.7)	(4.6)		(44.9
Payment of deferred financing costs	(3.2)			(0.5
Repayments of finance lease obligations and other	(7.8)			(4.0
Net cash used in financing activities from continuing operations	(203.2)	(107.0)	(175.2
Net cash provided by continuing operations	21.4	29.3		15.6
CASH USED IN DISCONTINUED OPERATIONS				
Operating cash flows	(2.0)	(24.4)		(33.6
Investing cash flows	—	2.1		3.6
Financing cash flows				
Net cash used in discontinued operations	(2.0)	(22.3)		(30.0
NET EFFECT OF EXCHANGE RATE CHANGES ON CASH AND CASH EQUIVALENTS	(0.3)	(3.1)		(9.4
increase (decrease) in cash and cash equivalents	19.1	3.9		(23.8
CASH AND CASH EQUIVALENTS, beginning of period	45.8	41.9		65.7
CASH AND CASH EQUIVALENTS, end of period	64.9	45.8		41.9
LESS: CASH AND CASH EQUIVALENTS OF DISCONTINUED OPERATIONS	—			0.8
CASH AND CASH EQUIVALENTS OF CONTINUING OPERATIONS	\$ 64.9	\$ 45.8	\$	41.1
Supplemental cash flow information:				
Cash paid during the period for:				
Interest	\$ 89.0	\$ 91.8	\$	86.6
Income taxes, net of refunds	\$ 73.8	\$ 32.5	\$	79.8

(1) Summary of Significant Accounting Policies

(a) *Basis of Presentation and Description of Business*. Tempur Sealy International, Inc., a Delaware corporation, together with its subsidiaries, is a U.S. based, multinational company. The term "Tempur Sealy International" refers to Tempur Sealy International, Inc. only, and the term "Company" refers to Tempur Sealy International, Inc. and its consolidated subsidiaries.

The Company develops, manufactures, markets and sells bedding products, which include mattresses, foundations and adjustable bases, and other products, which include pillows and other accessories. The Company also derives income from royalties by licensing Sealy® and Stearns & Foster® brands, technology and trademarks to other manufacturers. The Company sells its products through two sales channels: Wholesale and Direct.

(b) *Basis of Consolidation*. The accompanying financial statements include the accounts of Tempur Sealy International and its controlled subsidiaries. Intercompany balances and transactions have been eliminated.

The Company's Consolidated Financial Statements include the results of Comfort Revolution, LLC ("Comfort Revolution"). Prior to July 11, 2018, Comfort Revolution constituted a variable interest entity for which the Company was considered to be the primary beneficiary due to the Company's disproportionate share of the economic risk associated with its equity contribution, debt financing and other factors. On July 11, 2018, the Company acquired the remaining 55% equity interest in Comfort Revolution, which did not result in a material impact to the Company's Consolidated Financial Statements.

The Company has ownership interests in a group of Asia-Pacific joint ventures to develop markets for Sealy® branded products in those regions. The equity method of accounting is used for these joint ventures, over which the Company has significant influence but does not have effective control, and consolidation is not otherwise required. The Company's equity in the net income and losses of these investments is reported in equity income in earnings of unconsolidated affiliates in the accompanying Consolidated Statements of Income. The Company's Asia-Pacific joint ventures are more fully described in Note 7, "Unconsolidated Affiliate Companies."

(c) Use of Estimates. The preparation of financial statements in conformity with U.S. Generally Accepted Accounting Principles ("GAAP") requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the Consolidated Financial Statements and the reported amounts of revenue and expenses during the reporting period. Actual results could differ from those estimates. The Company's results are affected by economic, political, legislative, regulatory and legal actions. Economic conditions, such as recessionary trends, inflation, interest and monetary exchange rates, government fiscal policies and changes in the prices of raw materials, can have a significant effect on operations.

(d) Adoption of New Accounting Standards.

Revenue Recognition. On January 1, 2018, the Company adopted ASU No. 2014-09, "Revenue from Contracts with Customers (Topic 606)" using the modified retrospective method. Under the modified retrospective method, the Company recognized the cumulative effect of initially applying the new revenue standard as a decrease to the opening balance of retained earnings. Topic 606 required additional qualitative and quantitative disclosures. Other presentation and disclosure changes include the classification of royalty income to net sales and changes in the balance sheet classification and measurement for accrued sales returns. For additional information, see Note 4, "Revenue Recognition" of the Consolidated Financial Statements.

Pensions. In March 2017, the FASB issued ASU No. 2017-07, "Compensation - Retirement Benefits (Topic 715): Improving the Presentation of Net Periodic Pension Cost and Net Periodic Postretirement Benefit Cost", which is accounting guidance that changed how employers who sponsor defined benefit pension and/or postretirement benefit plans present the net periodic benefit cost in the Consolidated Statements of Income. This guidance requires employers to present the service cost component of net periodic benefit cost in the same caption within the Consolidated Statements of Income as other employee compensation costs from services rendered during the period. All other components of the net periodic benefit cost are presented separately outside of the operating income caption. The Company adopted ASU No. 2017-07 as of January 1, 2018 and applied the accounting guidance retrospectively. Adoption of this guidance resulted in a reclassification of pension and other postretirement plan non-service income and remeasurement adjustments, net, from within operating income to non-operating income. The adoption of this guidance was not material to the Consolidated Statement of Income for any periods presented.

Accumulated Other Comprehensive Income. In February 2018, the FASB issued ASU No. 2018-02, "Income Statement - Reporting Comprehensive Income (Topic 220): Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Income", which allows entities to reclassify tax effects stranded in accumulated other comprehensive loss ("AOCL") as a result of the Tax Cuts and Jobs Act of 2017 ("U.S. Tax Reform Act") to retained earnings. The Company early adopted ASU No. 2018-02 on March 31, 2018. The impact of adoption was not material to the Company's Consolidated Financial Statements.

Derivatives and Hedging. In August 2017, the FASB issued ASU No. 2017-12, "Derivatives and Hedging (Topic 815): Targeted Improvements to Accounting for Hedging Activities", which simplifies hedge accounting by better aligning a company's financial reporting for hedging relationships with its risk management activities. This guidance expands an entity's ability to hedge non-financial and financial risk components and reduces complexity in fair value hedges of interest rate risk; eliminates the requirement to separately measure and report hedge ineffectiveness and present the entire change in the fair value of a hedging instrument in the same income statement line as the hedged item; eases certain documentation and assessment requirements; and modifies the accounting for components excluded from the assessment of hedge effectiveness. The Company early adopted this ASU in the third quarter of 2018. There were no adjustments to the Company's Consolidated Financial Statements as a result of the adoption.

Leases. Effective January 1, 2019, the Company adopted Accounting Standards Codification 842, Leases ("ASC 842"). ASC 842 consists of a comprehensive lease accounting standard requiring most leases to be recognized on the Consolidated Balance Sheet and significant new disclosures. The Company determines if an arrangement contains a lease at inception based on whether or not the Company has the right to control the asset during the contract period and other facts and circumstances. The Company elected the package of practical expedients permitted under the transition guidance within the new standard, which among other things, allowed it to carry forward the historical lease classification.

Operating lease right-of-use assets represent the Company's right to use an underlying asset for the lease term and lease liabilities represent the Company's obligation to make lease payments arising from the lease, both of which are recognized based on the present value of the future minimum lease payments over the lease term at the commencement date. Leases with a lease term of 12 months or less at inception are not recorded within the Consolidated Balance Sheet and are expensed on a straight-line basis over the lease term within the Consolidated Statement of Income. The lease term is determined by assuming the exercise of renewal options that are reasonably certain. As most leases do not provide an implicit interest rate, the Company used its incremental borrowing rate based on the information available at commencement date in determining the present value of future payments. When contracts contain lease and non-lease components, the Company generally accounts for both components as a single lease component.

The adoption of ASC 842 resulted in the recognition of right-of-use assets, net of prepaid lease payments and lease incentives, of \$197.2 million and operating lease liabilities of \$203.3 million as of January 1, 2019. Results for reporting periods beginning prior to January 1, 2019 continue to be reported in accordance with our historical accounting treatment. The adoption of ASC 842 did not have a material impact on the Company's results of operations, cash flows or debt covenants. For additional information, see Note 9, "Leases" of the Consolidated Financial Statements.

(e) Foreign Currency. Assets and liabilities of non-U.S. subsidiaries, whose functional currency is the local currency, are translated into U.S. dollars at period-end exchange rates. Income and expense items are translated at the average rates of exchange prevailing during the period. The adjustments resulting from translating the financial statements of foreign subsidiaries are included in accumulated other comprehensive loss ("AOCL"), a component of stockholders' equity, and included in net earnings only upon sale or liquidation of the underlying foreign subsidiary or affiliated company. Foreign currency transaction gains and losses are recognized in net earnings based on differences between foreign exchange rates on the transaction date and on the settlement date. These amounts are not considered material to the Consolidated Financial Statements.

(f) *Derivative Financial Instruments*. Derivative financial instruments are used in the normal course of business to manage interest rate and foreign currency exchange risks. The financial instruments used by the Company are straight-forward, non-leveraged instruments. The counterparties to these financial instruments are financial institutions with strong credit ratings. The Company maintains control over the size of positions entered into with any one counterparty and regularly monitors the credit ratings of these institutions. For all transactions designated as hedges, the hedging relationships are formally documented at the inception and on an ongoing basis in offsetting changes in cash flows of the hedged transaction.

The Company records derivative financial instruments on the Consolidated Balance Sheets as either an asset or liability measured at its fair value. Changes in a derivative's fair value (i.e. unrealized gains or losses) are recorded each period in earnings unless the derivative qualifies as a hedge on future cash flows or a hedge of a net investment in a foreign operation. Gains and losses related to a hedge are either recognized in income immediately to offset the gain or loss on the hedged item, or deferred and recorded in the stockholders' equity section of the Consolidated Balance Sheets as a component of AOCL and subsequently recognized in the Consolidated Statements of Comprehensive Income when the hedged item affects net income. The ineffective portion of the change in fair value of a hedge is recognized in income immediately.

For derivative financial instruments that are designated as a hedge, unrealized gains and losses related to the effective portion are either recognized in income immediately to offset the realized gain or loss on the hedged item, or are deferred and reported as a component of AOCL in stockholders' equity and subsequently recognized in net income when the hedged item affects net income. The change in fair value of the ineffective portion of a derivative financial instrument is recognized in net income immediately. For derivative instruments that are not designated as hedges, the gain or loss related to the change in fair value is also recorded to net income immediately. The effectiveness of the cash flow hedge contracts, including time value, is assessed prospectively and retrospectively on a monthly basis using regression analysis, as well as other timing and probability criteria. For derivative instruments that are not designated as hedges, the gain or loss related to the change in fair value is also recorded in net income immediately.

The forward exchange contract assets and liabilities as of December 31, 2019 and 2018 were not material in any period presented.

(g) Cash and Cash Equivalents. Cash and cash equivalents consist of all highly liquid investments with initial maturities of three months or less. The carrying value of cash and cash equivalents approximates fair value because of the short-term maturity of those instruments.

(h) *Inventories*. Inventories are stated at the lower of cost and net realizable value, determined by the first-in, first-out method and consist of the following:

		Decembe						
(in millions)	2019	2019						
Finished goods	\$	157.4	\$	148.9				
Work-in-process		10.8		11.8				
Raw materials and supplies		92.3		61.6				
	\$	260.5	\$	222.3				

(i) *Property, Plant and Equipment.* Property, plant and equipment are carried at cost at acquisition date and are depreciated using the straight-line method over their estimated useful lives as follows:

	Estimated Useful Lives (in years)
Buildings	25-30
Computer equipment and software	3-7
Leasehold improvements	4-7
Machinery and equipment	3-7
Office furniture and fixtures	5-7

The Company records depreciation and amortization in cost of sales for long-lived assets used in the manufacturing process, and within each line item of operating expenses for all other long-lived assets. Leasehold improvements are amortized over the shorter of the life of the lease or seven years. Assets under finance leases are included within property, plant and equipment and represent non-cash investing activities.

Property, plant and equipment, net consisted of the following:

	Decemb					
(in millions)		2019		2018		
Machinery and equipment	\$	350.7	\$	319.3		
Land and buildings		317.8		328.5		
Computer equipment and software		155.2		142.2		
Furniture and fixtures		52.5		50.4		
Construction in progress		65.0		52.4		
Total property, plant, and equipment		941.2		892.8		
Accumulated depreciation		(505.4)		(472.0)		
Total property, plant and equipment, net	\$	435.8	\$	420.8		

Depreciation expense, which includes depreciation expense for finance and capital lease assets, for the Company was \$73.8 million, \$71.8 million and \$64.8 million for the years ended December 31, 2019, 2018 and 2017, respectively.

(j) *Long-Lived Assets*. Long-lived assets are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Recoverability of long-lived assets is assessed by a comparison of the carrying amount of the asset to the estimated future undiscounted net cash flows expected to be generated by the asset or group of assets. If estimated future undiscounted net cash flows are less than the carrying amount of the asset or group of assets, the asset is considered impaired and an expense is recorded in an amount required to reduce the carrying amount of the asset to its then fair value. Fair value generally is determined from estimated discounted future net cash flows (for assets held for use) or net realizable value (for assets held for sale). The Company did not identify any impairments for the years ended December 31, 2019, 2018 and 2017.

(k) *Goodwill and Other Intangible Assets*. Intangible assets with finite useful lives are amortized over their respective estimated useful lives to their estimated residual values and reviewed for impairment whenever events or changes in circumstances indicate impairment may have occurred. The Company performs an annual impairment test on goodwill and indefinite-lived intangible assets on October 1 of each year and whenever events or circumstances make it more likely than not that impairment may have occurred. In conducting the impairment test for the North America and International reporting units, the fair value of each of the Company's reporting units is compared to its respective carrying amount including goodwill. If the fair value exceeds the carrying amount, then no impairment exists. If the carrying amount exceeds the fair value, further analysis is performed to assess impairment. The Company's determination of fair value of the reporting units is based on a discounted cash flow approach, with an appropriate risk-adjusted discount rate, and a market approach. Any identified impairment would result in an adjustment to the Company's results of operations.

The Company also tests its indefinite-lived intangible assets, principally the Tempur and Sealy trade names. The Company tested both trade names for impairment using a "relief-from-royalty" method. Significant assumptions inherent in the methodologies are employed and include such estimates as royalty and discount rates.

The Company performed its annual impairment test of goodwill and indefinite-lived intangible assets in 2019, 2018 and 2017, none of which resulted in the recognition of impairment charges. The most recent annual impairment tests performed as of October 1, 2019, indicated that the fair values of each of the Company's reporting units and indefinite-lived intangible assets were substantially in excess of their carrying values. For further information on goodwill and other intangible assets, refer to Note 6, "Goodwill and Other Intangible Assets."

(1) Accrued Sales Returns. The Company allows product returns through certain sales channels and on certain products. Estimated sales returns are provided at the time of sale based on historical sales channel return rates. Estimated future obligations related to these products are provided by a reduction of sales in the period in which the revenue is recognized. The Company considers the impact of recoverable salvage value on sales returns by segment in determining its estimate of future sales returns. Effective January 1, 2018 with the Company's adoption of Topic 606, the Company recognizes a return asset for the right to recover the goods returned by the customer. The right of return asset is recognized on a gross basis outside of the accrued sales returns and is not material to the Company's Consolidated Balance Sheets.

The Company had the following activity for accrued sales returns from December 31, 2017 to December 31, 2019:

(in millions)	
Balance as of December 31, 2017	\$ 30.0
Reclassification and remeasurement of sales return asset under Topic 606	1.7
Balance as of January 1, 2018	31.7
Amounts accrued	83.8
Returns charged to accrual	 (81.2)
Balance as of December 31, 2018	 34.3
Amounts accrued	112.4
Returns charged to accrual	 (107.4)
Balance as of December 31, 2019	\$ 39.3

As of December 31, 2019 and 2018, \$26.2 million and \$22.0 million of accrued sales returns is included as a component of accrued expenses and other current liabilities and \$13.1 million and \$12.3 million of accrued sales returns is included in other non-current liabilities on the Company's accompanying Consolidated Balance Sheets, respectively.

(m) *Warranties*. The Company provides warranties on certain products, which vary by segment, product and brand. Estimates of warranty expenses are based primarily on historical claims experience and product testing. Estimated future obligations related to these products are charged to cost of sales in the period in which the related revenue is recognized. The Company considers the impact of recoverable salvage value on warranty costs in determining its estimate of future warranty obligations.

The Company provides warranties on mattresses with varying warranty terms. Tempur-Pedic mattresses sold in the North America segment and all Sealy mattresses have warranty terms ranging from 10 to 25 years, generally non-prorated for the first 10 to 15 years and then prorated for the balance of the warranty term. Tempur-Pedic mattresses sold in the International segment have warranty terms ranging from 5 to 15 years, non-prorated for the first 5 years and then prorated on a straight-line basis for the last 10 years of the warranty term. Tempur-Pedic pillows have a warranty term of 3 years, non-prorated.

The Company had the following activity for its accrued warranty expense from December 31, 2017 to December 31, 2019:

\$ 36.7
 2.8
 39.5
21.9
 (25.0)
 36.4
29.4
 (24.2)
\$ 41.6
\$

As of December 31, 2019 and 2018, \$19.4 million and \$14.9 million of accrued warranty expense is included as a component of accrued expenses and other current liabilities and \$22.2 million and \$21.5 million of accrued warranty expense is included in other non-current liabilities on the Company's accompanying Consolidated Balance Sheets, respectively.

(n) Allowance for Doubtful Accounts. The allowance for doubtful accounts is the Company's best estimate of the amount of probable credit losses in the Company's existing accounts receivable. The Company regularly reviews the adequacy of its allowance for doubtful accounts. The Company determines the allowance for doubtful accounts based on historical write-off experience and current economic conditions and also considers factors such as customer credit, past transaction history with the customer and changes in customer payment terms when determining whether the collection of a customer receivable is reasonably assured. Account balances are charged off against the allowance for doubtful accounts included in accounts receivable, net in the accompanying Consolidated Balance Sheets was \$71.9 million and \$47.6 million as of December 31, 2019 and 2018, respectively.

(o) *Income Taxes.* Deferred tax assets and liabilities are recognized for the future tax consequences attributable to temporary differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. Deferred tax assets are also recognized for the estimated future effects of tax loss carry forwards. The effect of changes in tax rates on deferred taxes is recognized in the period in which the enactment dates change. Valuation allowances are established when necessary on a jurisdictional basis to reduce deferred tax assets to the amounts expected to be realized. The Company accounts for uncertain foreign and domestic tax positions utilizing a proscribed recognition threshold and measurement attributes for the financial statement recognition and measurement of a tax position taken or expected to be taken in a tax return.

(p) *Cost of Sales*. Costs associated with net sales are recorded in cost of sales. Cost of sales includes the costs of receiving, producing, inspecting, warehousing, insuring, and shipping goods during the period, as well as depreciation and amortization of long-lived assets used in these processes. Cost of sales also includes shipping and handling costs associated with the delivery of goods to customers and costs associated with internal transfers between plant locations. Amounts included in cost of sales for shipping and handling were \$192.5 million, \$169.1 million and \$155.9 million for the years ended December 31, 2019, 2018 and 2017, respectively. Additionally, cost of sales for 2019 and 2018 include royalties that the Company pays to other entities for the use of their names on products produced by the Company. Prior to the adoption of Topic 606 as of January 1, 2018, royalty income, net of royalty expense was an operating expense line item presented separately on the Company's Consolidated Statements of Income. For additional information, please refer to Note 4, "Revenue Recognition." Royalty expense is not material to the Company's Consolidated Statements of Income.

(q) *Cooperative Advertising, Rebate and Other Promotional Programs.* The Company enters into programs with customers to provide funds for advertising and promotions. The Company also enters into volume and other rebate programs with customers. When sales are made to these customers, the Company records liabilities pursuant to these programs. The Company periodically assesses these liabilities based on actual sales and claims to determine whether all of the cooperative advertising earned will be used by the customer or whether the customer will meet the requirements to receive rebate funds. The Company generally negotiates these programs on a customer-by-customer basis. Some of these agreements extend over several years. Significant estimates are required at any point in time with regard to the ultimate reimbursement to be claimed by the customers. Subsequent revisions to the estimates are recorded and charged to earnings in the period in which they are identified. Rebates and cooperative advertising are classified as a reduction of revenue and presented within net sales in the accompanying Consolidated Statements of Income. Certain cooperative advertising expenses are reported as components of selling and marketing expenses in the advertising benefit can be reasonably estimated.

(r) *Advertising Costs*. The Company expenses advertising costs as incurred except for production costs and advance payments, which are deferred and expensed when advertisements run for the first time. Direct response advance payments are deferred and amortized over the life of the program. Advertising costs are included in selling and marketing expenses in the accompanying Consolidated Statements of Income. Advertising costs charged to expense were \$280.5 million, \$259.3 million and \$283.5 million for the years ended December 31, 2019, 2018 and 2017, respectively. Advertising costs include expenditures for shared advertising costs that the Company reimburses to customers under its integrated and cooperative advertising programs. Cooperative advertising costs paid to customers are recorded as a component of selling and marketing expenses within the Consolidated Statements of Income to the extent the fair value of the distinct good or service can reasonably be estimated. The Company periodically assesses the liabilities recorded for cooperative advertising costs deferred and included in prepaid expenses and other current assets in the accompanying Consolidated Balance Sheets were \$3.6 million and \$8.5 million as of December 31, 2019, and 2018, respectively.

(s) *Research and Development Expenses*. Research and development expenses for new products are expensed as they are incurred and are included in general, administrative and other expenses in the accompanying Consolidated Statements of Income. Research and development costs charged to expense were \$23.0 million, \$21.9 million and \$21.7 million for the years ended December 31, 2019, 2018 and 2017, respectively.

(t) Stock-based Compensation. The Company accounts for stock-based payment transactions in which the Company receives employee services in exchange for equity instruments of the Company. Stock-based compensation cost for restricted stock units ("RSUs"), performance restricted stock units ("PRSUs") and deferred stock units ("DSUs") is measured based on the closing fair market value of the Company's common stock on the date of grant. Stock-based compensation cost for stock options is estimated at the grant date based on each option's fair value as calculated by the Black-Scholes option-pricing model. The Company recognizes stock-based compensation cost as expense for awards other than its PRSUs ratably on a straight-line basis over the requisite service period. The Company recognizes stock-based compensation cost as expense for awards other than its PRSUs ratably on a straight-line basis over the requisite service period. The Company recognizes stock-based compensation cost as expense for awards other than its PRSUs ratably on a straight-line basis over the requisite service period. The Company recognizes stock-based compensation cost associated with its PRSUs over the requisite service period if it is probable that the performance conditions will be satisfied. The Company recognizes forfeitures of awards as they occur. Further information regarding stock-based compensation can be found in Note 13, "Stock-based Compensation."

(u) *Treasury Stock.* Subject to Delaware law, and the limitations in the 2019 Credit Agreement (as defined in Note 8, "Debt") and the Company's other debt agreements, the Board of Directors may authorize share repurchases of the Company's common stock. Purchases made pursuant to these authorizations may be carried out through open market transactions, negotiated purchases or otherwise, at times and in such amounts as the Company deems appropriate. Shares repurchased under such authorizations are held in treasury for general corporate purposes, including issuances under various employee stock-based award plans. On February 1, 2016, the Board of Directors authorized a share repurchase program pursuant to which the Company was permitted to repurchase shares of Tempur Sealy International's common stock. The Board of Directors authorized an increase in the amount of shares available for repurchase under this program in February 2020. Treasury stock is accounted for under the cost method and reported as a reduction of stockholders' equity. The authority provided under the share repurchase program may be suspended, limited or terminated at any time without notice. Please refer to Note 11, "Stockholders' Equity", for additional information.

(v) *Pension Obligations*. The Company has a noncontributory, defined benefit pension plan covering current and former hourly employees at two of its active Sealy plants and ten previously-closed Sealy U.S. facilities. Sealy Canada, Ltd. (a 100.0% owned subsidiary of the Company) also sponsors a noncontributory, defined benefit pension plan covering hourly employees at one of its facilities. Both plans provide retirement and survivorship benefits based on the employees' credited years of service. The Company's funding policy provides for contributions of an amount between the minimum required and maximum amount that can be deducted for federal income tax purposes. The funded status is measured as the difference between the fair value of plan assets and the benefit obligation at December 31, the measurement date. The benefit obligation is the projected benefit obligation ("PBO"). The PBO represents the actuarial present value of benefits expected to be paid upon retirement based on estimated future compensation levels. The measurement of the PBO is based on the Company's estimates and actuarial valuations. The fair value of plan assets represents the current market value of assets held by an irrevocable trust fund for the sole benefit of participants. These valuations reflect the terms of the plans and use participant-specific information such as compensation, age and years of service, as well as certain assumptions, including discount rates, expected return on plan assets, rate of compensation increases, interest crediting rates and mortality rates.

(2) Recently Issued Accounting Pronouncements

Credit Losses

In June 2016, the FASB issued ASU No. 2016-13, "Financial Instruments - Credit Losses (Topic 326)," which requires entities to estimate expected lifetime credit losses on financial assets and provide expanded disclosures. The ASU replaces the incurred loss impairment methodology with one that reflects expected credit losses and requires consideration of a broader range of reasonable and supportable information to inform credit loss estimates.

The Company adopted the new credit losses standard effective January 1, 2020 using the modified retrospective approach. The Company recognized a cumulative effect of initially applying the new standard as a decrease to the opening balance of retained earnings, which was not material to the Company's Consolidated Financial Statements.

(3) Discontinued Operations

The Company sold its operations in the Latin American region in 2018. The operating results from these divested businesses and subsequent adjustments related to ongoing assessments and activities of certain retained liabilities and tax items are reflected within discontinued operations for all periods presented.

Components of amounts reflected in the Consolidated Statements of Income related to discontinued operations are presented in the following table for the years ended December 31.

	Twelve Months Ended December 31,									
		2019	2018	2017						
Net sales	\$		\$ 31.1	\$ 53.8						
Cost of sales			23.0	34.1						
Gross profit			8.1	19.7						
Selling and marketing expenses		0.1	12.4	15.2						
General, administrative and other expenses		2.6	6.8	11.6						
Operating loss		(2.7)	(11.1)	(7.1)						
Interest (income) expense, net and other		(1.5)	7.7	19.9						
Loss from discontinued operations before income taxes		(1.2)	(18.8)	(27.0)						
Income tax provision		(0.2)		(3.9)						
Loss generated from discontinued operations, net of tax		(1.4)	(18.8)	(30.9)						
Gain on disposal of business			1.0							
Loss from discontinued operations, net of tax	\$	(1.4)	\$ (17.8)	\$ (30.9)						

(4) Revenue Recognition

Disaggregation of Revenue

The following table presents the Company's disaggregated revenue by channel, product and geographical region, including a reconciliation of disaggregated revenue by segment, for the years ended December 31.

		Twelve Mor	ths Er	ded Decem	mber 31, 2019 Twelve Mon					nths Ended December 31, 2018				
(in millions)	Nor	th America	Inte	rnational	Consolidated		North America		North America		America International		Co	nsolidated
Channel														
Wholesale	\$	2,273.5	\$	443.6	\$	2,717.1	\$	1,989.1	\$	463.0	\$	2,452.1		
Direct		259.8		129.1		388.9		147.1		103.7		250.8		
Net sales	\$	2,533.3	\$	572.7	\$	3,106.0	\$	2,136.2	\$	566.7	\$	2,702.9		
	Nor	th America	Inte	rnational	Co	nsolidated	North America		International		Co	nsolidated		
Product														
Bedding	\$	2,379.6	\$	455.7	\$	2,835.3	\$	2,002.1	\$	453.2	\$	2,455.3		
Other		153.7		117.0		270.7		134.1		113.5		247.6		
Net sales	\$	2,533.3	\$	572.7	\$	3,106.0	\$	2,136.2	\$	566.7	\$	2,702.9		
	North America		Inte	International		nsolidated	Nor	th America	Inte	rnational	Co	nsolidated		
Geographical region														
United States	\$	2,312.3	\$	—	\$	2,312.3	\$	1,928.9	\$	—	\$	1,928.9		
Canada		221.0		—		221.0		207.3		—		207.3		
International				572.7		572.7				566.7		566.7		
Net sales	\$	2,533.3	\$	572.7	\$	3,106.0	\$	2,136.2	\$	566.7	\$	2,702.9		

The North America and International segments sell product through two channels: Wholesale and Direct. The Wholesale channel includes all product sales to third party retailers, including third party distribution, hospitality and healthcare. The Direct channel includes product sales to company-owned stores, e-commerce and call centers. The North America and International segments classify products into two major categories: Bedding and Other. Bedding products include mattresses, foundations and adjustable foundations. Other products include pillows, mattress covers, sheets, cushions and various other comfort products.

The Wholesale channel also includes income from royalties derived by licensing Sealy® and Stearns & Foster® brands, technology and trademarks to other manufacturers. The licenses include rights for the licensees to use trademarks as well as current proprietary or patented technology that the Company utilizes. The Company also provides its licensees with product specifications, research and development, statistical services and marketing programs. The Company recognizes royalty income based on the occurrence of sales of Sealy® and Stearns & Foster® branded products by various licensees. Royalty income was \$22.6 million, \$20.9 million and \$20.8 million for the years ended December 31, 2019, 2018 and 2017, respectively.

For product sales in each of the Company's channels, the Company recognizes a sale when the obligations under the terms of the contract with the customer are satisfied, which is generally when control of the product has transferred to the customer. Transferring control of each product sold is considered a separate performance obligation. The Company transfers control and recognizes a sale when the customer receives the product. Each unit sold is considered an independent, unbundled performance obligation. The Company does not have any additional performance obligations other than product sales that are material in the context of the contract. The Company also offers assurance type warranties on certain of its products, which is not accounted for as separate performance obligations under the revenue model.

The transaction price is measured as the amount of consideration the Company expects to receive in exchange for transferring goods. The amount of consideration the Company receives, and correspondingly, the revenue that is recognized, varies due to sales incentives and returns the Company offers to its Wholesale and Direct channel customers. Specifically, the Company extends volume discounts, as well as promotional allowances, floor sample discounts, commissions paid to retail associates and slotting fees to its Wholesale channel customers and reflects these amounts as a reduction of sales at the time revenue is recognized based on historical experience. The Company allows returns following a sale, depending on the channel and promotion. The Company reduces revenue and cost of sales for its estimate of the expected returns, which is primarily based on the level of historical sales returns. The Company does not offer extended payment terms beyond one year to customers. As such, the Company does not adjust its consideration for financing arrangements.

In certain jurisdictions, the Company is subject to certain non-income taxes including, but not limited to, sales tax, value added tax, excise tax and other taxes. These taxes are excluded from the transaction price, and therefore, excluded from revenue. The Company has elected to account for shipping and handling activities as a fulfillment cost as permitted by Topic 606. Accordingly, the Company reflects all amounts billed to customers for shipping and handling in revenue and the costs of fulfillment in cost of sales. Amounts included in net sales for shipping and handling were \$19.3 million, \$13.6 million and \$11.3 million for the years ended December 31, 2019, 2018 and 2017, respectively.

(5) Acquisitions and Divestitures

Acquisition of Innovative Mattress Solutions, LLC ("iMS")

On January 11, 2019, iMS filed for bankruptcy and the Company provided debtor-in-possession financing in connection with the iMS Chapter 11 proceedings. On April 1, 2019, the Company acquired substantially all of the net assets of iMS in a transaction valued at approximately \$24 million, including assumed liabilities of approximately \$11 million as of March 31, 2019 (referred to as the "Sleep Outfitters Acquisition"). The acquisition of this regional bedding retailer furthers the Company's North American retail strategy, which is focused on meeting customer demand through geographic representation and sales expertise.

The Company accounted for this transaction as a business combination. Total cash consideration was \$13.2 million, less cash acquired of \$5.1 million, resulting in a purchase price of \$8.1 million. The final allocation of the purchase price is based on the fair values of the assets acquired and liabilities assumed as of April 1, 2019, which includes the following:

(in millions)

Working capital (accounts receivable and inventory, net of accounts payable and accrued liabilities)	\$ (1.4)
Property and equipment	5.0
Goodwill	2.4
Other intangible assets	2.1
Operating lease right-of-use assets	28.5
Long-term operating lease liabilities	(28.5)
Net purchase price	\$ 8.1

Goodwill is calculated as the excess of the purchase price over the net assets acquired and primarily represents the growth opportunities and synergistic benefits to be realized from the acquisition. The goodwill is deductible for income tax purposes and will be included within the North American reporting unit for goodwill impairment assessments.

As a result of the acquisition, the Company acquired trade names and customer database of \$2.1 million.

Acquisition of Sherwood Bedding

On January 31, 2020, the Company acquired an 80% ownership interest in a newly formed limited liability company containing substantially all of the assets of the Sherwood Bedding business for a cash purchase price of approximately \$40 million. The Company will account for this transaction as a business combination in 2020. The purchase price allocation will principally include working capital, property plant and equipment, and goodwill. Any excess of the purchase price over the fair value of the net assets acquired will be recorded as goodwill, which will be deductible for income tax purposes.

Table of Contents

TEMPUR SEALY INTERNATIONAL, INC. AND SUBSIDIARIES NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

(6) Goodwill and Other Intangible Assets

The following summarizes the Company's goodwill by reportable segment:

(in millions)	North	America	Inte	ernational	Consolidated		
Balance as of December 31, 2017	\$	576.6	\$	156.1	\$	732.7	
Foreign currency translation adjustments and other		(5.5)		(4.2)		(9.7)	
Balance as of December 31, 2018	\$	571.1	\$	151.9	\$	723.0	
Goodwill resulting from acquisitions		2.4		5.4		7.8	
Foreign currency translation adjustments and other		3.1		(1.6)		1.5	
Balance as of December 31, 2019	\$	576.6	\$	155.7	\$	732.3	

The following table summarizes information relating to the Company's other intangible assets, net:

		December 31, 2019							December 31, 2018										
(\$ in millions)	Useful Lives (Years)	Ca	Gross rrying mount	Accumulated Amortization				Net Carrying Amount		umulated Carryi		rying Carrying		Carrying Accumulated		Carrying Accumulated			
Unamortized indefinite life intangible assets:																			
Trade names		\$	559.5	\$	_	\$	559.5	\$	556.5	\$		\$	556.5						
Amortized intangible assets:																			
Contractual distributor relationships	15		85.5		38.7		46.8		84.7		32.7		52.0						
Technology and other	4-10		91.1		68.7		22.4		90.2		61.1		29.1						
Patents, other trademarks and other trade names	5-20		27.9		18.6		9.3		32.0		21.0		11.0						
Customer databases, relationships and reacquired rights	2-5		30.9		27.5		3.4		21.3		20.6		0.7						
Total		\$	794.9	\$	153.5	\$	641.4	\$	784.7	\$	135.4	\$	649.3						

Amortization expense relating to intangible assets for the Company was \$15.9 million, \$15.3 million and \$16.0 million for the years ended December 31, 2019, 2018 and 2017, respectively, and is recorded in general, administrative and other expenses in the Company's Consolidated Statements of Income. No impairments of goodwill or other intangible assets have adjusted the gross carrying amount of these assets in any period.

Estimated annual amortization of intangible assets is expected to be as follows for the years ending December 31:

(in millions)	
2020	\$ 17.1
2021	15.9
2022	15.1
2023	8.3
2024	6.4
Thereafter	 19.1
Total	\$ 81.9

(7) Unconsolidated Affiliate Companies

The Company has ownership interests in a group of Asia-Pacific joint ventures to develop markets for Sealy® branded products in those regions. The Company's ownership interest in these joint ventures is 50.0% and is accounted for under the equity method. The Company's investment of \$22.5 million at December 31, 2019 and 2018, is recorded in other non-current assets in the accompanying Consolidated Balance Sheets. The Company's share of earnings for the years ended December 31, 2019, 2018 and 2017 respectively, are recorded in equity income in earnings of unconsolidated affiliates in the accompanying Consolidated Statements of Income.

The tables below present summarized financial information for joint ventures as of and for the years ended December 31:

(in millions)		2019	2018
Current assets		\$ 81.0	\$ 81.8
Non-current assets		15.3	18.6
Total liabilities		55.4	59.0
Equity		40.9	41.4
(in millions)	2019	2018	2017
Net sales	\$ 212.6	\$ 220.5	\$ 195.1

Net sales	\$ 212.6	\$ 220.5	\$ 195.1
Gross profit	147.2	147.8	129.9
Income from operations	44.6	46.6	43.3
Net income	32.4	33.5	31.7

(8) Debt

Debt for the Company consists of the following:

(in millions)	I	December 31	, 2019		December 31	, 2018															
Debt:	A	mount	Rate	Amount		Amount		Amount		Amount		Amount		Amount		Amount		Amount		Amount Rate M	
2019 Credit Agreement:																					
Term A Facility	\$	425.0	(1)	\$	—	N/A	October 16, 2024														
Revolver			(1)			N/A	October 16, 2024														
2016 Credit Agreement:																					
Term A Facility			N/A		525.0	(2)															
Revolver			N/A		_	(2)															
2026 Senior Notes		600.0	5.500%		600.0	5.500%	June 15, 2026														
2023 Senior Notes		450.0	5.625%		450.0	5.625%	October 15, 2023														
Securitized debt			(3)		9.1	(3)	April 6, 2021														
Finance lease obligations (4)		64.1			66.7		Various														
Other		7.9			3.0		Various														
Total debt		1,547.0		_	1,653.8																
Less: Deferred financing costs		7.0			7.6																
Total debt, net		1,540.0			1,646.2																
Less: Current portion		37.4			47.1																
Total long-term debt, net	\$	1,502.6		\$	1,599.1																

(1) Interest at LIBOR plus applicable margin of 1.625% as of December 31, 2019.

(2) Interest at LIBOR plus applicable margin of 2.00% as of December 31, 2018.

(3) Interest at one month LIBOR index plus 80 basis points.

(4) Finance lease obligations are a non-cash financing activity. Refer to Note 9, "Leases."

2019 Credit Agreement

On October 16, 2019, the Company entered into the 2019 Credit Agreement with a syndicate of banks. The 2019 Credit Agreement replaced the Company's 2016 Credit Agreement. The 2019 Credit Agreement provides for a \$425.0 million revolving credit facility, a \$425.0 million term loan facility, and an incremental facility in an aggregate amount of up to \$550.0 million plus the amount of certain prepayments plus an additional unlimited amount subject to compliance with a maximum consolidated secured leverage ratio test. The 2019 Credit Agreement has a \$60.0 million sub-facility for the issuance of letters of credit. Total availability under the revolving facility was \$402.8 million, after giving effect to letters of credit outstanding of \$22.2 million, as of December 31, 2019.

Borrowings under the 2019 Credit Agreement will generally bear interest, at the election of Tempur Sealy International and the other subsidiary borrowers, at either (i) Base Rate plus the applicable margin or (ii) LIBOR plus the applicable margin. For the revolving credit facility and the term loan facility (a) the initial applicable margin for Base Rate advances was 0.625% per annum and the initial applicable margin for LIBOR advances was 1.625% per annum, and (b) following the delivery of financial statements for the fiscal quarter ending December 31, 2019, such applicable margins will be determined by a pricing grid based on the consolidated total net leverage ratio of the Company.

Obligations under the 2019 Credit Agreement are guaranteed by the Company's existing and future direct and indirect wholly-owned domestic subsidiaries, subject to certain exceptions and are secured by a security interest in substantially all of Tempur Sealy International's and the other subsidiary borrowers' domestic assets and the domestic assets of each subsidiary guarantor, whether owned as of the closing or thereafter acquired, including a pledge of 100.0% of the equity interests of each subsidiary owned by the Company or a subsidiary guarantor that is a domestic entity (subject to certain limited exceptions) and 65.0% of the voting equity interests of any direct first tier foreign entity owned by the Company or a subsidiary guarantor.

The 2019 Credit Agreement requires compliance with certain financial covenants providing for maintenance of a minimum consolidated interest coverage ratio, maintenance of a maximum consolidated total net leverage ratio, and maintenance of a maximum consolidated secured net leverage ratio. The consolidated total net leverage ratio is calculated using consolidated indebtedness less netted cash (as defined below). Consolidated indebtedness includes debt recorded on the Consolidated Balance Sheets as of the reporting date, plus letters of credit outstanding in excess of \$40.0 million and other short-term debt. The Company is allowed to subtract from consolidated indebtedness an amount equal to 100.0% of the domestic and foreign unrestricted cash ("netted cash"), the aggregate of which cannot exceed \$200.0 million at the end of the reporting period. As of December 31, 2019, netted cash was \$63.4 million. As of December 31, 2019, the Company's consolidated total net leverage ratio was 2.92 times, within the covenant in the Company's debt agreements which limits this ratio to 5.00 times.

The 2019 Credit Agreement contains certain customary negative covenants, which include limitations on liens, investments, indebtedness, dispositions, mergers and acquisitions, the making of restricted payments, changes in the nature of business, changes in fiscal year, transactions with affiliates, use of proceeds, prepayments of certain indebtedness, entry into burdensome agreements and changes to governing documents. The 2019 Credit Agreement also contains certain customary affirmative covenants and events of default, including upon a change of control.

The Company was in compliance with all applicable covenants in the 2019 Credit Agreement at December 31, 2019.

The Company is required to pay a commitment fee on the unused portion of the revolving credit facility, which initially will be 0.25% per annum and following the delivery of financial statements for the fiscal quarter ending December 31, 2019, such fees as determined by a pricing grid based on the consolidated total net leverage ratio of the Company. This unused commitment fee is payable quarterly in arrears and on the date of termination or expiration of the commitments under the revolving credit facility. The Company and the other borrowers also pay customary letter of credit issuance and other fees under the 2019 Credit Agreement.

The maturity date of the 2019 Credit Agreement is October 16, 2024. Amounts under the revolving credit facility may be borrowed, repaid and re-borrowed from time to time until the maturity date. The term loan facility is subject to quarterly amortization as set forth in the 2019 Credit Agreement. In addition, the term loan facility is subject to mandatory prepayment in connection with certain debt issuances, asset sales and casualty events, subject to certain reinvestment rights. Voluntary prepayments and commitment reductions under the 2019 Credit Agreement are permitted at any time without payment of any prepayment premiums.

2016 Credit Agreement

The Company used the proceeds from the 2019 Credit Agreement to refinance outstanding borrowings under the 2016 Credit Agreement and terminated the existing revolving credit commitments. The 2016 Credit Agreement initially provided for a \$500.0 million revolving credit facility, a \$500.0 million initial term loan facility and a \$100.0 million delayed draw term loan facility.

During the twelve months ended December 31, 2019, the Company prepaid \$75.0 million on the Term A facility under the 2016 Credit Agreement.

Senior Notes

2026 Senior Notes

On May 24, 2016, Tempur Sealy International issued \$600.0 million aggregate principal amount of 5.500% 2026 Senior Notes in a private offering to qualified institutional buyers pursuant to Rule 144A of the Securities Act of 1933, as amended (the "Securities Act"), and to certain non-U.S. persons in accordance with Regulation S under the Securities Act. The 2026 Senior Notes were issued pursuant to an indenture, dated as of May 24, 2016 (the "2026 Indenture"), among Tempur Sealy International, certain subsidiaries of Tempur Sealy International as guarantors (the "Combined Guarantor Subsidiaries"), and The Bank of New York Mellon Trust Company, N.A., as trustee. The 2026 Senior Notes are general unsecured senior obligations of Tempur Sealy International and are guaranteed on a senior unsecured basis by the Combined Guarantor Subsidiaries. The 2026 Senior Notes mature on June 15, 2026, and interest is payable semi-annually in arrears on each June 15 and December 15, which began on December 15, 2016. The gross proceeds from the 2026 Senior Notes were used to refinance the \$375.0 million aggregate principal amount of 2020 Senior Notes and to pay related fees and expenses, and the remaining funds were used for share repurchases and general corporate purposes.

Tempur Sealy International has the option to redeem all or a portion of the 2026 Senior Notes at any time on or after June 15, 2021. The initial redemption price is 102.750% of the principal amount, plus accrued and unpaid interest, if any. The redemption price will decline each year after 2021 until it becomes 100.0% of the principal amount beginning on June 15, 2024. In addition, Tempur Sealy International has the option at any time prior to June 15, 2021 to redeem some or all of the 2026 Senior Notes at 100.0% of the original principal amount plus a "make-whole" premium and accrued and unpaid interest, if any. Tempur Sealy International had the option to redeem up to 35.0% of the 2026 Senior Notes prior to June 15, 2019, under certain circumstances with the net cash proceeds from certain equity offerings, at 105.500% of the principal amount plus accrued and unpaid interest, if any. Tempur Sealy International could have made such redemptions as described in the preceding sentence only if, after any such redemption, at least 65.0% of the original aggregate principal amount of the 2026 Senior Notes issued remains outstanding.

The 2026 Indenture restricts the ability of Tempur Sealy International and the ability of certain of its subsidiaries to, among other things: (i) incur, directly or indirectly, debt; (ii) make, directly or indirectly, certain investments and restricted payments; (iii) incur or suffer to exist, directly or indirectly, liens on its properties or assets; (iv) sell or otherwise dispose of assets, directly or indirectly; (v) create or otherwise cause or suffer to exist any consensual restriction on the right of certain of the subsidiaries of Tempur Sealy International to pay dividends or make any other distributions on or in respect of their capital stock; (vi) enter into transactions with affiliates; (vii) engage in sale-leaseback transactions; (viii) purchase or redeem capital stock or subordinated indebtedness; (ix) issue or sell stock of restricted subsidiaries; and (x) effect a consolidation or merger. These covenants are subject to a number of exceptions and qualifications.

In conjunction with the issuance and sale of the 2026 Senior Notes, Tempur Sealy International and the Combined Guarantor Subsidiaries agreed through a Registration Rights Agreement to exchange the 2026 Senior Notes for a new issue of substantially identical senior notes registered under the Securities Act (the "Exchange Offer"). On October 18, 2016, Tempur Sealy International completed the Exchange Offer, with 100% of the outstanding notes tendered and received for new 2026 Senior Notes registered under the Securities Act.

2023 Senior Notes

On September 24, 2015, Tempur Sealy International issued \$450.0 million aggregate principal amount of 5.625% 2023 Senior Notes in a private offering to qualified institutional buyers pursuant to Rule 144A of the Securities Act, and to certain non-U.S. persons in accordance with Regulation S under the Securities Act. The 2023 Senior Notes were issued pursuant to an indenture, dated as of September 24, 2015 (the "2023 Indenture"), among Tempur Sealy International, the Combined Guarantor Subsidiaries (the Combined Guarantor Subsidiaries are the same under the 2026 Indenture, the 2023 Indenture and the 2020 Indenture), and The Bank of New York Mellon Trust Company, N.A., as trustee. The 2023 Senior Notes are general unsecured senior obligations of Tempur Sealy International and are guaranteed on a senior unsecured basis by the Combined Guarantor Subsidiaries. The 2023 Senior Notes mature on October 15, 2023, and interest is payable semi-annually in arrears on each April 15 and October 15, which began on April 15, 2016. The gross proceeds from the 2023 Senior Notes were used to refinance a portion of the term loan debt under the 2012 Credit Agreement and to pay related fees and expenses.

Since October 15, 2018, Tempur Sealy International has had the option to redeem all or a portion of the 2023 Senior Notes at any time. The initial redemption price is 104.219% of the principal amount, plus accrued and unpaid interest, if any. The redemption price will decline each year after 2018 until it becomes 100.0% of the principal amount beginning on October 15, 2021.

The 2023 Indenture restricts the ability of Tempur Sealy International and the ability of certain of its subsidiaries to, among other things: (i) incur, directly or indirectly, debt; (ii) make, directly or indirectly, certain investments and restricted payments; (iii) incur or suffer to exist, directly or indirectly, liens on its properties or assets; (iv) sell or otherwise dispose of, directly or indirectly, assets; (v) create or otherwise cause or suffer to exist any consensual restriction on the right of certain of the subsidiaries of Tempur Sealy International to pay dividends or make any other distributions on or in respect of their capital stock; (vi) enter into transactions with affiliates; (vii) engage in sale-leaseback transactions; (viii) purchase or redeem capital stock or subordinated indebtedness; (ix) issue or sell stock of restricted subsidiaries; and (x) effect a consolidation or merger. These covenants are subject to a number of exceptions and qualifications.

In conjunction with the issuance and sale of the 2023 Senior Notes, Tempur Sealy International and the Combined Guarantor Subsidiaries agreed through a Registration Rights Agreement to exchange the 2023 Senior Notes for a new issue of substantially identical senior notes registered under the Securities Act (the "2023 Exchange Offer"). On April 4, 2016, Tempur Sealy International completed the 2023 Exchange Offer, with 100% of the outstanding notes tendered and received for new 2023 Senior Notes registered under the Securities Act.

Securitized Debt

On April 12, 2017, the Company and certain of its subsidiaries entered into a securitization transaction with respect to certain accounts receivable due to the Company and certain of its subsidiaries (as amended the "Accounts Receivable Securitization"). In connection with this transaction, Tempur Sealy International and its wholly-owned special purpose subsidiary, Tempur Sealy Receivables, LLC, entered into a credit agreement that provides for revolving loans to be made from time to time in a maximum amount that varies over the course of the year based on the seasonality of the Company's accounts receivable and is subject to an overall limit of \$120.0 million. On April 5, 2019, the Company and its subsidiaries entered into a new amendment to the Accounts Receivables Securitization. The amendment, among other things, extended the maturity date of the Accounts Receivable Securitization to April 6, 2021.

The obligations of the Company and its relevant subsidiaries under the Accounts Receivable Securitization are secured by the accounts receivable and certain related rights and the facility agreements contain customary events of default. The accounts receivable continue to be owned by the Company and its subsidiaries and continue to be reflected as assets on the Company's Consolidated Balance Sheets and represent collateral up to the amount of the borrowings under this facility. Borrowings under this facility are classified as long-term debt within the Consolidated Balance Sheets.

Table of Contents

TEMPUR SEALY INTERNATIONAL, INC. AND SUBSIDIARIES NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

Fair Value

Financial instruments, although not recorded at fair value on a recurring basis, include cash and cash equivalents, accounts receivable, accounts payable, and the Company's debt obligations. The carrying value of cash and cash equivalents, accounts receivable and accounts payable approximate fair value because of the short-term maturity of those instruments. Borrowings under the 2019 Credit Agreement and the securitized debt are at variable interest rates and accordingly their carrying amounts approximate fair value. The fair value of the following material financial instruments were based on observable inputs estimated using discounted cash flows and market-based expectations for interest rates, credit risk, and the contractual terms of debt instruments. The fair values of these material financial instruments are as follows:

	Fair]	Value
(in millions)	December 31, 2019	December 31, 2018
2023 Senior Notes	\$ 464.2	\$ 435.6
2026 Senior Notes	634.9	549.3

Deferred Financing Costs

The Company capitalizes costs associated with the issuance of debt and amortizes these costs as additional interest expense over the lives of the debt instruments using the effective interest method. These costs are recorded as deferred financing costs as a direct reduction from the carrying amount of the corresponding debt liability in the accompanying Consolidated Balance Sheets and the related amortization is included in interest expense, net in the accompanying Consolidated Statements of Income. Upon the prepayment of the related debt, the Company accelerates the recognition of an appropriate amount of the costs.

Future Obligations

As of December 31, 2019, the scheduled maturities of long-term debt outstanding, excluding finance lease obligations, for each of the next five years and thereafter are as follows:

(in millions)	
2020	\$ 29.2
2021	21.3
2022	21.3
2023	481.8
2024	329.3
Thereafter	600.0
Total	\$ 1,482.9

(9) Leases

The Company leases retail stores, manufacturing and distribution facilities, office space and equipment under operating lease agreements. Most leases include one or more options to renew, with renewal terms that can extend the lease term from one to several years, with the longest renewal period extending through 2042. The exercise of lease renewal options are at the Company's sole discretion. Certain leases also include options to purchase the leased property. The depreciable life of assets and leasehold improvements are limited by the expected lease term, unless there is a transfer of title or purchase option reasonably certain of exercise.

The following table summarizes the classification of operating and finance lease assets and obligations in the Company's Consolidated Balance Sheet as of December 31, 2019:

(in millions)		Decem	ber 31, 2019
Assets			
Operating lease assets	Operating lease right-of-use assets	\$	245.4
Finance lease assets	Property, plant and equipment, net		54.4
Total leased assets		\$	299.8
Liabilities			
Short-term:			
Operating lease obligations	Accrued expenses and other current liabilities	\$	50.8
Finance lease obligations	Current portion of long-term debt		8.2
Long-term:			
Operating lease obligations	Long-term operating lease obligations		205.4
Finance lease obligations	Long-term debt, net		55.9
Total lease obligations		\$	320.3

The following table summarizes the classification of lease expense in the Company's Consolidated Statement of Income for the year ended December 31, 2019:

	Twelve m	onths ended
(in millions)	Decemb	er 31, 2019
Operating lease expense:		
Operating lease expense	\$	63.8
Short-term lease expense		9.0
Variable lease expense		18.8
Finance lease expense:		
Amortization of right-of-use assets		8.5
Interest on lease obligations		4.7
Total lease expense	\$	104.8

Table of Contents

TEMPUR SEALY INTERNATIONAL, INC. AND SUBSIDIARIES NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

The following table sets forth the scheduled maturities of lease obligations as of December 31, 2019:

(in millions)	Operat	Operating Leases Finance Leases		nance Leases		
Year Ended December 31,						
2020	\$	62.1	\$	12.3	\$	74.4
2021		54.5		12.0		66.5
2022		46.6		9.8		56.4
2023		36.2		7.8		44.0
2024		29.0		6.2		35.2
Thereafter		74.5		36.3		110.8
Total lease payments		302.9		84.4		387.3
Less: Interest		(46.7)		(20.3)		(67.0)
Present value of lease obligations	\$	256.2	\$	64.1	\$	320.3

The following table provides lease term and discount rate information related to operating and finance leases as of December 31, 2019:

	December 31, 2019
Weighted average remaining lease term (years):	
Operating leases	6.43
Finance leases	9.03
Weighted average discount rate:	
Operating leases	5.42%
Finance leases	6.27%

The following table provides supplemental information related to the Company's Consolidated Statement of Cash Flows for the year ended December 31, 2019:

	Twelve m	onths ended
(in millions)	Decemb	er 31, 2019
Cash paid for amounts included in the measurement of lease obligations:		
Operating cash flows paid for operating leases	\$	62.7
Operating cash flows paid for finance leases	\$	3.7
Financing cash flows paid for finance leases	\$	7.7
Right-of-use assets obtained in exchange for new operating lease obligations	\$	60.9
Right-of-use assets obtained in exchange for new finance lease obligations	\$	4.1

(10) Retirement Plans

401(k) Plan

The Company has a defined contribution plan ("the 401(k) Plan") whereby eligible employees may contribute up to 85.0% of their pay subject to certain limitations as defined by the 401(k) Plan. Employees are eligible to participate in the 401(k) Plan upon hire and are eligible to receive matching contributions upon six months of continuous employment with the Company. The 401(k) Plan provides a 100.0% match of the first 3.0% and 50.0% of the next 2.0% of eligible employee contributions. The match for union employees is based on the applicable collective bargaining arrangement. All matching contributions vest immediately. The Company incurred \$6.0 million, \$5.8 million and \$4.0 million of expenses associated with the 401(k) Plan for the years ended December 31, 2019, 2018 and 2017, respectively, which are included in the Consolidated Statements of Income.

Defined Benefit Pension Plans

The Company has a noncontributory, defined benefit pension plan covering current and former hourly employees at two of its active Sealy plants and ten previously closed Sealy U.S. facilities. Sealy Canada, Ltd. (a wholly-owned subsidiary of the Company) also sponsors a noncontributory, defined benefit pension plan covering hourly employees at one of its facilities (collectively, referred to as the "Plans"). The Plans provide retirement and survivorship benefits based on the employees' credited years of service. The Company's funding policy provides for contributions of an amount between the minimum required and maximum amount that can be deducted for federal income tax purposes.

The Plans' assets consist of investments in various common/collective trusts with equity investment strategies diversified across multiple industry sectors and company market capitalization within specific geographical investment strategies, fixed income common/collective trusts, which invest primarily in investment-grade and high-yield corporate bonds and U.S. treasury securities, as well as money market mutual funds. The fixed income investments are diversified as to ratings, maturities, industries and other factors. The Plans' assets contain no significant concentrations of risk related to individual securities or industry sectors. The Plans have no direct investment in the Company's common stock.

The long-term rate of return for the Plans is based on the weighted average of the Plans' investment allocation and the historical returns for those asset categories. Because future compensation levels are not a factor in these Plans' benefit formulas, the accumulated benefit obligation is equal to the projected benefit obligation as reported below. The discount rate is based on the returns on long-term bonds in the private sector and incorporates a long-term inflation rate. Summarized information for the Plans follows:

Expenses and Status

The Company recognizes the service cost component of net periodic pension cost within general, administrative and other expenses and all other components of net periodic pension cost are recognized within other income, net, in the accompanying Consolidated Statements of Income. Components of total net periodic pension cost for the years ended December 31 were as follows:

(in millions)	2019		2018			2017		
Service cost	\$	0.9	\$	1.0	\$	0.9		
Interest cost		1.2		1.1		1.2		
Expected return on assets		(1.3)		(1.5)		(1.5)		
Amortization of prior service cost		0.1		0.1		0.1		
Amortization of net gain		0.1				—		
Net periodic pension cost	\$	1.0	\$	0.7	\$	0.7		

The other changes in plan assets and benefit obligations recognized in other comprehensive loss, before tax effects, for the years ended December 31 were:

(in millions)	2019		2018		2017	
Net loss	\$	2.2	\$ 0.6	,	\$ 0.4	
New prior service cost		0.6	0.1		0.5	
Amortization of prior service cost		(0.1)	(0.1)	(0.1)	
Amortization or settlement recognition of net loss		(0.1)		-		
Total recognized in other comprehensive loss	\$	2.6	\$ 0.6	5	\$ 0.8	

The following assumptions, calculated on a weighted-average basis, were used to determine net periodic pension cost for the Company's Plans for the years ended December 31:

	2019	2018	2017
Discount rate ^(a)	4.10%	3.58%	4.07%
Expected long-term return on plan assets	6.16%	6.25%	6.64%

(a) The discount rates used in 2019 to determine the expenses for the U.S. retirement plan and Canadian retirement plan were 4.16% and 3.90%, respectively. The discount rates used in 2018 to determine the expenses for the U.S. retirement plan and Canadian retirement plan were 3.54% and 3.70%, respectively. The discount rates used in 2017 to determine the expenses for the U.S. retirement plan and Canadian retirement plan and Canadian retirement plan and Canadian retirement plan and Canadian retirement plan were 4.06% and 4.10%

Obligations and Funded Status

The measurement date for the Company's Plans is December 31. The funded status of the Plans as of December 31 was as follows:

(in millions)	,	2019	2018
Change in Benefit Obligation:			
Projected benefit obligation at beginning of year	\$	30.0	\$ 32.1
Service cost		0.9	1.0
Interest cost		1.2	1.1
Plan amendments		0.5	0.1
Actuarial (gain) loss		5.5	(3.0)
Benefits paid		(1.3)	(0.9)
Expenses paid		(0.1)	(0.1)
Foreign currency exchange rate changes		0.2	(0.3)
Projected benefit obligation at end of year	\$	36.9	\$ 30.0
Change in Plan Assets:			
Fair value of plan assets at beginning of year	\$	22.2	\$ 25.3
Actual return on plan assets		4.6	(2.1)
Employer contribution		1.4	0.3
Benefits paid		(1.3)	(0.9)
Expenses paid		(0.1)	(0.1)
Foreign currency exchange rate changes		0.2	(0.3)
Fair value of plan assets at end of year	\$	27.0	\$ 22.2
Funded status	\$	(9.9)	\$ (7.8)
	-		

The Company's defined benefit pension plan for U.S. Sealy employees is underfunded. As of December 31, 2019, the projected benefit obligation and fair value of plan assets were \$32.6 million and \$22.6 million, respectively. As of December 31, 2018, the projected benefit obligation and fair value of plan assets were \$26.5 million and \$18.4 million, respectively. As of December 31, 2019, the projected benefit obligation and fair value of plan assets for the Sealy Canada Ltd. pension plan were \$4.3 million and \$4.4 million, respectively. As of December 31, 2018, the projected benefit obligation and fair value of plan assets for the Sealy Canada Ltd. pension plan were \$4.3 million and \$4.4 million, respectively. As of December 31, 2018, the projected benefit obligation and fair value of plan assets for the Sealy Canada Ltd. pension plan were \$3.5 million and \$3.8 million, respectively.

The accumulated benefit obligation for all pension plans was \$36.9 million at December 31, 2019 and \$30.0 million at December 31, 2018.

The following table represents amounts recorded in the Consolidated Balance Sheets:

	December 31,			
(in millions)	2	019		2018
Amounts recognized in the Consolidated Balance Sheets:				
Non-current benefit liability	\$	10.0	\$	8.1
Non-current benefit asset		0.1		0.3

The following assumption, calculated on a weighted-average basis, was used to determine benefit obligations for the Company's defined benefit pension plans as of December 31:

	2019	2018
Discount rate ^(a)	3.16%	4.13%

(a) The discount rates used in 2019 to determine the benefit obligations for the U.S. retirement plan and Canadian retirement plan were 3.15% and 3.20%, respectively. The discount rates used in 2018 to determine the benefit obligations for the U.S. and Canadian defined benefit pension plans were 4.16% and 3.90%, respectively.

No material amounts are expected to be reclassified from AOCL to be recognized as components of net income during 2020.

Plan Contributions and Expected Benefit Payments

During 2020, the Company expects to contribute \$1.2 million to the Company's Plans from available cash and cash equivalents.

The following table presents estimated future benefit payments:

(in millions)	
Fiscal 2020	\$ 1.1
Fiscal 2021	1.1
Fiscal 2022	1.2
Fiscal 2023	1.2
Fiscal 2024	1.3
Fiscal 2025 - Fiscal 2028	8.0

Pension Plan Asset Information

Investment Objective and Strategies

The Company's investment objectives are to minimize the volatility of the value of the Company's pension assets relative to pension liabilities and to ensure assets are sufficient to pay plan benefits. Target and actual asset allocations are as follows:

	2019 Target	2019 Actual
Common/collective trust consisting primarily of:		
Equity securities	60.0%	55.7%
Debt securities	40.0%	44.0%
Other	%	0.3%
Total plan assets	100.0%	100.0%

Investment strategies and policies reflect a balance of risk-reducing and return-seeking considerations. The objective of minimizing the volatility of assets relative to liabilities is addressed primarily through asset diversification. Assets are broadly diversified across many asset classes to achieve risk-adjusted returns that, in total, lower asset volatility relative to liabilities. The Company's policy to rebalance the Company's investment regularly ensures that actual allocations are in line with target allocations as appropriate.

Strategies to address the goal of ensuring sufficient assets to pay benefits include target allocations to a broad array of asset classes that provide return, diversification and liquidity.

The plan investment fiduciaries are responsible for setting asset allocation targets, and monitoring asset allocation and investment performance. The Company's pension investment manager has discretion to manage assets to ensure compliance with the asset allocations approved by the plan fiduciaries.

Significant Concentrations of Risk

Significant concentrations of risk in the Company's plan assets relate to equity, interest rate, and operating risk. In order to ensure assets are sufficient to pay benefits, a portion of plan assets is allocated to equity investments that are expected, over time, to earn higher returns with more volatility than fixed income investments which more closely match pension liabilities. Within the common/collective trusts, the plan assets contain no significant concentrations of risk related to individual securities or industry sectors.

In order to minimize asset volatility relative to the liabilities, a portion of the plan assets are allocated to fixed income investments that are exposed to interest rate risk. Rate increases will generally result in a decline in fixed income assets while reducing the present value of the liabilities. Conversely, rate decreases will increase fixed income assets, partially offsetting the related increase in the liabilities.

Operating risks primarily include the risks of inadequate diversification and insufficient oversight. To mitigate this risk, investments are diversified across and within asset classes in support of investment objectives. Policies and practices to address operating risks include ongoing oversight, plan and asset class investment guidelines, and periodic reviews against these guidelines to ensure adherence.

Expected Long-Term Return on Plan Assets

The expected long-term return assumption at December 31, 2019 was 6.50% for the defined benefit pension plan for U.S. Sealy employees and 5.00% for the defined benefit pension plan for Sealy Canada, Ltd. The expected long-term return assumption is based on historical and projected rates of return for current and planned asset classes in the plan's investment portfolio. The assumption considers various sources, primarily inputs from advisors for long-term capital market returns, inflation, bond yields, and other variables, adjusted for specific aspects of the Company's investment strategy by plan.

The investments in plan assets primarily consist of common collective trusts and money market funds. Investments in common collective trusts and money market funds are valued at the net asset value ("NAV") per share or unit multiplied by the number of shares or units held as of the measurement date. The determination of NAV for the common/collective trusts includes market pricing of the underlying assets as well as broker quotes and other valuation techniques that represent fair value as determined by the respective administrator of the common/collective trust. Management has determined that the NAV is an appropriate estimate of the fair value of the common collective trusts at December 31, 2019 and 2018, based on the fact that the common/collective trusts are audited and accounted for at fair value by the administrators of the respective common/collective trusts. The methods described above may produce a fair value that may not be indicative of net realizable value or reflective of future fair value. Furthermore, while the Company believes its valuation methods are appropriate and consistent with other market participants, the use of different methodologies or assumptions to determine the fair value of certain financial instruments could result in a different estimate of fair value at the Consolidated Balance Sheet dates.

The fair value of the Company's plan assets, all valued at NAV, at December 31 by asset category was as follows:

(in millions)	2019		2018
Asset Category			
Common/collective trust			
U.S. equity	\$ 5.5	\$	14.1
International equity	9.5		3.6
Total equity based funds	15.0		17.7
Common/collective trust - fixed income	11.9		4.4
Money market funds	0.1		0.1
Total	\$ 27.0	\$	22.2

Multi-Employer Benefit Plans

Approximately 25.0% of the Company's domestic employees are represented by various labor unions with separate collective bargaining agreements. Hourly employees working at six of the Company's domestic manufacturing facilities are covered by union sponsored retirement plans. Further, employees working at three of the Company's domestic manufacturing facilities are covered by union sponsored health and welfare plans. These plans cover both active employees and retirees. Through the health and welfare plans, employees receive medical, dental, vision, prescription and disability coverage. The Company's cost associated with these plans consists of periodic contributions to these plans based upon employee participation. The expense recognized by the Company for such contributions for the years ended December 31 was follows:

(in millions)	2019		2018		2017	
Multi-employer retirement plan expense	\$	4.3	\$ 3.	9	\$	4.3
Multi-employer health and welfare plan expense		3.8	3.	6		3.5

The risks of participating in multi-employer pension plans are different from the risks of sponsoring single-employer pension plans in the following respects: 1) contributions to the multi-employer plan by one employer may be used to provide benefits to employees of other participating employers; 2) if a participating employer ceases its contributions to the plan, the unfunded obligations of the plan allocable to the withdrawing employer may be borne by the remaining participating employers; and 3) if the Company withdraws from the multi-employer pension plans in which it participates, the Company may be required to pay those plans an amount based on its allocable share of the underfunded status of the plan.

The following table presents information regarding the multi-employer pension plans that are significant to the Company for the years ended December 31, 2019 and 2018, respectively:

Pension Fund (in millions) United Furniture Workers Pension Fund A ⁽⁴⁾	EIN/Pension Plan Number 13-5511877-001	Date of Plan Year- End 2/28/19	Pension Protection Act Zone Status ⁽¹⁾ 2019 Red	FIP/RP Status Pending/ Implemented ⁽²⁾ Implemented	 ntributions of the ompany in 2019 1.1	Surcharge Imposed ⁽³⁾ No	Expiration Date of Collective Bargaining Agreement	Year Contributions to Plan Exceeded More than 5 Percent of Total Contributions 2017, 2018, 2019
Pension Plan of the National Retirement Fund	13-6130178-001	12/31/18	Red	Implemented	\$ 1.0	Yes, 10.0%	2022	N/A
Central States, Southeast & Southwest Areas Pension Plan	36-6044243-001	12/31/18	Red	Implemented	\$ 0.8	Yes, 10.0%	2021	N/A
Pension Fund	EIN/Pension Plan Number	Date of Plan Year- End	Pension Protection Act Zone Status ⁽¹⁾ 2018	FIP/RP Status Pending/ Implemented ⁽²⁾	 ntributions of the ompany in 2018	Surcharge Imposed ⁽³⁾	Expiration Date of Collective Bargaining Agreement	Year Contributions to Plan Exceeded More than 5 Percent of Total Contributions
<i>(in millions)</i> United Furniture								
Workers Pension Fund A ⁽⁴⁾	13-5511877-001	2/28/18	Red	Implemented	\$ 0.7	No	2020	2016, 2017, 2018
Pension Plan of the National Retirement Fund	13-6130178-001	12/31/17	Red	Implemented	\$ 0.7	Yes, 10.0%	2019	N/A
Central States, Southeast & Southwest Areas Pension Plan	36-6044243-001	12/31/17	Red	Implemented	\$ 0.8	Yes, 10.0%	2021	N/A

- (1) The Pension Protection Act of 2006 ranks the funded status of multi-employer pension plans depending upon a plan's current and projected funding. A plan is in the Red Zone (Critical) if it has a current funded percentage of less than 65.0%. A plan is in the Yellow Zone (Endangered) if it has a current funded percentage of less than 80.0%, or projects a credit balance deficit within seven years. A plan is in the Green Zone (Healthy) if it has a current funded percentage greater than 80.0% and does not have a projected credit balance deficit within seven years. The zone status is based on the plan's year end rather than the Company's. The zone status listed for each plan is based on information that the Company received from that plan and is certified by that plan's actuary for the most recent year available.
- (2) Funding Improvement Plan or Rehabilitation Plan as defined in the Employee Retirement Income Security Act of 1974 has been implemented or is pending.
- (3) Indicates whether the Company paid a surcharge to the plan in the most current year due to funding shortfalls and the amount of the surcharge.
- (4) The Company represented more than 5.0% of the total contributions for the most recent plan year available. For year ended December 31, 2017, the Company contributed \$1.1 million to the plan.

(11) Stockholders' Equity

(a) *Common and Preferred Stock.* Tempur Sealy International has 300.0 million authorized shares of common stock with \$0.01 per share par value and 10.0 million authorized shares of preferred stock with \$0.01 per share par value. The holders of the common stock are entitled to one vote for each share held of record on all matters submitted to a vote of stockholders. Subject to preferences that may be applicable to any outstanding preferred stock, holders of common stock are entitled to receive ratably such dividends as may be declared from time to time by the Board of Directors out of funds legally available for that purpose. In the event of liquidation, dissolution or winding up, the holders of common stock are entitled to share ratably in all assets remaining after payment of liabilities, subject to prior distribution rights of preferred stock, if any, then outstanding.

The Board of Directors is authorized, subject to any limitations prescribed by law, without further vote or action by the stockholders, to issue from time to time shares of preferred stock in one or more series. Each such series of preferred stock will have such number of shares, designations, preferences, voting powers, qualifications, and special or relative rights or privileges as determined by the Board of Directors, which may include, among others, dividend rights, voting rights, redemption and sinking fund provisions, liquidation preferences, conversion rights and preemptive rights.

(b) *Treasury Stock.* As of December 31, 2019, the Company had approximately \$124.6 million remaining under an existing share repurchase program initially authorized by the Board of Directors in 2016. In February 2020, the Board of Directors authorized an increase, of over \$190.0 million, to its existing share repurchase authorization of Tempur Sealy International's common stock to \$300.0 million. For the year ended December 31, 2019, the Company repurchased 1.3 million shares for approximately \$102.3 million under the program. The Company did not repurchase any shares under the program during the year ended December 31, 2017, the Company repurchased 0.6 million shares for approximately \$40.1 million under the program.

In addition, the Company acquired 0.1 million, 0.1 million, and 0.1 million shares upon the vesting of certain restricted stock units ("RSUs"), which were withheld to satisfy tax withholding obligations during the years ended December 31, 2019, 2018 and 2017, respectively. The shares withheld were valued at the closing price of the stock on the New York Stock Exchange on the vesting date or first business day prior to vesting, resulting in approximately \$3.4 million, \$4.6 million, and 4.8 million in treasury stock acquired during the years ended December 31, 2019, 2018 and 2017, respectively.

(c) *Charitable Stock Donation*. In the fourth quarter of 2019, the Company recorded an \$8.9 million charge, recorded in General, administrative and other expenses, related to the donation of 100,000 shares of its common stock at fair market value to certain public charities.

(d) AOCL. AOCL consisted of the following:

	Year Ended December 31,								
(in millions)	2019 2018		2018		2017				
Foreign Currency Translation									
Balance at beginning of period	\$	(91.7)	\$	(72.8)	\$	(101.9)			
Other comprehensive loss:									
Foreign currency translation adjustments ⁽¹⁾		9.5		(18.9)		29.1			
Balance at end of period	\$	(82.2)	\$	(91.7)	\$	(72.8)			
Pension Benefits									
Balance at beginning of period	\$	(3.6)	\$	(2.7)	\$	(2.2)			
Other comprehensive loss:									
Net change from period revaluation		(2.6)		(0.4)		(0.8)			
Tax benefit ⁽²⁾		0.7		0.1		0.3			
Total other comprehensive loss before reclassifications, net of tax		(1.9)		(0.3)		(0.5)			
Net amount reclassified to earnings						—			
U.S tax reform - reclassification to retained earnings upon adoption of ASU No. 2018-02				(0.5)		_			
Tax expense ⁽²⁾		_		(0.1)		_			
Total amount reclassified from accumulated other comprehensive loss, net of tax				(0.6)					
Total other comprehensive loss		(1.9)		(0.9)		(0.5)			
Balance at end of period	\$	(5.5)	\$	(3.6)	\$	(2.7)			
Foreign Exchange Forward Contracts									
Balance at beginning of period	\$	_	\$	_	\$	0.6			
Other comprehensive loss:									
Net change from period revaluation		_		_		(0.6)			
Tax benefit ⁽²⁾		_		_		0.1			
Total other comprehensive loss before reclassifications, net of tax		_		_		(0.5)			
Net amount reclassified to earnings ⁽³⁾		_		_		(0.1)			
Total amount reclassified from accumulated other comprehensive loss, net of tax						(0.1)			
Total other comprehensive loss		_				(0.6)			
Balance at end of period	\$	_	\$		\$	_			
•	_		-		-				

(1) In 2019, 2018 and 2017, there were no tax impacts related to foreign currency translation adjustments and no amounts were reclassified to earnings.

(2) These amounts were included in the income tax provision in the accompanying Consolidated Statements of Income.

(3) This amount was included in cost of sales, net in the accompanying Consolidated Statements of Income.

(12) Other Items

Accrued expenses and other current liabilities

Accrued expenses and other current liabilities consisted of the following:

(in millions)	Dec	December 31, 2019		ember 31, 2018
Taxes	\$	\$ 136.0		136.8
Other		90.8		84.1
Wages and benefits		79.5		43.7
Advertising		56.9		46.1
Operating leases obligations		50.8		—
Sales returns		26.2		22.0
Warranty		19.4		14.9
Rebates		13.6		11.6
	\$	473.2	\$	359.2

(13) Stock-based Compensation

Tempur Sealy International has two stock-based compensation plans which provide for grants of non-qualified and incentive stock options, stock appreciation rights, restricted stock and stock unit awards, performance shares, stock grants and performance based awards to employees, non-employee directors, consultants and Company advisors. The plan under which equity awards may be granted in the future is the Amended and Restated 2013 Equity Incentive Plan (the "2013 Plan"). It is the policy of the Company to issue stock out of treasury shares upon issuance or exercise of share-based awards. The Company believes that awards and purchases made under these plans better align the interests of the plan participants with those of its stockholders.

On May 11, 2017, the Company's stockholders approved the amendment and restatement of the original 2013 Plan. The 2013 Plan provides for grants of stock options to purchase shares of common stock to employees and directors of the Company. The 2013 Plan may be administered by the Compensation Committee of the Board of Directors, by the Board of Directors directly, or, in certain cases, by an executive officer or officers of the Company designated by the Compensation Committee. The shares issued or to be issued under the 2013 Plan may be either authorized but unissued shares of the Company's common stock or shares held by the Company in its treasury. Tempur Sealy International may issue a maximum of 8.7 million shares of common stock under the 2013 Plan, subject to certain adjustment provisions.

The Amended and Restated 2003 Equity Incentive Plan, as amended (the "2003 Plan"), was administered by the Compensation Committee of the Board of Directors, which, together with the Board of Directors, had the exclusive authority to administer the 2003 Plan, including the power to determine eligibility to receive awards, the types and number of shares of stock subject to the awards, the price and timing of awards and the acceleration or waiver of any vesting and performance of forfeiture restrictions, in each case subject to the terms of the 2003 Plan. Any of the Company's employees, non-employee directors, consultants and Company advisors, as determined by the Compensation Committee, were eligible to be selected to participate in the 2003 Plan. Tempur Sealy International allowed a maximum of 11.5 million shares of its common stock under the 2003 Plan to be issued. In May 2013, the Company's Board of Directors adopted a resolution that prohibited further grants under the 2003 Plan.

In 2010, the Board of Directors approved the terms of a Long-Term Incentive Plan established under the 2003 Plan. In 2013, the Board of Directors approved the terms of another Long-Term Incentive Plan established under the 2013 Plan. Awards under both Long-Term Incentive Plans have typically consisted primarily of a mix of stock options, RSUs and PRSUs. Shares with respect to the PRSUs will be granted and vest following the end of the applicable performance period and achievement of applicable performance metrics as determined by the Compensation Committee of the Board of Directors.

The Company's stock-based compensation expense for the year ended December 31, 2019 included PRSUs, stock options, RSUs and DSUs. A summary of the Company's stock-based compensation expense is presented below:

		Year Ended December 31,							
(in millions)		2019			2018	2017			
PRSU expense (benefit)		\$	1.4	\$	2.5	\$	(6.5)		
Stock option expense			4.9		6.7		7.1		
RSU/DSU expense			20.5		15.6		12.7		
Total stock-based compensation expense		\$	26.8	\$	24.8	\$	13.3		

The Company granted PRSUs during the years ended December 31, 2019, 2018 and 2017. Actual payout under the PRSUs is dependent upon the achievement of certain financial goals. The Company recorded a benefit in the accompanying Consolidated Statements of Income of \$9.3 million for the year ended December 31, 2017, after the change in estimate to reduce accumulated performance stock-based compensation amortization to actual cost based on updated projected or final financial results.

Performance Restricted Stock Units

A summary of the Company's PRSU activity and related information for the years ended December 31, 2019 and 2018 is presented below:

(shares in millions)	Shares	Weighted Average Grant Date Fair Value
Awards unvested at December 31, 2017	2.7	\$ 64.13
Granted	0.2	51.72
Vested	(0.1)	68.57
Forfeited	(0.8)	68.07
Awards unvested at December 31, 2018	2.0	61.07
Granted	0.1	85.41
Vested	—	59.21
Forfeited	(1.3)	70.94
Awards unvested at December 31, 2019	0.8	\$ 60.09

During 2017, the Company granted executive officers and certain members of management PRSUs if the Company achieves a certain level of adjusted earnings before interest, tax, depreciation and amortization ("Adjusted EBITDA") during four consecutive fiscal quarters as described below (the "2019 Aspirational Plan PRSUs"). Adjusted EBITDA is defined as the Company's "Consolidated EBITDA" as such term is defined in the Company's 2016 Credit Agreement. The 2019 Aspirational Plan PRSUs will vest based on the highest Adjusted EBITDA in any four consecutive fiscal quarter period ending between (and including) March 31, 2018 and December 31, 2019 (the "First Designated Period"). At the end of the First Designated Period, the Adjusted EBITDA targets were not met. As a result, one-half of the total 2019 Aspirational Plan PRSUs are no longer available for vesting based on performance and are included in forfeitures in the table above.

The remaining one-half of the total 2019 Aspirational Plan PRSUs will vest based on the highest Adjusted EBITDA in any four consecutive fiscal quarter period ending between (and including) March 31, 2020 and December 31, 2020 (the "Second Designated Period"). If the highest Adjusted EBITDA in the Second Designated Period is \$600.0 million then 66% of the remaining 2019 Aspirational Plan PRSUs will vest; if the Adjusted EBITDA is \$650.0 million or more 100% will vest; if Adjusted EBITDA is between \$600.0 million and \$650.0 million then a pro rata portion will vest; and if Adjusted EBITDA is below \$600.0 million then all of the remaining 2019 Aspirational Plan PRSUs will be forfeited.

The Company did not record any stock-based compensation expense related to the 2019 Aspirational Plan PRSUs during the years ended December 31, 2019, 2018 and 2017, as it was not probable that the Company would achieve the specified performance target for either the First Designated Period or the Second Designated Period. The Company will continue to evaluate the probability of achieving the performance condition in future periods and record the appropriate expense if necessary. Based on the price of the Company's common stock on the grant date, the total unrecognized compensation expense related to this award if the performance target is met for the Second Designated Period would range from \$33.1 million to \$49.7 million, which would be expensed over the remaining service period if achievement of the performance condition becomes probable.

As of December 31, 2019, the Company has 0.8 million of the 2019 Aspirational PRSUs outstanding that will fully vest if the Company achieves \$650.0 million or more of Adjusted EBITDA for 2020. All remaining 2019 Aspirational Plan PRSUs will be forfeited if the performance metric is not met in 2020.

In March 2019, the Compensation Committee of the Board of Directors formally determined that the Company did not have more than \$650.0 million of Adjusted EBITDA for payout under the PRSUs granted in 2017 ("the 2017 Aspirational Plan PRSUs"). As a result, the remaining one-third of the 2017 Aspirational Plan PRSUs previously granted with a performance period for 2018 were forfeited as of this date.

Stock Options

The Company uses the Black-Scholes option-pricing model to calculate the fair value of stock options granted. During the year ended December 31, 2019, no stock options were granted. The assumptions used in the Black-Scholes option-pricing model for the years ended December 31, 2019, 2018 and 2017 are set forth in the following table. Expected volatility is based on the unbiased standard deviation of Tempur Sealy International's common stock over the option term. The expected life of the options represents the period of time that the Company expects the options granted to be outstanding. The risk-free rate is based on the U.S. Treasury yield curve in effect at the time of the grant of the option for the expected term of the instrument. The dividend yield reflects an estimate of dividend payouts over the term of the award. The Company uses historical data to determine these assumptions.

	Y	Year Ended December 31,					
	2019	2018	2017				
Expected volatility range of stock	N/A	39.8% - 40.1%	37.4% - 40.8%				
Expected life of option, range in years	N/A	5	5				
Risk-free interest range rate	N/A	2.2% - 2.8%	1.8% - 1.9%				
Expected dividend yield on stock	N/A	<u> %</u>	%				

A summary of the Company's stock option activity under the 2003 Plan and 2013 Plan for the years ended December 31, 2019 and 2018 is presented below:

(in millions, except per share amounts and years)	Shares	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term (Years)	Aggregate Intrinsic Value
Options outstanding at December 31, 2017	1.7	\$ 58.93		
Granted	0.3	61.84		
Exercised	(0.2)	28.20		
Forfeited	(0.2)	60.45		
Options outstanding at December 31, 2018	1.6	\$ 62.51		
Granted		—		
Exercised	(0.3)	52.49		
Forfeited		46.36		
Options outstanding at December 31, 2019	1.3	\$ 65.18	6.35	20.8
Options exercisable at December 31, 2019	0.8	\$ 64.72	5.73	18.4

The aggregate intrinsic value of options exercised during the years ended December 31, 2019, 2018 and 2017 was \$5.9 million, \$3.9 million and \$5.4 million, respectively.

Cash received from options exercised under all stock-based compensation plans, including cash received from options issued from treasury shares, for the years ended December 31, 2019, 2018 and 2017, was \$17.8 million, \$4.6 million, and \$12.8 million, respectively.

A summary of the Company's unvested shares relating to stock options as of December 31, 2019 and 2018, and changes during the years ended December 31, 2019 and 2018, are presented below:

(shares in millions)	Shares	Weigh Average Date Fair	Grant
Options unvested at December 31, 2017	0.7	\$	67.95
Granted	0.3		61.84
Vested	(0.2)		66.72
Forfeited	(0.2)		60.45
Options unvested at December 31, 2018	0.6	\$	66.20
Granted	—		_
Vested	(0.1)		66.66
Forfeited	—		46.36
Options unvested at December 31, 2019	0.5	\$	65.99

Restricted/Deferred Stock Units

A summary of the Company's RSU and DSU activity and related information for the years ended December 31, 2019 and 2018 is presented below:

(in millions, except per share amounts)	Shares	Weighted Average Release Price		Aggregate Intrinsic Value	
Awards outstanding at December 31, 2017	0.6	\$	64.94		
Granted	0.3		61.29		
Vested	(0.1)		62.85		
Terminated	—		64.00		
Awards outstanding at December 31, 2018	0.8	\$	63.82	\$	34.6
Granted	0.7		43.07		
Vested	(0.3)		62.54		
Terminated			58.07		
Awards outstanding at December 31, 2019	1.2	\$	52.96	\$	110.5

The aggregate intrinsic value of RSUs and DSUs vested during the year ended December 31, 2019 was \$14.7 million.

Table of Contents

TEMPUR SEALY INTERNATIONAL, INC. AND SUBSIDIARIES NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

Excluding any potential compensation expense related to the 2019 Aspirational Plan PRSUs discussed above, a summary of total unrecognized stock-based compensation expense based on current performance estimates related to stock options, DSUs, RSUs and PRSUs for the year ended December 31, 2019 is presented below:

(in millions, except years)	ember 31, 2019	Weighted Average Remaining Vesting Period (Years)
Unrecognized stock option expense	\$ 6.6	1.50
Unrecognized DSU/RSU expense	37.6	2.42
Unrecognized PRSU expense	 2.0	1.73
Total unrecognized stock-based compensation expense	\$ 46.2	2.25

(14) Commitments and Contingencies

The Company is involved in various legal and administrative proceedings incidental to the operations of its business. The Company believes that the outcome of all pending proceedings in the aggregate will not have a material adverse effect on its business, financial condition, liquidity, or operating results.

(15) Income Taxes

Pre-tax Income by Jurisdiction

The following sets forth the amount of income before income taxes attributable to each of the Company's geographies for the years ended December 31, 2019, 2018 and 2017:

	Year Ended December 31,						
(in millions)	 2019		2018		2017		
Income before income taxes:							
United States	\$ 5 150.9	\$	59.2	\$	97.2		
Rest of the world	114.6		105.8		118.2		
	\$ S 265.5	\$	165.0	\$	215.4		

Reconciliation of Statutory Tax Rate to Effective Tax Rate

The Company's effective income tax provision differs from the amount calculated using the statutory U.S. federal income tax rate, principally due to the following:

				Y	ear Ended D	ecember 31,					
		2019 2018						2017			
(dollars in millions)	An	nount	Percentage of Income Before Income Taxes		Amount	Percentage of Income Before Income Taxes	A	mount	Percentage of Income Before Income Taxes		
Statutory U.S. federal income tax	\$	55.8	21.0 %	\$	34.6	21.0 %	\$	75.4	35.0 %		
State income taxes, net of federal benefit		8.7	3.3 %		1.8	1.1 %		(0.6)	(0.3)%		
Foreign tax differential		2.1	0.8 %		2.5	1.5 %		(11.9)	(5.5)%		
Change in valuation allowances		(8.6)	(3.2)%		(17.7)	(10.7)%		5.6	2.6 %		
Uncertain tax positions and interest		2.4	0.9 %		33.1	20.1 %		(1.0)	(0.5)%		
Subpart F income		11.0	4.1 %		6.6	4.0 %		2.7	1.2 %		
Manufacturing deduction		—			—	—		(1.9)	(0.9)%		
Remeasurement of deferred taxes		_	_		_	_		(69.7)	(32.3)%		
Transition Tax		—			(6.8)	(4.1)%		45.9	21.3 %		
Permanent and other		3.3	1.2 %		(4.5)	(2.8)%		(0.7)	(0.3)%		
Effective income tax provision	\$	74.7	28.1 %	\$	49.6	30.1 %	\$	43.8	20.3 %		

For 2019 and 2018, Subpart F income consists primarily of Global Intangible Low-Taxed Income ("GILTI") which is taxable to Tempur Sealy International as if earned directly by Tempur Sealy International. The Company recognizes GILTI in the period in which such tax arises. For years prior to 2018, Subpart F income represents interest and royalties earned by a foreign subsidiary as well as sales made by certain foreign subsidiaries outside of their country of incorporation and is taxable to Tempur Sealy International as if earned directly by Tempur Sealy International. The Transition Tax, described below, represents taxes on certain foreign sourced earnings and profits that were previously tax deferred.

On December 22, 2017, the Tax Cuts and Jobs Act of 2017 (the "Act") was signed into law, making significant changes to U.S. tax law. Changes include, but are not limited to, a corporate income tax rate decrease from 35% to 21% effective for tax years beginning after December 31, 2017, the transition of U.S. international taxation from a worldwide tax system to a territorial system, and a one-time transition tax on the mandatory deemed repatriation of cumulative foreign earnings as of December 31, 2017 ("Transition Tax"). In accordance with the Act, the Company recorded an income tax benefit of \$23.8 million in the fourth quarter of 2017, the period in which the legislation was enacted. The total benefit included a tax benefit of \$69.7 million related to the remeasurement of certain deferred tax assets and liabilities net of \$45.9 million in additional income tax expense related to the Transition Tax on foreign earnings. Pursuant to Staff Accounting Bulletin No. 118 ("SAB 118") the Company recorded an additional SAB 118 tax benefit of \$6.8 million in 2018 related to the finalization of the Company's Transition Tax obligation.

Income Tax Provision

The income tax provision consisted of the following:

	Year Ended December 31,								
(in millions)		2019				2017			
Current provision									
Federal	\$	50.4	\$	(14.6)	\$	73.5			
State		11.9		1.1		3.1			
Foreign		19.5		57.1		28.3			
Total current	\$	81.8	\$	43.6	\$	104.9			
Deferred provision									
Federal	\$	(10.8)	\$	11.4	\$	(67.7)			
State		(8.0)		(4.5)		7.6			
Foreign		11.7		(0.9)		(1.0)			
Total deferred		(7.1)		6.0		(61.1)			
Total income tax provision	\$	74.7	\$	49.6	\$	43.8			

The income tax provision includes federal, state and foreign income taxes currently payable and those deferred or prepaid because of temporary differences between financial statement and tax bases of assets and liabilities. The Company records income taxes under the liability method. Under this method, deferred income taxes are recognized for the estimated future tax effects of differences between the tax bases of assets and liabilities and their financial reporting amounts based on enacted tax laws. The amount provided for deferred income taxes reflects that impact of the revaluation of the Company's deferred income tax assets and liabilities required as the result of the change in the U.S. federal and state income tax rates, as discussed above.

Deferred Income Tax Assets and Liabilities

The net deferred tax assets and liabilities recognized in the accompanying Consolidated Balance Sheets, determined using the income tax rate applicable to each period in which those items will reverse, consist of the following:

	December 31,								
(in millions)		2019	2018						
Deferred tax assets:									
Stock-based compensation	\$	13.9	\$	12.8					
Accrued expenses and other		129.7		49.1					
Net operating losses, foreign tax credits and other tax attribute carryforwards		43.1		56.1					
Inventories		8.2		6.0					
Transaction costs		6.6		13.5					
Property, plant and equipment		2.9		3.6					
Total deferred tax assets		204.4		141.1					
Valuation allowances		(30.0)		(43.1)					
Total net deferred tax assets	\$	174.4	\$	98.0					
Deferred tax liabilities:									
Intangible assets	\$	(156.4)	\$	(156.8)					
Property, plant and equipment		(36.9)		(30.3)					
Accrued expenses and other		(69.1)		(5.8)					
Total deferred tax liabilities		(262.4)		(192.9)					
Net deferred tax liabilities	\$	(88.0)	\$	(94.9)					

Tax Attributes Included in Deferred Tax Assets

Included in the calculation of the Company's deferred tax assets are the following gross income tax attributes available at December 31, 2019 and 2018, respectively:

(in millions)	2019	2018
State net operating losses ("SNOLs")	\$ 165.7	\$ 355.7
U.S. federal foreign tax credits ("FTCs")	12.2	12.2
U.S. state income tax credits ("SITCs")	5.3	8.0
Foreign net operating losses ("FNOLs")	36.9	57.0
Charitable contribution carryover ("CCCs")	32.9	39.6
Interest limitation carryover ("ILC")		10.6

The SNOLs, FTCs, SITCs, FNOLs and CCCs generally expire in 2021, 2023, 2023, 2023 and 2020, respectively.

Management believes that, based on a number of factors, the available objective evidence creates sufficient uncertainty regarding the realizability of certain of the SNOLs, FTCs, SITCs, FNOLs, CCCs, the ILC and certain other deferred tax assets related to certain foreign operations (together, the "Tax Attributes"). In assessing the realizability of deferred tax assets (including the Tax Attributes), management considers whether it is more likely than not that some portion of all of such deferred tax assets will not be realized. Accordingly, the Company has established a valuation allowance for certain Tax Attributes. The ultimate realization of deferred tax assets is dependent upon the generation of future taxable income during the periods in which the temporary differences become deductible or creditable. Management considers the scheduled reversal of deferred tax liabilities, projected future taxable income and tax planning strategies in making this assessment. The Company has recorded valuation allowances against \$89.5 million of the SNOLs, \$12.2 million of the FTCs and \$1.4 million of SITCs. With respect to all other Tax Attributes above, based upon the level of historical taxable income and projections for future taxable income, management believes it is more likely than not the Company will realize the benefits of the underlying deferred tax assets. However, there can be no assurance that such assets will be realized if circumstances change.

Deferred Tax Liability for Undistributed Foreign Earnings

No additional income taxes have been provided for any remaining undistributed foreign earnings not subject to the Transition Tax, or any additional outside basis differences inherent in these entities, as these amounts continue to be indefinitely reinvested in foreign operations. At December 31, 2019, the Company's tax basis in its top tier foreign subsidiary exceeded the Company's book basis in this subsidiary in the hands of the top tier foreign subsidiary's U.S. shareholder. The Company has not recorded a deferred tax asset on such excess tax basis as it is not apparent that the excess tax basis will reverse in the foreseeable future. As it relates to the book to tax basis difference with respect to the stock of each of the Company's lower tier foreign subsidiaries, as a general matter, the book basis exceeds the tax basis in the hands of such foreign subsidiaries' shareholders. By operation of the tax laws of the various countries in which these subsidiaries are domiciled, earnings of lower tier foreign subsidiaries are not subject to tax, in all material respects, when distributed to a foreign shareholder. It is the Company's intent that the earnings of each lower tier foreign subsidiaries, will be permanently reinvested in each such foreign subsidiaries' own operations. As it relates to the book to tax basis difference of its stock. With respect to the Canadian subsidiary, Canadian income tax withholding applies to any distribution it makes to its foreign parent company. The Company concluded that at December 31, 2019 the Canadian subsidiary has accumulated earnings in excess of its operating needs and as such Canadian withholding tax has been accrued on such excess. The amount accrued is not material.

Uncertain Income Tax Positions

GAAP prescribes a recognition threshold and measurement attribute for the accounting and financial statement disclosure of tax positions taken or expected to be taken in a tax return. The evaluation of a tax position is a two-step process. The first step requires the Company to determine whether it is more likely than not that a tax position will be sustained upon examination based on the technical merits of the position. The second step requires the Company to recognize in the financial statements each tax position that meets the more likely than not criteria, measured at the largest amount of benefit that has a greater than 50.0% likelihood of being realized. Interest and penalties related to unrecognized tax benefits are recorded in income tax expense.

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

Table of Contents

TEMPUR SEALY INTERNATIONAL, INC. AND SUBSIDIARIES NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

(in millions)

Balance as of December 31, 2017	\$ 84.5
Additions based on tax positions related to 2018	2.5
Additions for tax positions of prior years	21.2
Expiration of statutes of limitations	—
Settlements of uncertain tax positions with tax authorities	(4.4)
Balance as of December 31, 2018	\$ 103.8
Additions based on tax positions related to 2019	
Additions for tax positions of prior years	0.7
Expiration of statutes of limitations	—
Settlements of uncertain tax positions with tax authorities	 _
Balance as of December 31, 2019	\$ 104.5

The amount of unrecognized tax benefits that would impact the effective tax rate if recognized at December 31, 2019, 2018 and 2017 would be \$96.8 million, \$91.4 million and \$31.7 million, respectively. During the years ended December 31, 2019, 2018 and 2017, the Company recognized \$1.3 million, \$6.4 million and \$0.4 million in interest and penalties, respectively, in income tax expense. The Company had \$67.9 million, \$66.3 million and \$59.9 million of accrued interest and penalties at December 31, 2019, 2018, 2019, 2018 and 2017, respectively.

The Company anticipates it is reasonably possible an increase or decrease in the amount of unrecognized tax benefits could be made in the next twelve months as a result of the statute of limitations expiring and/or the examinations being concluded on these returns. However, the Company does not presently anticipate that any increase or decrease in unrecognized tax benefits will be material to the Consolidated Financial Statements, other than the Danish Tax Matter discussed below which the Company believes will be settled commensurate with the amount previously accrued. With few exceptions, the Company is no longer subject to tax examinations by the U.S., state and local municipalities for periods prior to 2011, and in non-U.S. jurisdictions for periods prior to 2001. The Company is currently under examination by various tax authorities around the world.

The Company's liability for the Danish Tax Matter uncertain tax position is derived using a cumulative probability analysis with possible outcomes based on an evaluation of facts and circumstances and applying the technical requirements applicable to U.S., Danish, and international transfer pricing standard, taking into account the U.S. and Danish income tax implications of such outcomes. The Company's remaining uncertain tax liability is derived using the cumulative probability analysis with possible outcomes for each relevant matter based on the Company's updated evaluation of the facts and circumstances regarding each such matter and applying the technical requirements applicable to each tax position taken as it relates to each applicable taxing jurisdiction. The uncertain tax liability reflects the Company's best judgment of the facts, circumstances and information available related to each matter through the balance sheet date.

The Danish Tax Matter

The Company has been involved in a dispute with the Danish Tax Authority ("SKAT") regarding the royalty paid by a U.S. subsidiary of Tempur Sealy International to a Danish subsidiary (the "Danish Tax Matter") for tax years 2001 through current. The royalty is paid by the U.S. subsidiary for the right to utilize certain intangible assets owned by the Danish subsidiary in the U.S. production process.

During 2018, the Company reached agreements with both SKAT and the U.S. Internal Revenue Service ("IRS") (the "Settlement") with respect to the adjusted amount of royalties for tax years 2001 through 2011. The Company and SKAT are currently discussing the appropriate administrative process required to implement the Settlement as it relates to both tax and interest. During this process, the Company continues to maintain a liability on its balance sheet for tax and interest under the terms of the Settlement. At December 31, 2019 and December 31, 2018, the Danish liability related to the Settlement is DKK 847.3 million (approximately \$127.2 million and \$130.0 million using the applicable exchange rates at December 31, 2019 and December 31, 2018, respectively) and is included in accrued expenses and other current liabilities within the Company's Consolidated Balance Sheet. At December 31, 2019 and December 31, 2018, respectively the Company had on deposit with SKAT DKK 970.1 million (approximately \$145.6 million using the applicable exchange rate at December 31, 2019) and DKK 962.3 million (approximately \$147.7 million using the applicable exchange rate at December 31, 2019) and DKK 962.3 million (approximately \$147.7 million using the applicable exchange rate at December 31, 2019) and DKK 962.3 million (approximately \$147.7 million using the applicable exchange rate at December 31, 2018) for the satisfaction of the anticipated liability for both tax and interest once the administrative process is concluded. The deposit held by SKAT is included in "Prepaid expenses and other current assets" within the Company's Consolidated Balance Sheet.

Table of Contents

TEMPUR SEALY INTERNATIONAL, INC. AND SUBSIDIARIES NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

SKAT has issued income tax assessments for the years 2012 through 2017 asserting an increase in the royalty earned by the Danish subsidiary. The Company expects to continue to receive income tax assessments from SKAT for the tax years 2018 and forward, asserting the royalties paid by the U.S. to the Danish subsidiary were too low, which the Company disputes. The Company entered into the Advance Pricing Agreement Program (the "APA Program") for the tax years 2012 through 2022 (the "Post-2011 Years") in which the IRS, on the Company's behalf, will negotiate directly with SKAT for a mutually agreeable royalty due from the U.S. subsidiary to the Danish Subsidiary (the "APA"). That APA is in the early stages of negotiations. Such negotiations are not expected to be concluded in the near term. The Company anticipates such negotiations will result in an increase in the amount of royalties due from the U.S subsidiary to the Danish subsidiary (the "Post-2011 Years Adjustment") for the years 2012 - 2019 (the "2012 to Current Period"). It is expected that the Post-2011 Years Adjustment will result in additional income tax in Denmark and a reduction of tax in the United States for the 2012 to Current Period. Consequently, the Company maintains an uncertain income tax liability for its estimate of the potential Danish income tax liability and a deferred tax asset for the associated United States tax benefit for the Post-2011 Years Adjustment. As of December 31, 2019 and December 31, 2018, the Company had accrued Danish tax and interest for Post-2011 Years of approximately DKK 263.3 million and DKK 230.3 million (\$39.5 million and \$35.3 million using the applicable exchange rates at December 31, 2019 and December 31, 2018, respectively) as an uncertain income tax liability, which is included in other non-current liabilities on the Company's Consolidated Balance Sheets as of December 31, 2019 and 2018, respectively. The deferred tax asset for the U.S. correlative benefit associated with the accrual of Danish tax for the Post-2011 Years as of December 31, 2019 and 2018, respectively, is approximately \$7.2 million and \$4.2 million. Both the uncertain income tax liability and the deferred tax asset reflect the Company's best judgment of the facts, circumstances and information available through December 31, 2019.

If the Company is not successful in resolving the Danish Tax Matter for the Post-2011 Years or there is a change in facts and circumstances, the Company may be required to further increase its uncertain income tax position associated with this matter, or decrease its deferred tax asset, also related to this matter, which could have a material impact on the Company's reported earnings.

The Company continues to discuss certain matters with SKAT relating to the Danish Tax Matter. For instance, the Company's calculation of interest for the Settlement Years differs from the amount asserted by SKAT by approximately DKK 125.0 million (approximately \$18.8 million using the December 31, 2019 exchange rate). The Company believes its calculations properly reflect the mechanics of the calculation of interest as provided in Danish tax law and as such has not recorded a liability for the incremental interest proposed by SKAT. Further, if the IRS and SKAT are unable to reach a mutually acceptable agreement with respect to the years included in the APA Program, the Company could be required to make a significant payment to SKAT for Danish tax related to such years, which could have a material adverse effect on the Company's results of operations and liquidity.

From June 2012 through December 31, 2018, SKAT withheld Value Added Tax refunds otherwise owed to the Company, pending resolution of the Danish Tax Matter. Total withheld refunds at both December 31, 2019 and 2018 is approximately DKK 347.1 million (approximately \$52.1 million and \$53.3 million at the December 31, 2019 and 2018 exchange rates, respectively). In July 2016, the Company paid a deposit to SKAT in the amount of approximately DKK 615.2 million (approximately \$92.3 million and \$94.4 million using the applicable exchange rates at December 31, 2019 and 2018, respectively) (the "Tax Deposit") and applied approximately DKK 232.1 million (approximately \$34.8 million and \$35.6 million using the applicable exchange rates at December 31, 2019 and 2018, respectively) to the aforementioned potential Danish income tax liability, consistent with the Company's reserve position for this royalty matter. The deposit was made to mitigate additional interest and foreign exchange exposure. The Tax Deposit and the VAT Refund Applied are included within prepaid and other current assets and other non-current assets on the Consolidated Balance Sheets as of December 31, 2019 and 2018, respectively.

(16) Earnings Per Common Share

The following table sets forth the components of the numerator and denominator for the computation of basic and diluted earnings per share for net income attributable to Tempur Sealy International.

	Year Ended December 31,					
(in millions, except per common share amounts)	2019			2018		2017
Numerator:						
Net income from continuing operations, net of loss attributable to non-controlling interests	\$	190.9	\$	118.3	\$	182.3
Denominator:						
Denominator for basic earnings per common share-weighted average shares		54.5		54.4		54.0
Effect of dilutive securities:						
Employee stock-based compensation		0.9		0.7		0.7
Denominator for diluted earnings per common share—adjusted weighted average shares		55.4		55.1		54.7
Basic earnings per common share for continuing operations	\$	3.50	\$	2.17	\$	3.37
Diluted earnings per common share for continuing operations	\$	3.45	\$	2.15	\$	3.33

The Company excluded 1.1 million, 1.5 million and 1.3 million shares issuable upon exercise of outstanding stock options for the years ended December 31, 2019, 2018 and 2017, respectively, from the diluted earnings per common share computation because their exercise price was greater than the average market price of Tempur Sealy International's common stock or they were otherwise anti-dilutive. Holders of non-vested stock-based compensation awards do not have voting rights or rights to receive any dividends thereon.

(17) Business Segment Information

The Company operates in two segments: North America and International. Corporate operating expenses are not included in either of the segments and are presented separately as a reconciling item to consolidated results. These segments are strategic business units that are managed separately based on geography. The North America segment consists of Tempur and Sealy manufacturing and distribution subsidiaries, joint ventures and licensees located in the U.S. and Canada. The International segment consists of Tempur and Sealy manufacturing and distribution subsidiaries, joint ventures and licensees located in Europe, Asia-Pacific and Latin America. The Company evaluates segment performance based on net sales, gross profit and operating income. There were no customers that contributed more than 10% of the Company's sales in 2019 or 2018.

The Company's North America and International segment assets include investments in subsidiaries that are appropriately eliminated in the Company's accompanying Consolidated Financial Statements. The remaining inter-segment eliminations are comprised of intercompany accounts receivable and payable.

The following table summarizes total assets by segment:

	Dee	cember 31,	Dec	ember 31,	
(in millions)		2019	2018		
North America	\$	3,142.9	\$	2,788.1	
International		615.3		604.8	
Corporate		477.1		569.0	
Inter-segment eliminations		(1,173.5)		(1,246.5)	
Total assets	\$	3,061.8	\$	2,715.4	

Table of Contents

TEMPUR SEALY INTERNATIONAL, INC. AND SUBSIDIARIES NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

The following table summarizes property, plant and equipment, net, by segment:

	December 31,	December 31,		
(in millions)	2019	2018		
North America	\$ 328.9	\$ 317.5		
International	51.8	51.1		
Corporate	55.1	52.2		
Total property, plant and equipment, net	\$ 435.8	\$ 420.8		

The following table summarizes operating lease right-of-use assets by segment:

	December 31,	December 31,		
(in millions)	2019	2018		
North America	\$ 202.0	\$ —		
International	42.2	_		
Corporate	1.2			
Total operating lease right-of-use assets	\$ 245.4	\$		

The following table summarizes segment information for the year ended December 31, 2019:

(in millions)	Nor	th America	In	ternational	•	Corporate	ŀ	Eliminations	С	onsolidated
Bedding sales	\$	2,379.6	\$	455.7	\$		\$		\$	2,835.3
Other sales		153.7		117.0		—		_		270.7
Net sales	\$	2,533.3	\$	572.7	\$	_	\$	_	\$	3,106.0
Inter-segment sales	\$	3.4	\$	0.7	\$	—	\$	(4.1)	\$	—
Inter-segment royalty expense (income)		4.5		(4.5)		—		—		_
Gross profit		1,035.2		307.0		—		—		1,342.2
Operating income (loss)		344.8		115.4		(113.5)		—		346.7
Income (loss) from continuing operations before income taxes		337.0		109.7		(181.2)		_		265.5
Depreciation and amortization ⁽¹⁾	\$	64.4	\$	13.7	\$	38.4	\$	—	\$	116.5
Capital expenditures		62.1		11.6		14.5		—		88.2

(1) Depreciation and amortization includes stock-based compensation amortization expense.

The following table summarizes segment information for the year ended December 31, 2018:

(in millions)	Nort	th America	Int	ernational	(Corporate	E	liminations	С	onsolidated
Bedding sales	\$	2,002.1	\$	453.2	\$	_	\$	_	\$	2,455.3
Other sales		134.1		113.5		—				247.6
Net sales	\$	2,136.2	\$	566.7	\$	_	\$		\$	2,702.9
Inter-segment sales	\$	3.4	\$	0.5	\$	—	\$	(3.9)	\$	—
Inter-segment royalty expense (income)		3.1		(3.1)		—				—
Gross profit		823.4		297.3		—		—		1,120.7
Operating income (loss)		250.0		107.5		(101.2)				256.3
Income (loss) from continuing operations before income taxes		241.1		101.0		(177.1)		_		165.0
Depreciation and amortization ⁽¹⁾	\$	59.0	\$	13.5	\$	39.4	\$	—	\$	111.9
Capital expenditures		52.7		14.0		6.9		_		73.6

(1) Depreciation and amortization includes stock-based compensation amortization expense.

The following table summarizes segment information for the year ended December 31, 2017:

(in millions)	Nort	th America	In	ternational	(Corporate	F	liminations	С	onsolidated
Bedding sales	\$	2,051.8	\$	421.6	\$		\$		\$	2,473.4
Other sales		122.0		105.2		—		—		227.2
Net sales	\$	2,173.8	\$	526.8	\$	_	\$	_	\$	2,700.6
Inter-segment sales	\$	3.8	\$	1.0	\$	—	\$	(4.8)	\$	—
Inter-segment royalty expense (income)		5.5		(5.5)		—		—		—
Gross profit		844.7		276.3		—		—		1,121.0
Operating income (loss)		273.2		112.0		(89.7)				295.5
Income (loss) from continuing operations before income taxes		276.0		104.5		(165.1)		—		215.4
Depreciation and amortization ⁽¹⁾	\$	51.4	\$	14.1	\$	28.5	\$	—	\$	94.0
Capital expenditures		39.9		9.0		17.7				66.6

(1) Depreciation and amortization includes stock-based compensation amortization expense.

The following table summarizes property, plant and equipment, net, by geographic region:

	De	cember 31,	Dece	ember 31,
(in millions)		2019		2018
United States	\$	366.4	\$	350.7
Canada		17.5		19.1
Other International		51.9		51.0
Total property, plant and equipment, net	\$	435.8	\$	420.8
Total International	\$	69.4	\$	70.1

The following table summarizes operating lease right-of-use assets by geographic region:

	D	ecember 31,	December 31,
(in millions)		2019	2018
United States	\$	198.3	\$ —
Canada		4.9	_
Other International		42.2	
Total operating lease right-of-use assets	\$	245.4	\$ —
Total International	\$	47.1	\$

The following table summarizes net sales by geographic region:

	Year Ended December 31,										
(in millions)		2019		2018		2017					
United States	\$	2,312.3	\$	1,928.9	\$	1,954.2					
Canada		221.0		207.3		219.6					
Other International		572.7		566.7		526.8					
Total net sales	\$	3,106.0	\$	2,702.9	\$	2,700.6					
Total International	\$	793.7	\$	774.0	\$	746.4					

(18) Quarterly Financial Data (unaudited)

Quarterly results of operations for the years ended December 31, 2019 and 2018 are summarized below:

(in millions, except per share amounts)	First Quarter		Second Quarter		Third Quarter		Fourth Quarter
2019							
Net sales	\$	690.9	\$	722.8	\$	821.0	\$ 871.3
Gross profit		281.8		313.4		360.6	386.4
Operating income		60.5		81.0		120.6	84.6
Income from continuing operations		29.0		42.7		72.4	46.7
Net income attributable to Tempur Sealy International, Inc.		28.4		41.6		73.3	46.2
Basic earnings per common share for continuing operations	\$	0.53	\$	0.78	\$	1.33	\$ 0.87
Diluted earnings per common share for continuing operations	\$	0.52	\$	0.76	\$	1.30	\$ 0.85
2018							
Net sales	\$	637.4	\$	659.9	\$	729.5	\$ 676.1
Gross profit		264.7		272.8		300.0	283.2
Operating income		55.7		58.0		84.7	57.9
Income from continuing operations		25.6		26.6		44.1	19.1
Net income attributable to Tempur Sealy International, Inc.		23.1		22.8		42.3	12.3
Basic earnings per common share for continuing operations	\$	0.48	\$	0.52	\$	0.83	\$ 0.35
Diluted earnings per common share for continuing operations	\$	0.47	\$	0.52	\$	0.82	\$ 0.35

The sum of the quarterly earnings per common share amounts may not equal the annual amount reported because per share amounts are computed independently for each quarter and for the full year based on respective weighted-average common shares outstanding and other dilutive potential common shares. The Company's quarterly operating results fluctuate as a result of seasonal variations in the Company's business.

In the fourth quarter of 2019, the Company recorded \$29.8 million of customer-related charges in connection with the bankruptcy of Mattress PAL Holding, LLC ("Mattress PAL") and resulting significant liquidity issues of Mattress PAL's affiliates to fully reserve trade receivables and other assets associated with this account. Additionally, in the fourth quarter of 2019, the Company recorded an \$8.9 million charge related to the donation of common stock at fair market value to certain public charities.

Table of Contents

TEMPUR SEALY INTERNATIONAL, INC. AND SUBSIDIARIES NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

In the fourth quarter of 2018, prior to the Sleep Outfitters Acquisition, the Company recorded \$21.2 million of customerrelated charges in connection with the bankruptcy of iMS to fully reserve trade receivables and other assets associated with this account. Additionally, in the fourth quarter of 2018, the Company recorded \$9.1 million of restructuring costs. These costs included \$4.7 million of charges in the International business segment associated with International simplification efforts, including headcount reduction, professional fees, store closures and other costs, \$2.9 million of Corporate professional fees related to restructuring activities and \$1.5 million of charges associated with the operational alignment of a previous joint venture that became wholly acquired in the North America business segment.

(19) Guarantor/Non-Guarantor Financial Information

The \$450.0 million and \$600.0 million aggregate principal amount of 2023 Senior Notes and 2026 Senior Notes (collectively the "Senior Notes"), respectively, are general unsecured senior obligations of Tempur Sealy International and are fully and unconditionally guaranteed on a senior unsecured basis, jointly and severally, by the Combined Guarantor Subsidiaries. The \$375.0 million aggregate principal amount of 2020 Senior Notes were general unsecured senior obligations at December 31, 2015 but were redeemed in full in 2016. The foreign subsidiaries (the "Combined Non-Guarantor Subsidiaries") represent the foreign operations of the Company and do not guarantee the Senior Notes. A subsidiary guarantor will be released from its obligations under the applicable indenture governing the Senior Notes when: (a) the subsidiary guarantor is sold or sells all or substantially all of its assets; (b) the subsidiary is declared "unrestricted" under the applicable indenture governing the Senior Notes for legal or covenant defeasance or discharge of the applicable indenture have been satisfied. The principal elimination entries relate to investments in subsidiaries and intercompany balances and transactions, including transactions with the Company's wholly-owned subsidiary guarantors and non-guarantor subsidiaries. The Company has accounted for its investments in its subsidiaries under the equity method.

The following financial information presents Consolidated Balance Sheets as of December 31, 2019 and December 31, 2018, and the related Consolidated Statements of Income and Comprehensive Income and Cash Flows for the years ended December 31, 2019, 2018 and 2017 for Tempur Sealy International, Combined Guarantor Subsidiaries and Combined Non-Guarantor Subsidiaries.

TEMPUR SEALY INTERNATIONAL, INC.

Supplemental Consolidated Statements of Income and Comprehensive Income

Year Ended December 31, 2019

	Tempur Sealy International, Inc. (Ultimate Parent)	Combined Guarantor Subsidiaries	Combined Non- Guarantor Subsidiaries	Reclassifications and Eliminations	Consolidated
Net sales	\$	\$ 2,387.1	\$ 793.5	\$ (74.6)	\$ 3,106.0
Cost of sales		1,390.6	447.8	(74.6)	1,763.8
Gross profit		996.5	345.7		1,342.2
Selling and marketing expenses	11.2	466.0	189.2	(0.1)	666.3
General, administrative and other expenses	17.4	242.8	57.7	(2.6)	315.3
Customer-related charges	_	29.8	_	_	29.8
Equity income in earnings of unconsolidated affiliates	_	_	(15.9)	_	(15.9)
Operating (loss) income	(28.6)	257.9	114.7	2.7	346.7
Other expense, net:					
Third party interest expense, net	56.3	26.7	2.7		85.7
Intercompany interest (income) expense, net	(9.8)	13.2	(3.4)	_	_
Interest expense (income), net	46.5	39.9	(0.7)		85.7
Other (income) expense, net	_	(7.6)	1.6	1.5	(4.5)
Total other expense, net	46.5	32.3	0.9	1.5	81.2
Income from equity investees	250.7	84.3	—	(335.0)	—
Income from continuing operations before income taxes	175.6	309.9	113.8	(333.8)	265.5
Income tax benefit (provision)	13.8	(59.2)	(29.5)	0.2	(74.7)
Income from continuing operations	189.4	250.7	84.3	(333.6)	190.8
Loss from discontinued operations, net of tax				(1.4)	(1.4)
Net income before non-controlling interests	189.4	250.7	84.3	(335.0)	189.4
Less: Net loss attributable to non-controlling interest	(0.1)		(0.1)	0.1	(0.1)
Net income attributable to Tempur Sealy International, Inc.	\$ 189.5	\$ 250.7	\$ 84.4	\$ (335.1)	\$ 189.5
Comprehensive income attributable to Tempur Sealy International, Inc.	\$ 197.1	\$ 251.9	\$ 90.8	\$ (342.7)	\$ 197.1

TEMPUR SEALY INTERNATIONAL, INC.

Supplemental Consolidated Statements of Income and Comprehensive Income

Year Ended December 31, 2018

	Inter Inc. (pur Sealy national, Ultimate arent)	Gi	ombined uarantor bsidiaries	Combined Non- Guarantor Subsidiaries	Reclassifications and Eliminations	Сот	isolidated
Net sales	\$		\$	2,000.9	\$ 800.5	\$ (98.5)	\$	2,702.9
Cost of sales		_		1,208.3	464.3	(90.4)		1,582.2
Gross profit		_		792.6	336.2	(8.1)		1,120.7
Selling and marketing expenses		8.4		392.0	199.8	(12.4)		587.8
General, administrative and other expenses		17.8		204.6	57.4	(6.8)		273.0
Customer-related charges				21.2	_	_		21.2
Equity income in earnings of unconsolidated affiliates		_		_	(17.6)			(17.6)
Operating (loss) income		(26.2)		174.8	96.6	11.1		256.3
Other expense, net:								
Third party interest expense, net		59.2		30.2	4.6	(1.7)		92.3
Intercompany interest (income) expense, net		(6.9)		10.8	(3.9)			
Interest expense, net		52.3		41.0	0.7	(1.7)		92.3
Other (income) expense, net				(9.9)	13.9	(5.0)		(1.0)
Total other expense, net		52.3		31.1	14.6	(6.7)		91.3
Income from equity investees		162.0		26.6	—	(188.6)		—
Income from continuing operations before income taxes		83.5		170.3	82.0	(170.8)		165.0
Income tax benefit (provision)		14.1		(8.3)	(55.4)			(49.6)
Income from continuing operations		97.6		162.0	26.6	(170.8)		115.4
Loss from discontinued operations, net of tax		_		_	_	(17.8)		(17.8)
Net income before non-controlling interests		97.6		162.0	26.6	(188.6)		97.6
Less: Net loss attributable to non-controlling interests		(2.9)		(2.6)	(0.3)	2.9		(2.9)
Net income attributable to Tempur Sealy International, Inc.	\$	100.5	\$	164.6	\$ 26.9	\$ (191.5)	\$	100.5
Comprehensive income attributable to Tempur Sealy International, Inc.	\$	80.7	\$	164.2	\$ 7.5	\$ (171.7)	\$	80.7

TEMPUR SEALY INTERNATIONAL, INC.

Supplemental Consolidated Statements of Income and Comprehensive Income

Year Ended December 31, 2017

	Tempur Sealy International, Inc. (Ultimate Parent)	Combined Guarantor Subsidiaries	Combined Non- Guarantor Subsidiaries	Reclassifications and Eliminations	Consolidated
Net sales	\$	\$ 1,961.2	\$ 862.5	\$ (123.1)	\$ 2,700.6
Cost of sales	_	1,185.4	497.6	(103.4)	1,579.6
Gross profit		775.8	364.9	(19.7)	1,121.0
Selling and marketing expenses	5.6	406.8	188.9	(15.2)	586.1
General, administrative and other expenses	17.5	176.6	78.9	(11.6)	261.4
Customer-related charges	(8.4)	21.7	1.1		14.4
Equity income in earnings of unconsolidated affiliates	_	_	(15.6)	_	(15.6)
Royalty income, net of royalty expense	—	(20.8)			(20.8)
Operating (loss) income	(14.7)	191.5	111.6	7.1	295.5
Other expense, net:					
Third party interest expense, net	59.6	26.0	22.4	(20.7)	87.3
Intercompany interest (income) expense, net	(4.7)	8.3	(3.6)	_	
Interest expense, net	54.9	34.3	18.8	(20.7)	87.3
Other (income) expense, net		(17.2)	9.2	0.8	(7.2)
Total other expense, net	54.9	17.1	28.0	(19.9)	80.1
Income from equity investees	193.1	51.3	_	(244.4)	_
Income from continuing operations before income taxes	123.5	225.7	83.6	(217.4)	215.4
Income tax benefit (provision)	17.2	(32.6)	(32.3)	3.9	(43.8)
Income from continuing operations	140.7	193.1	51.3	(213.5)	171.6
Loss from discontinued operations				(30.9)	(30.9)
Net income before non-controlling interests	140.7	193.1	51.3	(244.4)	140.7
Less: Net loss attributable to non-controlling interests	(10.7)	(5.2)	(5.5)	10.7	(10.7)
Net income attributable to Tempur Sealy International, Inc.	\$ 151.4	\$ 198.3	\$ 56.8	\$ (255.1)	\$ 151.4
Comprehensive income attributable to Tempur Sealy International, Inc.	\$ 179.4	\$ 193.0	\$ 89.9	\$ (282.9)	\$ 179.4

TEMPUR SEALY INTERNATIONAL, INC.

Supplemental Consolidated Balance Sheets

December 31, 2019

(in millions)

	Inte Inc.	pur Sealy rnational, (Ultimate Parent)	G	ombined uarantor bsidiaries	0	Combined Non- Guarantor ubsidiaries		eclassifications and Eliminations	Сог	nsolidated
ASSETS										
Current Assets:										
Cash and cash equivalents	\$	0.2	\$	20.0	\$	44.7	\$	_	\$	64.9
Accounts receivable, net		0.2		21.9		352.5		(2.6)		372.0
Inventories		_		199.9		60.6				260.5
Prepaid expenses and other current assets		12.9		59.5		140.2		(9.8)		202.8
Total Current Assets	_	13.3		301.3	_	598.0	_	(12.4)		900.2
Property, plant and equipment, net		—		366.5		69.3				435.8
Goodwill		_		511.2		221.1				732.3
Other intangible assets, net		—		564.3		77.1				641.4
Operating lease right-of-use assets		_		198.2		47.2				245.4
Deferred income taxes		13.0		_		14.1		(13.0)		14.1
Other non-current assets		0.4		46.6		45.6				92.6
Net investment in subsidiaries		1,143.3		369.0		—		(1,512.3)		
Due from affiliates		341.6		125.4		19.6		(486.6)		_
Total Assets	\$	1,511.6	\$	2,482.5	\$	1,092.0	\$	(2,024.3)	\$	3,061.8

LIABILITIES AND STOCKHOLDERS' EQUITY

Current Liabilities:					
Accounts payable	\$ 	\$ 198.4	\$ 55.9	\$ (2.6)	\$ 251.7
Accrued expenses and other current liabilities	6.8	245.7	220.7	—	473.2
Income taxes payable	—	10.0	10.8	(9.8)	11.0
Current portion of long-term debt	—	29.5	7.9	—	37.4
Total Current Liabilities	6.8	483.6	295.3	(12.4)	773.3
Long-term debt, net	1,044.3	458.1	0.2	—	1,502.6
Long-term operating lease obligations		172.4	33.0	_	205.4
Deferred income taxes		98.5	16.6	(13.0)	102.1
Other non-current liabilities	0.2	59.4	58.4	—	118.0
Due to affiliates	99.9	67.2	319.5	(486.6)	
Total Liabilities	1,151.2	1,339.2	723.0	(512.0)	2,701.4
Total Stockholders' Equity	360.4	1,143.3	369.0	(1,512.3)	360.4
Total Liabilities and Stockholders' Equity	\$ 1,511.6	\$ 2,482.5	\$ 1,092.0	\$ (2,024.3)	\$ 3,061.8

TEMPUR SEALY INTERNATIONAL, INC.

Supplemental Consolidated Balance Sheets

December 31, 2018

(in millions)

	Inter Inc.	pur Sealy mational, (Ultimate arent)	Gı	ombined arantor osidiaries	(Combined Non- Guarantor ubsidiaries	eclassifications and Eliminations	Со	nsolidated_
ASSETS									
Current Assets:									
Cash and cash equivalents	\$	0.1	\$	6.2	\$	39.5	\$ _	\$	45.8
Accounts receivable, net		—		15.2		303.3	3.0		321.5
Inventories		_		159.4		62.9	_		222.3
Prepaid expenses and other current assets		276.9		65.4		148.1	(274.6)		215.8
Total Current Assets		277.0	_	246.2		553.8	 (271.6)		805.4
Property, plant and equipment, net		—		350.7		70.1	—		420.8
Goodwill		—		508.8		214.2	—		723.0
Other intangible assets, net		—		572.7		76.6	—		649.3
Deferred income taxes		15.0		_		22.6	(15.0)		22.6
Other non-current assets		—		49.2		45.1	—		94.3
Net investment in subsidiaries		661.7		210.0		—	(871.7)		_
Due from affiliates		422.1		153.8		15.4	(591.3)		_
Total Assets	\$	1,375.8	\$	2,091.4	\$	997.8	\$ (1,749.6)	\$	2,715.4

LIABILITIES AND STOCKHOLDERS' EQUITY

Current Liabilities:					
Accounts payable	\$ —	\$ 186.7	\$ 63.3	\$ 3.0	\$ 253.0
Accrued expenses and other current liabilities	6.7	143.9	208.6	—	359.2
Income taxes payable	—	274.7	9.6	(274.6)	9.7
Current portion of long-term debt	 	 44.0	3.1	 	47.1
Total Current Liabilities	6.7	649.3	284.6	(271.6)	669.0
Long-term debt, net	1,043.0	547.1	9.0	—	1,599.1
Deferred income taxes	—	118.0	14.5	(15.0)	117.5
Other non-current liabilities	1.9	58.2	52.2	—	112.3
Due to affiliates	106.7	57.1	427.5	(591.3)	—
Total Liabilities	1,158.3	 1,429.7	787.8	(877.9)	2,497.9
Total Stockholders' Equity	217.5	661.7	210.0	(871.7)	217.5
Total Liabilities and Stockholders' Equity	\$ 1,375.8	\$ 2,091.4	\$ 997.8	\$ (1,749.6)	\$ 2,715.4

TEMPUR SEALY INTERNATIONAL, INC.

Supplemental Consolidated Statements of Cash Flows

Year Ended December 31, 2019

	Tempur Sealy International, Inc. (Ultimate Parent)	Combined Guarantor Subsidiaries	Combined Non- Guarantor Subsidiaries	Reclassifications and Eliminations	Consolidated	
Net cash (used in) provided by operating activities from continuing operations	\$ (47.6)	\$ 295.2	\$ 65.2	\$ 2.0	\$ 314.8	
CASH FLOWS FROM INVESTING ACTIVITIES:						
Contributions (paid to) received from subsidiaries and affiliates	—	(68.4)	68.4	_		
Purchases of property, plant and equipment	—	(76.2)	(12.0)	—	(88.2)	
Acquisitions, net of cash acquired	—	(8.1)	(9.0)	—	(17.1)	
Other	_	4.9	10.2	_	15.1	
Net cash (used in) provided by investing activities from continuing operations		(147.8)	57.6		(90.2)	
CASH FLOWS FROM FINANCING ACTIVITIES:						
Proceeds from borrowings under long-term debt obligations	_	607.8	635.0	_	1,242.8	
Repayments of borrowings under long-term debt obligations	_	(707.6)	(639.5)	_	(1,347.1)	
Net activity in investment in and advances from (to) subsidiaries and affiliates	135.6	(22.8)	(112.8)	_	_	
Proceeds from exercise of stock options	17.8	_		_	17.8	
Treasury stock repurchased	(105.7)	—	—	—	(105.7)	
Repayments of deferred financing costs	—	(3.2)	_	—	(3.2)	
Repayments of finance lease obligations and other		(7.8)			(7.8)	
Net cash provided by (used in) financing activities from continuing operations	47.7	(133.6)	(117.3)	_	(203.2)	
Net cash provided by continuing operations	0.1	13.8	5.5	2.0	21.4	
CASH USED IN DISCONTINUED OPERATIONS						
Operating cash flows, net				(2.0)	(2.0)	
Investing cash flows, net	_	_		_	_	
Financing cash flows, net	_	_	_	_		
Net cash used in discontinued operations				(2.0)	(2.0)	
NET EFFECT OF EXCHANGE RATE CHANGES ON CASH AND CASH EQUIVALENTS	_	_	(0.3)	_	(0.3)	
Increase in cash and cash equivalents	0.1	13.8	5.2		19.1	
CASH AND CASH EQUIVALENTS, beginning of period	0.1	6.2	39.5	_	45.8	
CASH AND CASH EQUIVALENTS, end of period	\$ 0.2	\$ 20.0	\$ 44.7	\$	\$ 64.9	

TEMPUR SEALY INTERNATIONAL, INC.

Supplemental Consolidated Statements of Cash Flows

Year Ended December 31, 2018

	Tempur Sealy International, Inc. (Ultimate Parent)	Combined Guarantor Subsidiaries	Combined Non- Guarantor Subsidiaries	Reclassifications and Eliminations	Consolidated	
Net cash (used in) provided by operating activities from continuing operations	\$ (55.8)	\$ 166.6	\$ 72.3	\$ 24.4	\$ 207.5	
CASH FLOWS FROM INVESTING ACTIVITIES:						
Contributions (paid to) received from subsidiaries and affiliates	_	(75.8)	75.8	_	_	
Purchases of property, plant and equipment	—	(58.8)	(15.3)	0.5	(73.6)	
Other	_	0.1	4.9	(2.6)	2.4	
Net cash (used in) provided by investing activities from continuing operations	_	(134.5)	65.4	(2.1)	(71.2)	
CASH FLOWS FROM FINANCING ACTIVITIES:						
Proceeds from borrowings under long-term debt obligations	_	414.0	680.9	_	1,094.9	
Repayments of borrowings under long-term debt obligations	_	(444.0)	(751.8)	_	(1,195.8)	
Net activity in investment in and advances from (to) subsidiaries and affiliates	55.8	(3.0)	(52.8)	—	_	
Proceeds from exercise of stock options	4.6	—	—	—	4.6	
Treasury stock repurchased	(4.6)	—	—	—	(4.6)	
Repayments of finance lease obligations and other		(5.2)	(0.9)		(6.1)	
Net cash provided by (used in) financing activities from continuing operations	55.8	(38.2)	(124.6)		(107.0)	
Net cash (used in) provided by continuing operations		(6.1)	13.1	22.3	29.3	
CASH USED IN DISCONTINUED OPERATIONS						
Operating cash flows, net	—	—	_	(24.4)	(24.4)	
Investing cash flow, net	_	_	_	2.1	2.1	
Financing cash flows, net	_	_	_	_		
Net cash used in discontinued operations				(22.3)	(22.3)	
NET EFFECT OF EXCHANGE RATE CHANGES ON CASH AND CASH EQUIVALENTS	_	_	(3.1)	_	(3.1)	
(Decrease) increase in cash and cash equivalents		(6.1)	10.0		3.9	
CASH AND CASH EQUIVALENTS, beginning of period	0.1	12.3	29.5		41.9	
CASH AND CASH EQUIVALENTS, end of period	\$ 0.1	\$ 6.2	\$ 39.5	\$	\$ 45.8	

TEMPUR SEALY INTERNATIONAL, INC.

Supplemental Consolidated Statements of Cash Flows

Year Ended December 31, 2017

	Tempur Sealy International, Inc. (Ultimate Parent)	Combined Guarantor Subsidiaries	Combined Non- Guarantor Subsidiaries	Reclassifications and Eliminations	Consolidated_	
Net cash (used in) provided by operating activities from continuing operations	\$ (55.3)	\$ 376.9	\$ (98.7)	\$ 33.6	\$ 256.5	
CASH FLOWS FROM INVESTING ACTIVITIES:						
Contributions (paid to) received from subsidiaries and affiliates	_	(129.7)	129.7	—	_	
Purchases of property, plant and equipment	—	(55.8)	(11.2)	0.4	(66.6)	
Other		0.8	4.1	(4.0)	0.9	
Net cash (used in) provided by investing activities from continuing operations		(184.7)	122.6	(3.6)	(65.7)	
CASH FLOWS FROM FINANCING ACTIVITIES:						
Proceeds from borrowings under long-term debt obligations		603.9	729.0	_	1,332.9	
Repayments of borrowings under long-term debt obligations	_	(790.8)	(680.7)	_	(1,471.5)	
Net activity in investment in and advances from (to) subsidiaries and affiliates	87.5	0.5	(88.0)	—	_	
Proceeds from exercise of stock options	12.8	—	—	—	12.8	
Treasury stock repurchased	(44.9)	—	—	—	(44.9)	
Payment of deferred financing costs	_	_	(0.5)	—	(0.5)	
Other		(1.4)	(2.6)		(4.0)	
Net cash provided by (used in) financing activities from continuing operations	55.4	(187.8)	(42.8)	_	(175.2)	
Net cash provided by (used in) continuing operations	0.1	4.4	(18.9)	30.0	15.6	
CASH USED IN DISCONTINUED OPERATIONS						
Operating cash flows, net	—		—	(33.6)	(33.6)	
Investing cash flow, net	—		—	3.6	3.6	
Financing cash flows, net						
Net cash used in discontinued operations				(30.0)	(30.0)	
NET EFFECT OF EXCHANGE RATE CHANGES ON CASH AND CASH	_	_	(9.4)	_	(9.4)	
Increase (decrease) in cash and cash equivalents	0.1	4.4	(28.3)		(23.8)	
CASH AND CASH EQUIVALENTS, beginning of period		7.9	57.8		65.7	
CASH AND CASH EQUIVALENTS, end of period	0.1	12.3	29.5		41.9	
LESS: CASH AND CASH EQUIVALENTS OF DISCONTINUED OPERATIONS			0.8		0.8	
CASH AND CASH EQUIVALENTS OF CONTINUING OPERATIONS	\$ 0.1	\$ 12.3	\$ 28.7	\$	\$ 41.1	

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

An evaluation was performed under the supervision and with the participation of our management, including our Chief Executive Officer (principal executive officer) and Chief Financial Officer (principal financial officer), of the effectiveness of our disclosure controls and procedures, as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act, as of the end of the period covered by this Report. Based on that evaluation, our management, including our Chief Executive Officer and Chief Financial Officer, concluded that our disclosure controls and procedures were effective as of December 31, 2019, and designed to ensure that information required to be disclosed by us in reports that we file or submit under the Exchange Act, is recorded, processed, summarized and reported within the time periods specified in the rules and forms of the Securities and Exchange Commission and that such information is accumulated and communicated to our management, including our Chief Executive Officer and Chief Financial Officer, as appropriate to allow timely decisions regarding required disclosure.

Management's Annual Report on Internal Control Over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act. Our internal control over financial reporting is designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with GAAP.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Therefore, even those systems determined to be effective can provide only reasonable assurance of achieving their control objectives.

Under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, we evaluated the effectiveness of our internal control over financial reporting as of December 31, 2019 based on the framework in *Internal Control - Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission ("COSO"). Based on our assessment and those criteria, management believes that we maintained effective internal control over financial reporting as of December 31, 2019.

Our independent registered public accounting firm, Ernst & Young LLP, has issued a report on the Company's internal control over financial reporting as of December 31, 2019. That report appears on page 102 of this Report.

Changes in Internal Control over Financial Reporting

There have not been any changes in our internal control over financial reporting during the quarter ended December 31, 2019 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Report of Independent Registered Public Accounting Firm

The Stockholders and the Board of Directors of Tempur Sealy International, Inc. and Subsidiaries

Opinion on Internal Control over Financial Reporting

We have audited Tempur Sealy International, Inc. and Subsidiaries' internal control over financial reporting as of December 31, 2019, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 Framework) (the COSO criteria). In our opinion, Tempur Sealy International, Inc. and Subsidiaries (the Company) maintained, in all material respects, effective internal control over financial reporting as of December 31, 2019, based on the COSO criteria.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated balance sheets of the Company as of December 31, 2019 and 2018, the related consolidated statements of income, comprehensive income, stockholders' equity and cash flows for each of the three years in the period ended December 31, 2019, and the related notes and financial statement schedule listed in the Index at Item 15(a) and our report dated February 21, 2020, expressed an unqualified opinion thereon.

Basis for Opinion

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

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

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

Definition and Limitations of Internal Control Over Financial Reporting

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

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

/s/ Ernst & Young LLP

Louisville, Kentucky February 21, 2020

PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

The information required by this Item is incorporated herein by reference from our definitive proxy statement for the 2020 Annual Meeting of Stockholders (the "Proxy Statement") under the sections entitled "Proposal One—Election of Directors," and "Board of Directors' Meetings, Committees of the Board and Related Matters—Corporate Governance," — "Committees of the Board," — "Policies Governing Director Nominations," and "Executive Compensation and Related Information—Delinquent Section 16(a) Reports."

Information relating to executive officers is incorporated herein by reference from our Proxy Statement under the section entitled "Proposal One—Election of Directors—Executive Officers."

ITEM 11. EXECUTIVE COMPENSATION

The information required by this Item is incorporated by reference from the Proxy Statement under the sections entitled "Executive Compensation and Related Information" and "Board of Directors' Meetings, Committees of the Board and Related Matters—Compensation Committee Interlocks and Insider Participation."

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

Equity Compensation Plan Information

The following table sets forth equity compensation plan information as of December 31, 2019:

Plan category	Number of securities to be issued upon exercise of outstanding options, warrants and rights	ave opt	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a))	
	(a)	(b)		(c)
Equity compensation plans approved by security holders:				
Amended and Restated 2003 Equity Incentive Plan ⁽¹⁾	100,317	\$	44.11	_
Amended and Restated 2013 Equity Incentive Plan ⁽²⁾	4,165,274		61.75	2,948,158
Total	4,265,591	\$	105.86	2,948,158

- (1) In May 2013, our Board of Directors adopted a resolution that prohibited further grants under the Amended and Restated 2003 Equity Incentive Plan. The number of securities to be issued upon exercise of outstanding stock options, warrants and rights issued under the Amended and Restated 2003 Equity Incentive Plan includes 404 shares issuable under restricted stock units and deferred stock units. These restricted and deferred stock units are excluded from the weighted average exercise price calculation above.
- (2) The number of securities to be issued upon exercise of outstanding stock options, warrants and rights issued under the Amended and Restated 2013 Equity Incentive Plan includes 1,268,462 shares issuable under restricted stock units and deferred stock units. Additionally, this number includes 1,701,245 performance restricted stock units which reflects a maximum payout of the awards granted. The Company expects that in early March 2019 the Compensation Committee of the Board of Directors will formally determine that the Company did not have \$600.0 million or more in Adjusted EBITDA for 2019 in accordance with the 2019 Aspirational Plan PRSUs. As a result, half of the total outstanding PRSUs above will be forfeited as of this date. These restricted, deferred and performance restricted stock units are excluded from the weighted average exercise price calculation above.

For information regarding the material features of each of the above plans see Note 13, "Stock-based Compensation," in our Consolidated Financial Statements included in Part II, ITEM 8 of this Report.

All other information required by this Item is incorporated by reference from the Proxy Statement under the section entitled "Principal Security Ownership and Certain Beneficial Owners."

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS AND DIRECTOR INDEPENDENCE

The information required by this Item is incorporated by reference from the Proxy Statement under the section entitled "Executive Compensation and Related Information—Certain Relationships and Related Transactions" and "Board of Directors' Meetings, Committees of the Board and Related Matters—Board and Committee Independence; Audit Committee Financial Experts."

ITEM 14. PRINCIPAL ACCOUNTING FEES AND SERVICES

The information required by this Item is incorporated by reference from the Proxy Statement under the sections entitled "Proposal Two— Ratification of Independent Auditors—Fees for Independent Auditors During the Years Ended December 31, 2019 and 2018" and "—Policy on Audit Committee Pre-Approval of Audit and Non-Audit Services of Independent Auditors."

PART IV

ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULE

(a) 1. The following is a list of the financial statements of Tempur Sealy International, Inc. included in this Report, which are filed herewith pursuant to ITEM 8:

Report of Independent Registered Public Accounting Firm

Consolidated Statements of Income for the years ended December 31, 2019, 2018 and 2017

Consolidated Statements of Comprehensive Income for the years ended December 31, 2019, 2018 and 2017

Consolidated Balance Sheets as of December 31, 2019 and 2018

Consolidated Statements of Stockholders' Equity for the years ended December 31, 2019, 2018 and 2017

Consolidated Statements of Cash Flows for the years ended December 31, 2019, 2018 and 2017 Notes to the Consolidated Financial Statements

2. Financial Statement Schedule:

Schedule II-Valuation and Qualifying Accounts

All other schedules have been omitted because they are inapplicable, not required, or the information is included elsewhere in the Consolidated Financial Statements or notes thereto.

3. Exhibits:

The following is an index of the exhibits included in this Report or incorporated herein by reference.

(b) EXHIBIT INDEX

- 3.1 Amended and Restated Certificate of Incorporation of Tempur-Pedic International Inc. (filed as Exhibit 3.1 to Amendment No. 3 to the Registrant's registration statement on Form S-1 (File No. 333-109798) as filed on December 12, 2003).⁽¹⁾
- 3.2 Amendment to Certificate of Incorporation of Tempur-Pedic International Inc. (filed as Exhibit 3.1 to the Registrant's Current Report on Form 8-K as filed on May 24, 2013). ⁽¹⁾
- 3.3 Seventh Amended and Restated By-laws of Tempur Sealy International, Inc. (filed as Exhibit 3.1 to the Registrant's Current Report on Form 8-K as filed on February 11, 2019).⁽¹⁾
- 3.4 Amended and Restated Certificate of Designation of Series A Junior Participating Preferred Stock of Tempur Sealy International, Inc. (filed as Exhibit 3.1 to the Registrant's Current Report on Form 8-K as filed on March 15, 2017).⁽¹⁾
- 4.1 Specimen certificate for shares of common stock (filed as Exhibit 4.1 to the Registrant's Annual Report on Form 10-K as filed on March 1, 2018). ⁽¹⁾
- 4.2 Indenture, dated as of September 24, 2015, among Tempur Sealy International, Inc., the Guarantors party thereto and The Bank of New York Mellon Trust Company, N.A., as Trustee (filed as Exhibit 4.1 to the Registrant's Current Report on Form 8-K as filed on September 24, 2015). ⁽¹⁾
- 4.3 Supplemental Indenture, dated as of October 21, 2019, by and among Tempur Sealy International, Inc., the guarantors party thereto and The Bank of New York Mellon Trust Company, N.A., as trustee, re 5.625% Senior Notes due 2023 (filed as Exhibit 4.1 to the Registrant's Quarterly Report on Form 10-Q as filed on November 7, 2019). (1)
- 4.4 Indenture, dated as of May 24, 2016, among Tempur Sealy International, Inc., the Guarantors party thereto and The Bank of New York Mellon Trust Company, N.A., as Trustee (filed as Exhibit 4.1 to the Registrant's Current Report on Form 8-K filed on May 24, 2016).

- 4.5 Supplemental Indenture, dated as of October 21, 2019, by and among Tempur Sealy International, Inc., the guarantors party thereto and The Bank of New York Mellon Trust Company, N.A., as trustee, re 5.500% Senior Notes due 2026 (filed as Exhibit 4.2 to the Registrant's Quarterly Report on Form 10-Q as filed on November 7, 2019). (1)
- 4.6 Description of registered securities
- 10.1 Credit Agreement, dated as of April 6, 2016, by and among Tempur Sealy International, Inc., as parent borrower, the several banks and other financial institutions party thereto, and JPMorgan Chase Bank, N.A., as administrative agent (filed as Exhibit 10.1 to the Registrant's Current Report on Form 8-K as filed on April 7, 2016).⁽¹⁾
- 10.2 Amendment No. 1 to Credit Agreement dated as of April 4, 2017 among Tempur Sealy International, Inc., as parent borrower, the several banks and other financial institutions party thereto and JPMorgan Chase Bank, N.A., as Administrative Agent (filed as Exhibit 10.3 to the Registrant's Annual Report on Form 10-K as filed on February 25, 2019). (1)
- 10.3 Amendment No. 2 to Credit Agreement dated as of January 8, 2019 among Tempur Sealy International, Inc., as parent borrower, the several banks and other financial institutions party thereto and JPMorgan Chase Bank, N.A., as Administrative Agent (filed as Exhibit 10.4 to the Registrant's Annual Report on Form 10-K as filed on February 25, 2019). (1)
- 10.4 Amendment No. 3, dated June 4, 2019, to Credit Agreement among Tempur Sealy International, Inc., as parent borrower, the several banks and other financial institutions party thereto and JPMorgan Chase Bank, N.A., as Administrative Agent (filed as Exhibit 10.1 to the Registrant's Quarterly Report on Form 10-Q as filed on August 1, 2019). (1)
- 10.5 Amendment and Restatement Agreement, dated as of October 16, 2019, by and among Tempur Sealy International, Inc., as parent borrower, Tempur-Pedic Management, LLC, as additional borrower, the subsidiary guarantors party thereto, the several banks and other financial institutions party thereto, and JPMorgan Chase Bank, N.A., as administrative agent (filed as Exhibit 10.1 to the Registrant's Current Report on Form 8-K as filed on October 17, 2019). (1)
- 10.6 Receivables Sale and Contribution Agreement, dated as of April 12, 2017, between Tempur-Pedic North America, LLC, as seller and contributor, and Tempur Sealy Receivables LLC, as purchaser and contribute (filed as Exhibit 10.2 to the Registrant's Current Report on Form 8-K as filed on April 18, 2017).⁽¹⁾
- 10.7 Receivables Sale Agreement, dated as of April 12, 2017, between Sealy Mattress Manufacturing Company, LLC, as seller and Tempur-Pedic North America, LLC, as purchaser (filed as Exhibit 10.3 to the Registrant's Current Report on Form 8-K as filed on April 18, 2017). ⁽¹⁾
- 10.8 Credit and Security Agreement, dated as of April 12, 2017, among Tempur Sealy Receivables, LLC, as borrower, Tempur Sealy International, Inc., as master servicer and Wells Fargo Bank, National Association, as lender (filed as Exhibit 10.1 to the Registrant's Current Report on Form 8-K as filed on April 18, 2017). ⁽¹⁾
- 10.9 Amendment No. 1, dated as of September 25, 2017, to that certain Credit and Security Agreement, dated as of April 12, 2017, among Tempur Sealy Receivables, LLC, as borrower, Tempur Sealy International, Inc., as master servicer and Wells Fargo Bank, National Association, as lender (filed as Exhibit 10.1 to Registrant's Quarterly Report on Form 10-Q as filed on August 2, 2018). ⁽¹⁾
- 10.10 Amendment No. 2, dated as of April 2, 2018, to that certain Credit and Security Agreement, dated as of April 12, 2017, among Tempur Sealy Receivables, LLC, as borrower, Tempur Sealy International, Inc., as master servicer and Wells Fargo Bank, National Association, as lender (filed as Exhibit 10.2 to Registrant's Quarterly Report on Form 10-Q as filed on August 2, 2018).⁽¹⁾
- 10.11 Omnibus Amendment dated as of October 31, 2018 and constituting (a) Amendment No. 3 to the Credit and Security Agreement dated as of April 12, 2017 among Tempur Sealy Receivables, LLC, Tempur Sealy International, Inc. and Wells Fargo Bank, National Association, (b) Amendment No. 1 to the Receivables Sale and Contribution Agreement dated as of April 12, 2017 by and between Tempur Pedic North America, LLC and Tempur Sealy Receivables, LLC and (c) Amendment No. 1 to the Receivables Sale Agreement dated as of April 12, 2017 by and between Sealy Mattress Manufacturing Company, LLC and Tempur Pedic North America, LLC (filed as Exhibit 10.1 to the Registrant's Current Report on Form 10-Q as filed on November 8, 2018). ⁽¹⁾
- 10.12 Amendment No. 4, dated January 15, 2019, to that certain Credit and Security Agreement, dated as of April 12, 2017, among Tempur Sealy Receivables, LLC, as borrower, Tempur Sealy International, Inc., as master servicer and Wells Fargo Bank, National Association, as lender (filed as Exhibit 10.1 to the Registrant's Quarterly Report on Form 10-Q as filed on May 9, 2019). (1)
- 10.13 Amendment No. 5, dated April 12, 2019, to that certain Credit and Security Agreement, dated as of April 12, 2017, among Tempur
 † Sealy Receivables, LLC, as borrower, Tempur Sealy International, Inc., as master servicer and Wells Fargo Bank, National Association, as lender (filed as Exhibit 10.2 to the Registrant's Quarterly Report on Form 10-Q as filed on May 9, 2019). (1)
- 10.14 Bond Purchase Agreement, dated October 26, 2005, by and among Tempur World LLC, Tempur Production USA, Inc. and Bernalillo County (filed as Exhibit 10.5 to the Registrant's Annual Report on Form 10-K as filed on March 14, 2006). ⁽¹⁾
- 10.15 Trust Indenture, dated September 1, 2005, by and between Bernalillo County and The Bank of New York Trust Company, N.A., as Trustee (filed as Exhibit 10.2 to the Registrant's Annual Report on Form 10-K as filed on March 14, 2006). ⁽¹⁾
- 10.16 Mortgage, Assignment, Security Agreement and Fixture Filing, dated as of October 27, 2005, by and between Bernalillo County and Tempur Production USA, Inc. (filed as Exhibit 10.7 to the Registrant's Annual Report on Form 10-K as filed on March 14, 2006).⁽¹⁾
- 10.17 Lease Agreement, dated September 1, 2005, by and between Bernalillo County and Tempur Production USA, Inc. (filed as Exhibit 10.3 to the Registrant's Annual Report on Form 10-K as filed on March 14, 2006). ⁽¹⁾
- 10.18 Non-Disclosure and Standstill Agreement, dated as of June 26, 2017, by and among Tempur Sealy International, Inc., Usman Nabi, H Partners Management, LLC and the other parties named therein (filed as Exhibit 10.1 to the Registrant's Current Report on Form 8-K as filed on June 28, 2017). ⁽¹⁾
- 10.19 Letter Agreement dated March 23, 2018 from Tempur Sealy International, Inc. to H Partners Management, LLC and the other H Partners Group Members listed therein (filed as filed as Exhibit 10.1 to the Registrant's Current Report on Form 8-K as filed on March 26, 2018). ⁽¹⁾
- 10.20 Amended and Restated Non-Employee Director Deferred Compensation Plan (filed as Exhibit 10.15 to the Registrant's Annual Report on Form 10-K as filed on February 13, 2015). ⁽¹⁾⁽²⁾

- 10.21 Tempur Sealy International, Inc. Amended and Restated 2013 Long-Term Incentive Plan (filed as Exhibit 10.1 to Registrant's Current Report on Form 8-K as filed on July 26, 2017). ⁽¹⁾⁽²⁾
- 10.22 Amended and Restated Tempur-Pedic International Inc. 2003 Equity Incentive Plan (filed as Appendix B to the Registrant's Definitive Proxy Statement on Schedule 14A (File No. 001-31922) as filed on March 25, 2009). ⁽¹⁾⁽²⁾
- 10.23 First Amendment to the Amended and Restated 2003 Equity Incentive Plan (filed as Appendix A to the Registrant's Definitive Proxy Statement on Schedule 14A (File No. 001-31922) as filed on March 25, 2009). ⁽¹⁾⁽²⁾
- 10.24 Tempur Sealy International, Inc. Amended and Restated 2013 Equity Incentive Plan (filed as Exhibit 99.1 to the Registrant's Current Report on Form 8-K as filed on May 2, 2017).⁽¹⁾⁽²⁾
- 10.25 Second Amended and Restated Annual Incentive Bonus Plan for Senior Executives (filed as Appendix B to the Registrant's Definitive Proxy Statement (File No.001-31922) filed on March 16, 2015).⁽¹⁾⁽²⁾
- 10.26 Employment Agreement dated September 12, 2003, between Tempur International Limited and David Montgomery (filed as Exhibit 10.13 to Amendment No. 1 to the Registrant's registration statement on Form S-4 ((File No. 333-109054-02) as filed on October 31, 2003). ⁽¹⁾⁽²⁾
- 10.27 Employment Agreement dated as of July 18, 2006 between Tempur-Pedic International Inc. and Richard Anderson (filed as Exhibit 10.1 to Registrant's Quarterly Report on Form 10-Q as filed November 7, 2006).⁽¹⁾⁽²⁾
- 10.28 Employment and Non-Competition Agreement dated as of September 4, 2015, by and between Tempur Sealy International, Inc. and Scott L. Thompson (filed as Exhibit 10.1 to Registrant's Current Report on Form 8-K as filed on September 8, 2015). ⁽¹⁾⁽²⁾
- 10.29 First Amendment to Employment and Non-Competition Agreement dated November 27, 2017 by and between Tempur Sealy International, Inc. and Scott L. Thompson (filed as Exhibit 10.32 to the Registrant's Annual Report on Form 10-K as filed on March 1, 2018)⁽¹⁾⁽²⁾
- 10.30 Employment and Non-Competition Agreement dated September 5, 2017, by and between Tempur Sealy International, Inc. and H. Clifford Buster, III (filed as Exhibit 10.3 to the Registrant's Quarterly Report on Form 10-Q as filed on November 9, 2017).⁽¹⁾⁽²⁾
- 10.31 Employment and Non-Competition Agreement dated October 13, 2017, by and between Tempur Sealy International, Inc. and Bhaskar Rao (filed as Exhibit 10.6 to the Registrant's Quarterly Report on Form 10-Q as filed on November 9, 2017). ⁽¹⁾⁽²⁾
- 10.32 Employment and Non-Competition Agreement dated February 27, 2018, by and between Tempur Sealy International, Inc. and Scott Vollet (filed as Exhibit 10.35 to the Registrant's Annual Report on Form 10-K as filed on March 1, 2018)⁽¹⁾⁽²⁾
- 10.33 Employment and Non-Competition Agreement effective January 1, 2020, by and between Tempur Sealy International, Inc. and Thomas Murray.
- 10.34 Employment and Non-Competition Agreement effective January 1, 2020, by and between Tempur Sealy International, Inc. and Steven Rusing.⁽²⁾
- 10.35 Form of Stock Option Agreement under the Amended and Restated 2003 Equity Incentive Plan (Director) (filed as Exhibit 10.40 to Registrant's Annual Report on Form 10-K as filed on February 12, 2009). ⁽¹⁾⁽²⁾
- 10.36 Form of Stock Option Agreement under the United Kingdom Approved Share Option Sub Plan to the 2003 Equity Incentive Plan (filed as Exhibit 10.1 to Registrant's Quarterly Report on Form 10-Q as filed on April 30, 2009). ⁽¹⁾⁽²⁾
- 10.37 Form of Stock Option Agreement under the Amended and Restated 2003 Equity Incentive Plan (filed as Exhibit 10.4 to the Registrant's Current Report on Form 8-K as filed on February 19, 2010). ⁽¹⁾⁽²⁾
- 10.38 Form of Stock Option Agreement under Amended and Restated 2003 Equity Incentive Plan (Executive) (filed as Exhibit 10.4 to the Registrant's Current Report on Form 8-K as filed on February 19, 2010).⁽¹⁾⁽²⁾
- 10.39 Form of Stock Option Agreement under the Amended and Restated 2003 Equity Incentive Plan (Director) (filed as Exhibit 10.2 to Registrant's Quarterly Report on Form 10-Q as filed on July 28, 2010). ⁽¹⁾⁽²⁾
- 10.40 Form of Stock Option Agreement under the 2013 Equity Incentive Plan (Director) (filed as Exhibit 10.3 to Registrant's Quarterly Report on Form 10-Q as filed on November 8, 2013).⁽¹⁾⁽²⁾
- 10.41 Form of Stock Option Agreement under the 2013 Equity Incentive Plan (filed as Exhibit 10.37 to Registrant's Annual Report on Form 10-K as filed on February 13, 2015).⁽¹⁾⁽²⁾
- 10.42 Stock Option Agreement dated as of September 4, between Tempur Sealy International, Inc. and Scott L. Thompson (filed as Exhibit 10.2 to Registrant's Current Report on Form 8-K as filed September 8, 2015).⁽¹⁾⁽²⁾
- 10.43 Form of Stock Option Agreement under the 2013 Equity Incentive Plan (filed as Exhibit 10.57 to Registrant's Annual Report on Form 10-K filed on February 24, 2017).⁽¹⁾⁽²⁾
- 10.44 Form of Special Grant Stock Option Agreement under the Amended and Restated 2013 Equity Incentive Plan (filed as Exhibit 10.46 to the Registrant's Annual Report on Form 10-K as filed on March 1, 2018).⁽¹⁾⁽²⁾
- 10.45 Form of Amendment to Stock Option Agreement (filed as Exhibit 10.47 to the Registrant's Annual Report on Form 10-K as filed on March 1, 2018) ⁽¹⁾⁽²⁾
- 10.46 Form of Performance Restricted Stock Unit Award Agreement under the 2013 Equity Incentive Plan (filed as Exhibit 10.38 to Registrant's Annual Report on Form 10-K as filed on February 13, 2015).⁽¹⁾⁽²⁾
- 10.47 2015 Performance Restricted Stock Unit Award Agreement dated as of September 4, 2015, between Tempur Sealy International, Inc. and Scott L. Thompson (filed as Exhibit 10.5 to Registrant's Current Report on Form 8-K as filed on September 8, 2015).⁽¹⁾⁽²⁾
- 10.48 Form of 2015 Performance Restricted Stock Unit Award Agreement (filed as Exhibit 10.1 to Registrant's Current Report on Form 8-K as filed on October 29, 2015). ⁽¹⁾⁽²⁾
- 10.49 Form of 2017 Performance Restricted Stock Unit Award Agreement (filed as Exhibit 10.1 to the Registrant's Current Report on Form 8-K as filed on August 7, 2017). ⁽¹⁾⁽²⁾

- 10.50 2017 Performance Restricted Stock Unit Award Agreement dated October 13, 2017 by and between Tempur Sealy International, Inc. and Bhaskar Rao (filed as Exhibit 10.7 to the Registrant's Quarterly Report on Form 10-Q as filed on November 9, 2017). ⁽¹⁾⁽²⁾
- 10.51 2017 Performance Restricted Stock Unit Award Agreement dated September 5, 2017 by and between Tempur Sealy International, Inc. and H. Clifford Buster, III (filed as Exhibit 10.4 to the Registrant's Quarterly Report on Form 10-Q as filed on November 9, 2017).⁽¹⁾
- 10.52 Matching Performance Restricted Stock Unit Award Agreement dated as of September 4, 2015 between Tempur Sealy International, Inc. and Scott L. Thompson (filed as Exhibit 10.4 to Registrant's Current Report on Form 8-K as filed on September 8, 2015).⁽¹⁾⁽²⁾
- 10.53 Amendment to Matching Performance Restricted Stock Unit Award Agreement dated as of October 12, 2015, between Tempur Sealy International, Inc. and Scott L. Thompson (filed as Exhibit 10.1 to Registrant's Current Report on Form 8-K as filed on October 14, 2015). ⁽¹⁾⁽²⁾
- 10.54 Form of Matching PRSU Award Agreement under the 2013 Equity Incentive Plan (filed as Exhibit 99.1 to the Registrant's Current Report on Form 8-K filed on February 26, 2016).⁽¹⁾⁽²⁾
- 10.55 Form of Amendment to Matching PRSU Agreement (filed as Exhibit 10.58 to the Registrant's Annual Report on Form 10-K as filed on March 1, 2018). ⁽¹⁾⁽²⁾
- 10.56 Restricted Stock Unit Award Agreement dated as of September 4, 2015, between Tempur Sealy International, Inc. and Scott L. Thompson (filed as Exhibit 10.3 to Registrant's Current Report on Form 8-K as filed on September 8, 2015).⁽¹⁾⁽²⁾
- 10.57 Form of Restricted Stock Unit Award Agreement under the 2013 Equity Incentive Plan (filed as Exhibit 10.58 to Registrant's Annual Report on Form 10-K as filed on February 24, 2017). ⁽¹⁾⁽²⁾
- 10.58 Restricted Stock Unit Award Agreement dated October 13, 2017 by and between Tempur Sealy International, Inc. and Bhaskar Rao (filed as Exhibit 10.8 to the Registrant's Quarterly Report on Form 10-Q as filed on November 9, 2017).⁽¹⁾⁽²⁾
- 10.59 Restricted Stock Unit Award Agreement dated September 5, 2017 by and between Tempur Sealy International, Inc. and H. Clifford Buster, III (filed as Exhibit 10.5 to the Registrant's Quarterly Report on Form 10-Q as filed on November 9, 2017).⁽¹⁾⁽²⁾
- 10.60 Form of Restricted Stock Unit Award Agreement under the Amended and Restated 2013 Equity Incentive Plan (filed as Exhibit 10.63 to the Registrant's Annual Report on Form 10-K as filed on March 1, 2018)⁽¹⁾⁽²⁾
- 10.61 Form of Amendment to RSU Award Agreement (filed as Exhibit 10.64 to the Registrant's Annual Report on Form 10-K as filed on March 1, 2018)⁽¹⁾⁽²⁾
- 10.62 Form of 2019 Restricted Stock Unit Award Agreement under the Amended and Restated 2013 Equity Incentive Plan (filed as Exhibit 10.60 to the Registrant's Annual Report on Form 10-K as filed on February 25, 2019). ⁽¹⁾⁽²⁾
- 10.63 Form of 2020 Restricted Stock Unit Award Agreement under the Amended and Restated 2013 Equity Incentive Plan.⁽²⁾
- 10.64 Form of 2020 Performance Restricted Stock Unit Award Agreement under the Amended and Restated 2013 Equity Incentive Plan.⁽²⁾
- 10.65 Subscription Agreement dated as of September 4, 2015, between Tempur Sealy International, Inc. and Scott L. Thompson (filed as Exhibit 10.6 to Registrant's Current Report on Form 8-K as filed on September 8, 2015). (1)(2)
- 10.66 Amended and Restated Sealy Benefit Equalization Plan dated December 18, 2008 (filed as Exhibit 10.44 to Sealy Corporation's Annual Report on Form 10-K as filed on January 15, 2009). ⁽¹⁾⁽²⁾
- 21.1 Subsidiaries of Tempur Sealy International, Inc.
- 23.1 Consent of Ernst & Young LLP.
- 31.1 Certification of Chief Executive Officer, pursuant to Securities Exchange Act Rules 13a-14(a) and 15d-14(a), as adopted pursuant to Section 302 of the Sarbanes Oxley Act of 2002.
- 31.2 Certification of Chief Financial Officer, pursuant to Securities Exchange Act Rules 13a-14(a) and 15d-14(a), as adopted pursuant to Section 302 of the Sarbanes Oxley Act of 2002.
- 32.1 Certification of Chief Executive Officer and Chief Financial Officer, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes Oxley Act of 2002. (³⁾
- 101 The following materials from Tempur Sealy International Inc.'s Annual Report on Form 10-K for the year ended December 31, 2019, formatted in Inline XBRL (eXtensible Business Reporting Language): (i) the Consolidated Statements of Income, (ii) the Consolidated Balance Sheets, (iii) the Consolidated Statements of Stockholders' Equity, (iv) the Consolidated Statements of Cash Flows, and (v) the Notes to the Consolidated Financial Statements, tagged as blocks of text.
- 104 The cover page from the Company's Annual Report on Form 10-K for the year ended December 31, 2019, formatted in Inline XBRL.
 - † Certain portions of this exhibit have been omitted.
 - (1) Incorporated by reference.
 - (2) Indicates management contract or compensatory plan or arrangement.
 - (3) This exhibit shall not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934 or otherwise subject to the liabilities of that Section, nor shall it be deemed incorporated by reference in any filings under the Securities Act of 1933 or the Securities Exchange Act of 1934, whether made before or after the date hereof and irrespective of any general incorporation language in any filings.

TEMPUR SEALY INTERNATIONAL, INC. AND SUBSIDIARIES VALUATION AND QUALIFYING ACCOUNTS FOR THE YEARS ENDED DECEMBER 31, 2019, 2018 AND 2017 SCHEDULE II

(in millions)

			Addi			
Description	Begin	nce at ning of riod	Charges to Costs and Expenses	Charged to Other Accounts	Deductions	alance at End of Period
Allowance for doubtful accounts:						
Year Ended December 31, 2017	\$	20.9	9.8	—	(6.0)	\$ 24.7
Year Ended December 31, 2018	\$	24.7	31.3	—	(8.4)	\$ 47.6
Year Ended December 31, 2019	\$	47.6	29.3		(5.0)	\$ 71.9

			Addi			
Description	Beg	lance at inning of Period	Charges to Costs and Expenses	Charged to Other Accounts	Deductions	alance at End of Period
Valuation allowance for deferred tax assets:						
Year Ended December 31, 2017	\$	45.2	9.9	—	—	\$ 55.1
Year Ended December 31, 2018	\$	55.1	9.5	—	(21.5)	\$ 43.1
Year Ended December 31, 2019	\$	43.1	0.8	_	(13.9)	\$ 30.0

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.

TEMPUR SEALY INTERNATIONAL, INC. *(Registrant)*

Date: February 21, 2020

By: /S/ Scott L. Thompson

Scott L. Thompson Chairman, President and Chief Executive Officer Pursuant to the requirements of the Securities Exchange Act of 1934, this Report has been signed below by the following persons on February 21, 2020, on behalf of the registrant and in the capacities indicated.

Signature	Capacity			
/S/ SCOTT L. THOMPSON	Chairman, President and Chief Executive Officer (Principal			
Scott L. Thompson	Executive Officer)			
/S/ BHASKAR RAO	Executive Vice President and Chief Financial Officer (Principal			
Bhaskar Rao	Financial Officer and Principal Accounting Officer)			
/S/ EVELYN S. DILSAVER	— Director			
Evelyn S. Dilsaver				
/S/ CATHY R. GATES	— Director			
Cathy R. Gates				
/S/ JOHN A. HEIL	— Director			
John A. Heil				
/S/ JON L. LUTHER	— Director			
Jon L. Luther				
/S/ RICHARD W. NEU	— Director			
Richard W. Neu				
/S/ ARIK W. RUCHIM	— Director			
Arik W. Ruchim				
/S/ ROBERT B. TRUSSELL, JR.	— Director			
Robert B. Trussell, Jr.				