

ACCELERATING OUR GROWTH

2019 ANNUAL REPORT











Financial Highlights*

REGULATION G RECONCILIATION

Selected Income Statement Data¹

Dollar amounts in U.S. millions, except per share amounts and percentage data.

Revenue \$1,356.2 \$1,444.1 \$1,886.2 \$2,047.0 \$2,104.5 \$2,083.7 \$2,094.6 \$2,306.0 \$3,041.0 Net income attributable to H.B. Fuller from continuing operations \$70.9 \$80.3 \$68.1 \$95.6 \$50.7 \$83.9 \$121.7 \$59.4 \$171.2 Adjustments: Acquisition/divestiture-related \$8.4 - \$2.5 - \$1.7 \$7.0 \$2.0 \$5.3 \$2.8 Tonsan call option agreement - - - - - - - - \$6.2 \$8.4 \$3.5 \$15.6 \$2.8 Royal restructuring and integration - - - - - - - - - \$47.4 \$20.4	\$2,897.0 \$130.8 \$2.2
from continuing operations \$70.9 \$80.3 \$68.1 \$95.6 \$50.7 \$83.9 \$121.7 \$59.4 \$171.2 Adjustments: Acquisition/divestiture-related \$8.4 - \$2.5 - \$1.7 \$7.0 \$2.0 \$5.3 \$2.8 Tonsan call option agreement - - - - - - - \$(5.4) \$(3.9) \$1.5 Organizational realignment - - - - \$6.2 \$8.4 \$3.5 \$15.6 \$2.8 Royal restructuring and integration - - - - - - - - \$47.4 \$20.4	\$2.2
Acquisition/divestiture-related \$8.4 - \$2.5 - \$1.7 \$7.0 \$2.0 \$5.3 \$2.8 Tonsan call option agreement - - - - - - \$(5.4) \$(3.9) \$1.5 Organizational realignment - - - - \$6.2 \$8.4 \$3.5 \$15.6 \$2.8 Royal restructuring and integration - - - - - - - - \$47.4 \$20.4	-
Tonsan call option agreement - - - - - - - \$(5.4) \$(3.9) \$1.5 Organizational realignment - - - - \$6.2 \$8.4 \$3.5 \$15.6 \$2.8 Royal restructuring and integration - - - - - - - - \$47.4 \$20.4	-
Organizational realignment - - - - \$6.2 \$8.4 \$3.5 \$15.6 \$2.8 Royal restructuring and integration - - - - - - - \$47.4 \$20.4	-
Royal restructuring and integration \$47.4 \$20.4	
	\$7.7
Tax reform \$(43.2)	\$0.8
	\$0.1
Special charges - \$5.7 \$40.7 \$35.3 \$45.2 \$4.7	-
Project One and other \$0.8 \$16.7 \$3.3 \$2.7 \$2.8 \$0.5	\$12.1
Adjusted net income attributable to H.B. Fuller² \$79.3 \$86.0 \$111.3 \$131.7 \$120.5 \$107.3 \$124.5 \$126.6 \$156.0	\$153.7
Add:	
Interest expense \$10.4 \$10.8 \$19.8 \$19.1 \$19.7 \$24.7 \$27.1 \$42.4 \$110.6	\$103.3
Interest income \$(0.6) \$(2.1) \$(1.9) \$(0.5) \$(0.3) \$(0.5) \$(2.0) \$(2.9) \$(11.8)	\$(12.2)
Income taxes \$28.2 \$33.0 \$43.0 \$50.0 \$50.8 \$59.8 \$52.1 \$46.2 \$49.6	\$47.4
Depreciation expense \$30.4 \$28.9 \$38.7 \$39.2 \$47.3 \$48.3 \$49.2 \$50.5 \$67.9	\$66.9
Amortization expense \$10.8 \$10.1 \$18.7 \$22.5 \$23.2 \$27.0 \$28.5 \$36.2 \$76.5	\$73.2
Adjusted EBITDA ² \$158.5 \$166.7 \$229.6 \$262.0 \$261.2 \$266.6 \$279.4 \$299.0 \$448.8	\$432.3
Adjusted EBITDA margin² 11.7% 11.5% 12.2% 12.8% 12.4% 12.8% 13.3% 13.0% 14.8%	14.9%
Diluted shares 49.6 49.9 50.6 51.1 51.3 51.4 51.3 51.6 52.0	52.0
Adjusted diluted income per common share attributable to H.B. Fuller (EPS) ² \$1.60 \$1.72 \$2.20 \$2.58 \$2.35 \$2.09 \$2.43 \$2.45 \$3.00	\$2.96
2010 2011 2012 2013 2014 2015 2016 2017 2018	2019
Gross profit \$397.2 \$403.8 \$517.3 \$570.2 \$534.8 \$561.4 \$605.8 \$599.0 \$828.2	\$806.9
Gross profit margin 29.3% 28.0% 27.4% 27.9% 25.4% 26.9% 28.9% 26.0% 27.2%	27.9%
Adjustments:	
Acquisition/divestiture-related \$1.8 - \$3.3 \$3.7 \$1.3 \$4.3 \$2.5	_
Organizational realignment - - - \$6.2 \$6.5 \$3.2 \$11.4 \$1.5	\$0.4
Royal restructuring and integration \$10.8 \$5.0	\$6.3
Special charges -	-
Project One and other \$1.1 \$8.0 \$(1.9) \$2.4	\$0.2
Adjusted gross profit ³ \$399.0 \$403.8 \$520.6 \$571.3 \$550.3 \$571.6 \$610.3 \$623.6 \$839.6	\$813.8
Adjusted gross profit margin ³ 29.4% 28.0% 27.6% 27.9% 26.2% 27.4% 29.1% 27.0% 27.6%	28.1%

^{*}Please see the inside back cover for additional Financial Highlights and Regulation G disclosure and footnotes.

Letter to Shareholders

DEAR SHAREHOLDER:

In 2019, our focus on profitable growth enabled us to achieve solid financial performance for H.B. Fuller. We delivered constant currency EPS growth of 6%, margin improvement, and very strong cash flow, which allowed us to reduce debt by \$268 million, well ahead of our target. And, for the 50th consecutive year, we increased the dividend paid to our shareholders.

We delivered these results in a challenging environment for global industrial production that impacted volumes, particularly in the automotive and construction sectors. By remaining focused on our strategy and taking several proactive measures, we strengthened our underlying business during the year in several ways: by gaining share in key strategic markets, better aligning our business for future growth, driving continued improvement in EBITDA margin, and accelerating our debt paydown.

Through strong cash flow conversion, working capital improvements, and the divestment of a small non-core business, we significantly accelerated our debt deleverage plan with total debt paydown

"We delivered constant currency EPS growth of 6%, margin improvement, and very strong cash flow, which allowed us to reduce debt by \$268 million, well ahead of our target."

of \$268 million in 2019. This far exceeded the \$200 million commitment we made at the beginning of the year, demonstrating the strength and resiliency of our cash flow.

Jim Owens

Building momentum for 2020, we invested more than \$60 million in capital expenditures in fiscal 2019 to make operating improvements around the world and to expand manufacturing capacity. Last year, we opened two new facilities. First, we expanded the plant, laboratories, and office space we acquired in Brazil, creating a new technical adhesive center of excellence in Latin America. This new, state-of-the-art facility is already driving new business in this growing region. We also opened a new manufacturing facility in Vietnam, allowing us to meet the growing demand from customers in Southeast Asia. In addition, we officially integrated our distribution partner, Ramapo, to support growth in the insulating glass segment in the U.S. And, we continued to deliver on the commitments we made to integrate Royal, capturing an additional \$15 million in synergies.

In 2019, we announced a company realignment into three global business units in order to accelerate organic growth and reduce cost and complexity. This move from two global and three regional operating segments is a natural and important next step in our company's evolution. We have completed significant steps in this business realignment initiative by finalizing the new structure and leadership teams, establishing clear operational plans for 2020, reducing redundant roles and costs in supporting functional areas, and investing resources in market segments with the highest growth potential. In addition to accelerating profitable growth, we expect this change will yield an estimated \$25 to \$35 million in savings by 2021. Finalizing the new global business unit structure to be effective at the beginning of fiscal 2020 has positioned us to quickly realize the benefits of this new operating model.

Overall, the actions we took in 2019 have positioned us to grow profitably in 2020 and beyond.

KEY FINANCIAL MEASURES

 $\label{eq:continuous} \mbox{Dollar amounts in U.S. millions, except per share amounts and percentage data.}$









2019 Segment Results

In our business segments, we continued to win with customers in strategic markets, despite weakness across a number of manufacturing goods sectors, and we improved our margins by leveraging lower raw material costs, delivering acquisition synergies, improving our portfolio, and controlling expenses.

A few highlights from our operating segments as they were reported in 2019 include:

Organic revenues increased in the Americas and Asia Pacific segments, led by stronger sales in hygiene, packaging, Korea and Southeast Asia, while our team in EIMEA experienced a challenging year in terms of top line growth, reflecting a general market slowdown in core Europe. We were successful with margin management in this environment. Adjusted EBITDA increased 18% in Asia Pacific. Adjusted EBITDA margin in the Americas was largely in line with fiscal 2018 without the impact from the divestiture. And, European margins improved throughout the year.

In our Construction Adhesives segment, organic sales were down year-over-year due to a planned repositioning of the portfolio and lower overall construction spending in the U.S. In 2019, we realigned our product portfolio, enhanced leadership, added capacity where needed, and increased investments in growth, so we anticipate revitalized revenue growth and profit improvement in 2020.

Our Engineering Adhesives segment once again performed exceptionally well with strong growth in our electronics and new energy market segments, offsetting lower automotive sales, and resulting in a 15% increase in adjusted EBITDA and adjusted EBITDA margin of 21%.

I'm proud of our entire team for remaining focused on what we can control in this challenging environment: serving our customers, gaining share, responding quickly to market trends, and executing efficiently.

Investing in Our Core

We continue to invest in our capabilities and global footprint to ensure our company's long-term success. In 2019, we made more than \$60 million in capital investments, including the following:



NEW TECHNOLOGY ADHESIVE CENTER IN LATIN AMERICA

Recognizing the potential that exists in Latin America, we opened a new, high-tech facility in Brazil to serve as the strategic point of adhesive solutions distribution throughout the region.



NEW FACTORY AND DISTRIBUTION CENTER IN VIETNAM

Our new factory and distribution center in Vietnam is helping us to better serve our customers and expand our business in this growing economy.

Reorganizing to Deliver Future Growth

Over the past 10 years, we have shifted our portfolio toward more highly specified adhesive applications through organic and inorganic investments. In most of our markets, decision makers in one part of the world affect our ability to win in another part of the world. Our company has changed, and the markets we serve are evolving, which is why now is the right time for us to realign our business structure.

We have a winning formula: we win with customers by identifying market trends and solving our customers' problems better, faster, and at lower total cost than our competitors, and this new structure enables us to do that. Our new operating model enhances our strategic alignment across end markets, and positions us to develop and deliver adhesive solutions around the world better, faster, and more efficiently. And, by simplifying our business, we expect to save between \$25 and \$35 million by 2021.

Our new structure is comprised of the following three global business units (GBUs):

Engineering Adhesives (EA), an existing business segment, enables engineers and product designers to create and build the newest advances in consumer and durable goods, leveraging our adhesive expertise. EA has previously focused on the highly specified markets of aerospace and automotive, electronics and energy, general industries, as well as bus, truck, rail, recreational and specialty vehicles, and now also includes our durable assembly businesses of composite panels, insulating glass, woodworking products, high-performance filtration, product assembly, and technical textiles.





"We win with customers by identifying market trends and solving our customers' problems better, faster, and at lower total cost than our competitors, and this new structure enables us to do that."

Hygiene, Health and Consumable Adhesives (HHC) is a new global business unit that we created to identify trends in sustainable packaging, beauty care, medical care, and disposable hygiene products. This GBU will allow us to put a more targeted focus on growth in markets where we have a modest presence today, such as medical and beauty, while focusing on global trends that will support growth in established markets, like hygiene, packaging, and paper converting.

Construction Adhesives (CA) will remain focused on the commercial roofing, residential and commercial flooring, and utility and infrastructure markets. We win in this GBU by delivering adhesive solutions that enable architects, builders, and construction workers to complete projects in less time, at lower cost, and with greater durability and sustainability.

Our three GBUs will report up to Ted Clark, who was named chief operating officer (COO) in August. Ted, formerly the CEO of Royal Adhesives & Sealants, did an outstanding job leading our Royal integration effort along with the development of the global market strategies for each of our market segments. As COO, Ted will drive execution of our strategy and global growth initiatives across the company.

With this new structure in place, our company will have clearer global alignment and improved accountability between market segment strategies and financial results, enabling us to accelerate our growth.

Accelerating Growth in 2020 and Beyond

H.B. Fuller is a world leader in adhesive technology. As a leader, we work to identify the changes in our world where adhesives can enable advancement and then develop solutions that make those changes a reality. Trends — such as the continued penetration of electronics into all aspects of our lives, sustainable packaging, electric vehicles, energy efficient buildings, advanced medical and beauty products, and developments in solar technology — are all examples of opportunities and applications requiring adhesive solutions. We serve the world's innovators in all of the markets where we operate by partnering with them to solve product development and manufacturing challenges that address consumer demands in a fast-changing world. We have organized our company with experts in the end markets where we compete and have developed

the capability and technology to solve nearly every adhesive application challenge.

Our business model enables relatively low capital intensity, and our focus on strengthening our business portfolio and improving our efficiency is driving increasing EBITDA margins. Growth in our EBITDA combined with strategic acquisitions, a focus on reducing working capital, and leveraging our balance sheet, have all enabled us to accelerate our profit growth and dramatically increase cash flow. From 2018 through 2020, we committed to decrease debt by \$600 million, and we will far exceed that target as we work to deliver value for shareholders. Our steadfast commitment to drive returns to shareholders is also evident in our exceptional track record of increasing dividends every year for the last 50 years.

The actions we took last year have set the stage for further earnings and cash flow increases. In 2020 and beyond, we are focused on executing the growth drivers and achieving the cost savings that are enabled by our GBU alignment coupled with further growth synergies from the Royal acquisition. In addition, the negative effects of the portfolio adjustment in our Construction business are behind us, and the positive impact from our investment in this business are ahead of us.

H.B. Fuller Growth Vision

Identify market trends
that require new and
improved adhesives and
application systems and

market faster and better than the competition.

bring those solutions to

We expect to experience continued external challenges in 2020. Political uncertainty in the U.S. and UK, surrounding the upcoming presidential election and Brexit, as well as macroeconomic forces around the globe, including the recent outbreak of the novel coronavirus, will continue to challenge global growth. We remain steadfast in our focus on delivering profit growth for our shareholders despite the external challenges we face. Our company is strong. We are gaining market share in key segments. And, we are increasingly nimble. We have a solid strategy for global growth across our three GBUs, a resilient cash flow model, and expanding margins. Most importantly, we have an outstanding, experienced team that has demonstrated success in focusing on the right issues and delivering our commitments.

H.B. Fuller has a proven track record of growth. Five years ago, we were a \$2 billion company, and today we are nearly \$3 billion in sales, solidifying our position as the largest pure-play adhesives provider in the world. With our new structure in place and our teams laser-focused on growth, we will gain market share and improve profitability, which, in turn, will provide more opportunity for our company, for our employees around the world, and for you, our valued investors.

Thank you for your continued trust and support.

Jim Owens

President and Chief Executive Officer

Strategic Financial Priorities:



Gain share in our selected, strategic markets



Deliver 3% to 5% organic growth annually



Increase earnings by 10% in constant currency



Exceed three-year debt paydown target of \$600 million by 2020

2019 Company Highlights

JANUARY 2019

- Received IATF 16949:2016 standard compliance certification for the Nienburg, Germany, manufacturing facility's development of a process-oriented quality management system
- Launched Rakoll® 4933, a water-based adhesive that is formaldehyde-free, enabling our customers' sustainability

MARCH 2019

 Celebrated the grand opening of the H.B. Fuller Innovation Center in JA BizTown, a state-of-the-art experiential learning lab in Junior Achievement of the Upper Midwest's new facility

APRIL 2019

- Launched new Global Responsibility website, aligned with the UN Sustainable Development Goals (SDGs)
- Invested tax reform savings in our people by improving medical benefits and reducing premiums for hourly employees

MAY 2019

- Held grand opening for new factory and distribution center in Vietnam
- Announced partnership with Hodei Technology LLC to use their hands-free, wearable Glass telepresence system to improve customer service, training, and more

JUNE 2019

 Opened new technology adhesive center in Latin America, enabling the development of new products, and showcasing our cutting-edge technology and substrates

JULY 2019

 Divested Surfactants, Dispersants, and Thickeners business in Dalton, Georgia, solidifying our focus on more highly specified adhesive solutions

SEPTEMBER 2019

- Celebrated 20th anniversary of Advantra[®] line of hot melt packaging adhesives with introduction of Advantra[®] Warrior case and carton sealing adhesive, Advantra SMART food packaging solutions, and new FullVision[™] data analytics consultancy service designed to connect packaging manufacturers with continuous performance and quality improvement
- Announced operating segment realignment to drive growth and operating efficiencies

OCTOBER 2019

 Presented with the Twin Cities Business Manufacturing Excellence Award for Global Impact

NOVEMBER 2019

 Created new, global business process improvement function, which will focus on areas that will help deliver consistent, long-term organic growth

YEARLONG

- Increased dividends paid for the 50th consecutive year
- Filed 14 new patents and launched 201 new products

Sustainability Goals and Results



We know that our company is best positioned for long-term success when all of our stakeholders — customers, employees, shareholders, and communities — also are thriving. We believe that H.B. Fuller can and should play a role in creating positive change.

COMMITTED TO OPERATING RESPONSIBLY AND SUSTAINABLY

Our commitment begins inside our company. We continually strive to minimize the environmental impact of our operations, while holding safety as a top priority and providing a dynamic and supportive workplace for our employees. Yet, we recognize that to truly drive change, we must collaborate with others beyond our own operations. That's why we partner with customers, for example, to deliver solutions to the challenges they face, including the design and production of stronger, safer, greener consumer and durable goods.

GLOBAL SUSTAINABILITY GOALS AND PROGRESS

H.B. Fuller actively manages the environmental impact of our operations, people, and products. In 2014, we established the following 10-year sustainability goals:

GOAL 1

Reduce energy intensity by 20% between 2014-2025

GOAL 2

1 and 2 greenhouse gi (GHG) emissio intensity by 20% betwee GOAL 3

Reduce waste intensity by 10% between 2014-2025

GOAL 4

withdrawal intensity by 10% betweer 2014-2025

To-date, we are currently on track to meet or exceed each of these goals by 2025.

GLOBAL RESPONSIBILITY WEBSITE

We report our progress against our sustainability goals, and discuss our corporate social responsibility efforts annually via our Global Responsibility Report, which is published to the Global Responsibility section of our company website at **www.hbfuller.com**.

Management Information

CORPORATE OFFICERS

James J. Owens

President and Chief Executive Officer

Theodore Clark

Executive Vice President and Chief Operating Officer

John Corkrean

Executive Vice President and Chief Financial Officer

Zhiwei Cai

Executive Vice President, Engineering Adhesives

Andrew Tometich

Executive Vice President, Hygiene, Health and Consumable Adhesives

M. Shahbaz Malik

Senior Vice President, Global Construction Adhesives

Timothy Keenan

Vice President, General Counsel and Corporate Secretary

Paula Cooney

Vice President, Human Resources

Traci Jensen

Vice President, Global Business Process Improvement

Robert Martsching

Vice President, Corporate Controller

Heidi Weiler

Vice President, Treasurer

BOARD OF DIRECTORS

Lee R. Mitau

Chairman of the Board H.B. Fuller Company and Graco Inc.

Daniel L. Florness

President and Chief Executive Officer Fastenal Company

Thomas W. Handley

Chief Operating Officer for Investment Operations William H. Gates III and Melinda F. Gates and the Bill and Melinda Gates Foundation Trust

Maria Teresa Hilado

Independent Director

Ruth S. Kimmelshue

Corporate Senior Vice President, Business Operations & Supply Chain Cargill, Incorporated

J. Michael Losh

Independent Director; Chairman of MASCO Corporation

James J. Owens

President and Chief Executive Officer H.B. Fuller Company

Dante C. Parrini

Chairman and Chief Executive Officer P.H. Glatfelter Company

John C. van Roden, Jr.

Independent Director

R. William Van Sant

Executive Chairman and Director, Builtrite Holdings, LLC; Operating Partner, TJM Capital Partners; Senior Advisor, Yukon Partners II, LLC; Senior Operating Partner, Tenex Capital Management L.P.

COMMITTEES

Audit

Florness Handley Kimmelshue van Roden (Chair)

Compensation

Florness Handley Hilado Kimmelshue Mitau Parrini Van Sant (Chair)

Corporate Governance and Nominating Committee

Hilado Losh Mitau (Chair) Parrini van Roden Van Sant

About H.B. Fuller

Since 1887, H.B. Fuller has been a leading global adhesives provider focusing on perfecting adhesives, sealants, and other specialty chemical products to improve products and lives. With fiscal 2019 net revenue of nearly \$3 billion, H.B. Fuller's commitment to innovation brings together people, products, and processes that answer and solve some of the world's biggest challenges. Our reliable, responsive service creates lasting, rewarding connections with customers in electronics, disposable hygiene, medical, transportation, aerospace, clean energy, packaging, construction, woodworking, general industries, and other consumer businesses. And, our promise to our people connects them with opportunities to innovate and thrive.

For more information, visit us at www.hbfuller.com

Financial Highlights (Continued)

Selected Balance Sheet Data¹

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Total assets	\$1,153.5	\$1,227.7	\$1,786.3	\$1,873.0	\$1,890.3	\$2,056.9	\$2,066.6	\$4,373.2	\$4,176.3	\$3,985.7
Cash and equivalents	\$133.3	\$156.1	\$200.4	\$155.1	\$77.6	\$119.2	\$142.2	\$194.4	\$150.8	\$112.2
Total debt	\$250.7	\$232.3	\$520.2	\$492.9	\$574.9	\$722.9	\$705.7	\$2,451.9	\$2,247.5	\$1,979.1
Total H.B. Fuller stockholder equity	\$631.9	\$705.2	\$778.3	\$930.1	\$899.1	\$882.0	\$944.5	\$1,051.4	\$1,152.8	\$1,222.3

REGULATION G DISCLOSURE AND FOOTNOTES

REGULATION G: The information presented in this report regarding adjusted gross profit, adjusted gross profit margin, adjusted net income attributable to H.B. Fuller, adjusted diluted net income attributable to H.B. Fuller per common share (also referred to as EPS), adjusted earnings before interest, taxes, depreciation, and amortization (EBITDA), and adjusted EBITDA margin does not conform to generally accepted accounting principles (GAAP), and should not be construed as an alternative to the reported results determined in accordance with GAAP. Management has included the non-GAAP information to assist in understanding the operating performance of the company and its operating segments, as well as the comparability of results. The non-GAAP information provided may not be consistent with the methodologies used by other companies. The table shown inside the front cover of this report provides a reconciliation of non-GAAP information to the most directly comparable measure determined in accordance with GAAP.

- ¹ Financial highlights for 2010 and 2011 are displayed as presented in each year. In 2012, the company divested its Central American paints business and acquired the global industrial adhesives business from the Forbo Group. Financial results in 2012 reflect those two events. Information displayed for 2010 and 2011 is not adjusted for the divestiture of the Central American paints business. In the fourth quarter of 2018, the company elected to change our method of accounting for certain inventories in the United States from the last-in, first-out method ("LIFO") to weighted-average cost, as discussed in Item 7 in the 2018 Annual Report on Form 10-K. Results have been retrospectively adjusted to reflect this change through 2014. Results prior to 2014 have not been retrospectively adjusted for this change. In the first quarter of 2019, the company adopted new revenue recognition standards and a new accounting standard regarding the timing of income tax recognition for an intercompany sale of assets. Both of these adoptions resulted in an adjustment to beginning equity, as discussed in Item 7 in the 2019 Annual Report on Form 10-K. 2018 Balance sheet amounts have been restated for these adoptions. In the first quarter of 2019, the company adopted a new accounting standard requiring that pension expense, other than service cost, be presented as non-operating expenses while service cost remains in operating expenses. See Item 7 in the 2019 Annual Report on Form 10-K for further discussion of this adoption. Results for 2017 and 2018 have been retrospectively adjusted to reflect this change and results prior to 2016 have not been retrospectively adjusted for this change.
- ² Adjusted net income attributable to H.B. Fuller, adjusted diluted net income attributable to H.B. Fuller per share (EPS), adjusted EBITDA and adjusted EBITDA margin are non-GAAP financial measures. Adjusted net income attributable to H.B. Fuller is defined as net income before the specific adjustments shown in the table on the inside front cover. Adjusted diluted net income attributable to H.B. Fuller per share is defined as net income attributable to H.B. Fuller divided by the number of diluted common shares. Adjusted EBITDA is defined as net income before interest, income taxes, depreciation, amortization, and the specific adjustments shown in the table inside the front cover. Adjusted EBITDA margin is defined as adjusted EBITDA divided by net revenue. The table shown on the inside front cover provides a reconciliation of adjusted net income attributable to H.B. Fuller, adjusted net income attributable to H.B. Fuller, adjusted net income attributable to H.B. Fuller per diluted share, adjusted EBITDA and adjusted EBITDA margin to net income attributable to H.B. Fuller, the most directly comparable financial measure determined and reported in accordance with GAAP.
- ³ Adjusted gross profit and adjusted gross profit margin are non-GAAP financial measures. Adjusted gross profit and adjusted gross profit margin are defined as gross profit and gross profit margin excluding the specific adjustments shown in the table on the inside front cover. The table provides a reconciliation of adjusted gross profit and adjusted gross profit margin to gross profit and gross profit margin, the most directly comparable financial measure determined and reported in accordance with GAAP.

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-K

(Mark One) ☑ ANNUAL REPORT PURSUANT TO SECTI	ON 13 OR 15(d) OF THE S	ECURITIES EXCHANGE ACT OF 1934
	scal year ended November 3	
1 01 010 110	OR	·, - · · ·
☐ TRANSITION REPORT PURSUANT TO SI	ECTION 13 OR 15(d) OF T	HE SECURITIES EXCHANGE ACT OF 1934
For the transition po	eriod fromt	o
Comm	nission file number: 001-092	<u> 225</u>
H.B. FI	JLLER COM	PANY
	of registrant as specified in it	
Minnesota (State or other jurisdiction of incorporation or organization)		41-0268370 (I.R.S. Employer Identification No.)
1200 Willow Lake Boulevard, St. Paul, Minno (Address of principal executive offices)	esota	55110-5101 (Zip Code)
Registrant's telephone number, including area code: (65	51) 236-5900	
Securities registered pursuant to Section 12(b) of the Ad	et:	
<u>Title of each class</u> Common Stock, par value \$1.00 per share	Trading Symbol FUL	Name of each exchange on which registered New York Stock Exchange
Securities registered pursuant to Section 12(g) of the Ad	ct: none	
Indicate by check mark if the registrant is a well-known	seasoned issuer, as defined in	n Rule 405 of the Securities Act. ⊠ Yes □ No
Indicate by check mark if the registrant is not required t	to file reports pursuant to Sect	ion 13 or Section 15(d) of the Act. ☐ Yes ⊠ No
Indicate by check mark whether the registrant (1) has fill Act of 1934 during the preceding 12 months (or for such been subject to such filing requirements for the past 90	ch shorter period that the regi	
Indicate by check mark whether the registrant has subn to Rule 405 of Regulation S-T during the preceding 12 files). ⊠ Yes □ No		
Indicate by check mark whether the registrant is a larg company, or an emerging growth company. See the defir and "emerging growth company" in Rule 12b-2 of the I	nitions of "large accelerated fil	rated filer, a non-accelerated filer, smaller reporting er", "accelerated filer", "smaller reporting company"
Large accelerated filer ⊠ Non-accelerated filer □ Emerging growth company □	Accelerated file Smaller reportin	
If an emerging growth company, indicate by check mark with any new or revised financial accounting standards		
Indicate by check mark whether the registrant is a shell	company (as defined in Rule	12b-2 of the Act). □ Yes ☒ No
The aggregate market value of the Common Stock, par was approximately \$1,991,396,615 (based on the closis such date).		
The number of shares outstanding of the Registrant's C	ommon Stock, par value \$1.0	0 per share, was 51,255,026 as of January 20, 2020.
DOCUMENTS	S INCORPORATED BY RE	EFERENCE
Part III incorporates information by reference to portio be held on April 2, 2020.	ns of the registrant's Proxy S	tatement for the Annual Meeting of Shareholders to

H.B. FULLER COMPANY

2019 Annual Report on Form 10-K

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PART I

Item 1. Business

H.B. Fuller Company was founded in 1887 and incorporated as a Minnesota corporation in 1915. Our stock is traded on the New York Stock Exchange ("NYSE") under the ticker symbol FUL. As used herein, "H.B. Fuller", "we", "us", "our", "management" or "company" includes H.B. Fuller and its subsidiaries unless otherwise indicated. Where we refer to 2019, 2018 and 2017 herein, the reference is to our fiscal years ended November 30, 2019, December 1, 2018 and December 2, 2017, respectively.

We are a leading worldwide formulator, manufacturer and marketer of adhesives, sealants and other specialty chemical products. Sales operations span 32 countries in North America, Europe, Latin America, the Asia Pacific region, India, the Middle East and Africa. Industrial adhesives represent our core product offering. Customers use our adhesives products in manufacturing common consumer and industrial goods, including food and beverage containers, disposable diapers, windows, doors, flooring, roofing, appliances, sportswear, footwear, multi-wall bags, water filtration products, insulation, textiles, automobiles, recreational vehicles, buses, trucks and trailers, marine products, solar energy systems, electronics and products for the aerospace and defense industries. Our adhesives help improve the performance of our customers' products or improve their manufacturing processes. We also provide our customers with technical support and unique solutions designed to address their specific needs. In addition, we have established a variety of product offerings for residential construction markets, such as tile-setting adhesives, grouts, sealants and related products.

Recent Acquisition and Divestiture

Ramapo Sales and Marketing, Inc.

On May 17, 2019, we acquired certain assets from a window and insulating glass sealants sales and distribution company, Ramapo Sales and Marketing, Inc. ("Ramapo"), headquartered in Charleston, South Carolina. This acquisition supports the integration of the insulating glass business that we acquired as part of the Royal Adhesives acquisition. The purchase price of \$8.3 million was funded through existing cash. In addition, we are required to pay up to \$3.4 million in contingent consideration based upon financial results for the twelve months ended December 31, 2019. Ramapo is reported in our Americas Adhesives operating segment.

Dalton Holdings, LLC

On July 1, 2019, we completed the sale of Dalton Holdings, LLC ("Dalton Holdings"), which primarily manufactures surfactants and thickeners, within the Americas Adhesives segment. The sale resulted in a pre-tax gain of \$18.8 million, which is recorded in other income, net in the Consolidated Statements of Income for the year ended November 30, 2019.

Non-U.S. Operations

The principal markets, products and methods of distribution outside the United States vary with each of our regional operations generally maintaining integrated business units that contain dedicated supplier networks, manufacturing, logistics and sales organizations. The vast majority of the products sold within any region are produced within the region, and the respective regions do not import significant amounts of product from other regions. As of November 30, 2019, we had sales offices and manufacturing plants in 21 countries outside the United States and satellite sales offices in another 10 countries.

We have a Code of Business Conduct and detailed Core Policies that we apply across all of our operations around the world. These policies represent a set of common values that apply to all employees and all of our business dealings. We have adopted policies and processes, and conduct employee training, intended to ensure compliance with various economic sanctions and export controls, including the regulations of the U.S. Treasury Department's Office of Foreign Assets Control ("OFAC"). We do not conduct any business in the following countries that are subject to U.S. economic sanctions: Cuba; Iran; North Korea; Syria and the Crimea region of the Ukraine. See Item 3. Legal Proceedings for additional disclosures regarding past business conducted in Iran.

Competition

Many of our markets are highly competitive. However, we compete effectively due to the quality and breadth of our adhesives, sealants and specialty chemical portfolio and the experience and expertise of our commercial organizations. Within the adhesives and other specialty chemical markets, we believe few suppliers have comparable global reach and corresponding ability to deliver quality and consistency to multinational customers. Our competition is made up generally of two types of companies: (1) similar multinational suppliers and (2) regional or specialty suppliers that typically compete in only one region or within a narrow geographic area within a region. The multinational competitors typically maintain a broad product offering and range of technology, while regional or specialty companies tend to have limited or more focused product ranges and technology.

Principal competitive factors in the sale of adhesives and other specialty chemicals are product performance, supply assurance, technical service, quality, price and customer service.

Customers

We have cultivated strong, integrated relationships with a diverse set of customers worldwide. Our customers are among the technology and market leaders in consumer goods, construction, and industrial markets. We pride ourselves on long-term, collaborative customer relationships and a diverse portfolio of customers in which no single customer accounted for more than 10 percent of consolidated net revenue.

Our leading customers include manufacturers of food and beverages, hygiene products, clothing, major appliances, electronics, automobiles, aerospace and defense products, solar energy systems, filters, construction materials, wood flooring, furniture, cabinetry, windows, doors, tissue and towel, corrugation, tube winding, packaging, labels and tapes.

Our products are delivered directly to customers primarily from our manufacturing plants, with additional deliveries made through distributors and retailers.

Backlog

No significant backlog of unfilled orders existed at November 30, 2019 or December 1, 2018.

Raw Materials

We use several principal raw materials in our manufacturing processes, including tackifying resins, polymers, synthetic rubbers, vinyl acetate monomer and plasticizers. We generally avoid sole source supplier arrangements for raw materials.

The majority of our raw materials are petroleum/natural gas based derivatives. Under normal conditions, raw materials are available on the open market. Prices and availability are subject to supply and demand market mechanisms. Raw material costs are primarily determined by the balance of supply against the aggregate demand from the adhesives industry and other industries that use the same raw material streams. The cost of crude oil and natural gas, the primary feedstocks for our raw materials, can also impact the cost of our raw materials.

Patents, Trademarks and Licenses

Much of the technology we use in our products and manufacturing processes is available in the public domain. For technology not available in the public domain, we rely on trade secrets and patents when appropriate to protect our competitive position. We also license some patented technology from other sources. Our business is not materially dependent upon licenses or similar rights or on any single patent or group of related patents.

We enter into agreements with many employees to protect rights to technology and intellectual property. Confidentiality commitments also are routinely obtained from customers, suppliers and others to safeguard proprietary information.

We own numerous trademarks and service marks in various countries. Trademarks, such as H.B. Fuller[®], Swift[®], Advantra[®], Clarity[®], Sesame[®], TEC[®], Foster[®], Rakoll[®], Rapidex[®], Full-Care[®], Thermonex[®], Silaprene[®], Eternabond[®], Cilbond[®], and TONSAN[®] are important in marketing products. Many of our trademarks and service marks are registered. U.S. trademark registrations are for a term of ten years and are renewable every ten years as long as the trademarks are used in the regular course of trade.

Research and Development

Our investment in research and development creates new and innovative adhesive technology platforms, enhances product performance, ensures a competitive cost structure and leverages available raw materials. New product development is a key research and development outcome, providing higher-value solutions to existing customers or meeting new customers' needs. Projects are developed in local laboratories in each region, where we understand our customer base the best. Platform developments are coordinated globally through our network of laboratories.

Through designing and developing new polymers and new formulations, we expect to continue to grow in our current markets. We also develop new applications for existing products and technologies, and improve manufacturing processes to enhance productivity and product quality. Research and development efforts are closely aligned to customer needs, but we do not engage in customer sponsored activities. We foster open innovation, seek supplier-driven new technology and use relationships with academic and other institutions to enhance our capabilities.

Environmental, Health and Safety

We comply with applicable regulations relating to environmental protection and workers' safety. This includes regular review of and upgrades to environmental, health and safety policies, practices and procedures as well as improved production methods to minimize our facilities' outgoing waste, based on evolving societal standards and increased environmental understanding.

Expenditures to comply with environmental regulations over the next two years are estimated to be approximately \$1.8 million, including approximately \$1.4 million of capital expenditures. See additional disclosure under Item 3. Legal Proceedings.

Seasonality

Our operating segments have historically had lower net revenue in winter months, which is primarily our first fiscal quarter, mainly due to international holidays and the seasonal decline in construction and consumer spending activities.

Employees

We employed approximately 6,400 individuals on November 30, 2019, of which approximately 2,500 were located in the United States.

Information About Our Executive Officers

The following table shows the name, age and business experience for the past five years of the executive officers as of January 6, 2020. Unless otherwise noted, the positions described are positions with the company or its subsidiaries.

<u>Name</u>	<u>Age</u>	<u>Positions</u>	Period Served
James J. Owens	55	President and Chief Executive Officer	November 2010 - Present
Zhiwei Cai	57	Executive Vice President, Engineering Adhesives Senior Vice President, Engineering Adhesives Vice President, TONSAN and Electronics	August 2019 - Present February 2016 - August 2019 2014 - 2016
Theodore M. Clark	66	Executive Vice President and Chief Operating Officer Senior Vice President, Royal Adhesives President and CEO of Royal Adhesives and Sealants, LLC	August 2019 - Present October 2017 - August 2019 2003 - 2017
Paula M. Cooney	51	Vice President, Human Resources Director, Global Human Resources Strategic Programs	April 2016 - Present 2010 - 2016

John J. Corkrean 54	Executive Vice President & Chief Financial Officer Senior Vice President, Finance - Global Energy Services, NALCO Champion, an Ecolab Inc. company (supplier of chemicals and related services to the oil and gas industry)	May 2016 - Present 2014 - 2016
Traci L. Jensen 53	Vice President, Global Business Process Improvement Senior Vice President, Global Construction Adhesives Senior Vice President, Americas Adhesives	December 2019 - Present July 2016 - December 2019 January 2013 - July 2016
Timothy J. Keenan 62	Vice President, General Counsel and Corporate Secretary	December 2006 - Present
M. Shahbaz Malik 52	Senior Vice President, Global Construction Adhesives Vice President and Business Leader, North America Distribution, Masonite International Corporation (global residential doors business) Senior Vice President, Sales, Marketing and Supply Chain, Continental Building Products, Inc. (North America manufacturer of wallboard and joint compound materials)	December 2019 - Present 2018 - 2019 2014 - 2018
Andrew E. Tometich . 53	Executive Vice President, Hygiene, Health and Consumable Adhesives Senior Vice President, Specialty Materials, Corning Incorporated (global company specializing in specialty glass, ceramics, and related materials and technologies) President, Performance Silicones, The Dow Chemical Company (a global sustainable materials science company) Senior Vice President, Silicones, Dow Corning Corporation (joint venture between The Dow Chemical Company and Corning Incorporated)	September 2019 - Present 2017 - 2019 2016 - 2017 2014 - 2016

The Board of Directors elects the executive officers annually.

Available Information

For more information about us, visit our website at: www.hbfuller.com.

We file annual, quarterly and current reports, proxy statements and other information with the Securities and Exchange Commission ("SEC") via EDGAR. Our SEC filings are available free of charge to the public at our website as soon as reasonably practicable after they have been filed with or furnished to the SEC.

Item 1A. Risk Factors

As a global manufacturer of adhesives, sealants and other specialty chemical products, we operate in a business environment that is subject to various risks and uncertainties. Below are the most significant factors that could adversely affect our business, financial condition and results of operations.

Macroeconomic and Industry Risks

Uncertainties in foreign economic, political, regulatory and social conditions and fluctuations in foreign currency may adversely affect our results.

Approximately 55 percent, or \$1.6 billion, of our net revenue was generated outside the United States in 2019. International operations could be adversely affected by changes in economic, political, regulatory, and social conditions, especially in Brazil, Russia, China, the Middle East, including Turkey and Egypt, and other developing or emerging markets where we do business. An economic downturn in the businesses or geographic areas in which we sell our products could reduce demand for these products and result in a decrease in sales volume that could have a negative impact on our results of operations. Product demand often depends on end-use markets. Economic conditions that reduce consumer confidence or discretionary spending may reduce product demand. Challenging economic conditions may also impair the ability of our customers to pay for products they have purchased, and as a result, our reserves for doubtful accounts and write-offs of accounts receivable may increase. In addition, trade protection measures, anti-bribery and anti-corruption regulations, restrictions on repatriation of earnings, differing intellectual property rights and changes in legal and regulatory requirements that restrict the sales of products or increase costs could adversely affect our results of operations.

Fluctuations in exchange rates between the U.S. dollar and other currencies could potentially result in increases or decreases in net revenue, cost of raw materials and earnings and may adversely affect the value of our assets outside the United States. In 2019, the change in foreign currencies negatively impacted our net revenue by approximately \$100.0 million. In 2019, we spent approximately \$1.5 billion for raw materials worldwide of which approximately \$807.4 million was purchased outside the United States. Based on 2019 financial results, a hypothetical one percent change in our cost of sales due to foreign currency rate changes would have resulted in a change in net income of approximately \$8.1 million or \$0.16 per diluted share. Although we utilize risk management tools, including hedging, as appropriate, to mitigate market fluctuations in foreign currencies, any changes in strategy in regard to risk management tools can also affect revenue, expenses and results of operations and there can be no assurance that such measures will result in cost savings or that all market fluctuation exposure will be eliminated.

Distressed financial markets may result in dramatic deflation of financial asset valuations and a general disruption in capital markets.

Adverse equity market conditions and volatility in the credit markets could have a negative impact on the value of our pension trust assets, our future estimated pension liabilities and other postretirement benefit plans. In addition, we could be required to provide increased pension plan funding. As a result, our financial results could be negatively impacted. Reduced access to capital markets may affect our ability to invest in strategic growth initiatives such as acquisitions. In addition, the reduced credit availability could limit our customers' ability to invest in their businesses, refinance maturing debt obligations, or meet their ongoing working capital needs. If these customers do not have sufficient access to the financial markets, demand for our products may decline.

The interest rates of our term loans are priced using a spread over LIBOR.

LIBOR, the London interbank offered rate, is the basic rate of interest used in lending between banks on the London interbank market and is widely used as a reference for setting the interest rate on loans globally. We typically use LIBOR as a reference rate in our term loan, credit facilities and derivative agreements such that the interest due to our creditors pursuant to a term loan extended to us is calculated using LIBOR. Most of our financial obligation agreements contain a stated minimum value for LIBOR.

On July 27, 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. The Alternative Reference Rates Committee, a steering committee comprised of large U.S. financial institutions convened by the U.S. Federal Reserve, has recommended the Secured Overnight Financing Rate ("SOFR") as a more robust reference rate alternative to U.S. dollar LIBOR. SOFR is calculated based on short-term repurchase agreements, backed by Treasury securities. SOFR is observed and backward looking, which stands in contrast with LIBOR under the current methodology, which is an estimated forward-looking rate and relies, to some degree, on the expert judgment of submitting panel members. Given that SOFR is a secured rate backed by government securities, it will be a rate that does not take into account bank credit risk (as is the case with LIBOR). SOFR is therefore likely to be lower than LIBOR and is less likely to correlate with the funding costs of financial institutions. Whether or not SOFR attains market traction as a LIBOR replacement tool remains in question. As such, the future of LIBOR at this time is uncertain. In preparation for the potential phase out of LIBOR, we may need to renegotiate our financial obligations and derivative instruments that utilize LIBOR. However, these efforts may not be successful in mitigating the

legal and financial risk from changing the reference rate in our legacy agreements. Furthermore, the discontinuation of LIBOR may adversely impact our ability to manage and hedge exposures to fluctuations in interest rates using derivative instruments.

Operational Risks

Increases in prices and declines in the availability of raw materials could negatively impact our financial results.

In 2019, raw material costs made up approximately 75 percent of our cost of sales. Accordingly, changes in the cost of raw materials can significantly impact our earnings. Raw materials needed to manufacture products are obtained from a number of suppliers and many of the raw materials are petroleum and natural gas based derivatives. Under normal market conditions, these raw materials are generally available on the open market from a variety of producers. While alternate supplies of most key raw materials are available, supplier production outages may lead to strained supply-demand situations for certain raw materials. The substitution of key raw materials requires us to identify new supply sources, reformulate and re-test and may require seeking re-approval from our customers using those products. From time to time, the prices and availability of these raw materials may fluctuate, which could impair our ability to procure necessary materials, or increase the cost of manufacturing products. If the prices of raw materials increase in a short period of time, we may be unable to pass these increases on to our customers in a timely manner and could experience reductions to our profit margins. Based on 2019 financial results, a hypothetical one percent change in our raw material costs would have resulted in a change in net income of approximately \$11.5 million or \$0.22 per diluted share.

We experience substantial competition in each of the operating segments and geographic areas in which we operate.

Our wide variety of products are sold in numerous markets, each of which is highly competitive. Our competitive position in markets is, in part, subject to external factors. For example, supply and demand for certain of our products is driven by end-use markets and worldwide capacities which, in turn, impact demand for and pricing of our products. Many of our direct competitors are part of large multinational companies and may have more resources than we do. Any increase in competition may result in lost market share or reduced prices, which could result in reduced profit margins. This may impair the ability to grow or even to maintain current levels of revenues and earnings. While we have an extensive customer base, loss of certain top customers could adversely affect our financial condition and results of operations until such business is replaced, and no assurances can be made that we would be able to regain or replace any lost customers.

Failure to develop new products and protect our intellectual property could negatively impact our future performance and growth.

Ongoing innovation and product development are important factors in our competitiveness. Failure to create new products and generate new ideas could negatively impact our ability to grow and deliver strong financial results. We continually apply for and obtain U.S. and foreign patents to protect the results of our research for use in our operations and licensing. We are party to a number of patent licenses and other technology agreements. We rely on patents, confidentiality agreements and internal security measures to protect our intellectual property. Failure to protect this intellectual property could negatively affect our future performance and growth.

We may be required to record impairment charges on our goodwill or long-lived assets.

Weak demand may cause underutilization of our manufacturing capacity or elimination of product lines; contract terminations or customer shutdowns may force sale or abandonment of facilities and equipment; or other events associated with weak economic conditions or specific product or customer events may require us to record an impairment on tangible assets, such as facilities and equipment, as well as intangible assets, such as intellectual property or goodwill, which would have a negative impact on our financial results.

For the fiscal 2019 impairment test, our Flooring and EIMEA (Europe, India, Middle East and Africa) reporting units had headroom of 8 percent and 21 percent, respectively. The recoverability of goodwill is dependent upon the continued growth of cash flows from our business activities. If the economy or business environment falter and we are unable to achieve our assumed revenue growth rates or profit margin percentages, our projections used would need to be remeasured, which could impact the carrying value of our goodwill in one or more of our reporting units. Most significantly, for our Flooring and EIMEA reporting units, a decrease in the planned volume revenue growth would negatively impact the fair value of the reporting units and the calculation of excess carrying value.

Catastrophic events could disrupt our operations or the operations of our suppliers or customers, having a negative impact on our financial results.

Unexpected events, including natural disasters and severe weather events, fires or explosions at our facilities or those of our suppliers, acts of war or terrorism, supply disruptions or breaches of security of our information technology systems could increase the cost of doing business or otherwise harm our operations, our customers and our suppliers. Such events could reduce demand for our products or make it difficult or impossible for us to receive raw materials from suppliers and deliver products to our customers.

A failure in our information technology systems could negatively impact our business.

We rely on information technology to record and process transactions, manage our business and maintain the financial accuracy of our records. Our computer systems are subject to damage or interruption from various sources, including power outages, computer and telecommunications failures, computer viruses, security breaches, vandalism, catastrophic events and human error. Interruptions of our computer systems could disrupt our business, for example by leading to plant downtime and/or power outages, and could result in the loss of business and cause us to incur additional expense.

Information technology security threats are increasing in frequency and sophistication. Our information technology systems could be breached by unauthorized outside parties or misused by employees or other insiders intent on extracting sensitive information, corrupting information or disrupting business processes. Such unauthorized access and a failure to effectively recover from breaches could compromise confidential information, disrupt our business, harm our reputation, result in the loss of assets including trade secrets and other intellectual property, customer confidence and business, result in regulatory proceedings and legal claims, and have a negative impact on our financial results.

We are in the process of implementing a global Enterprise Resource Planning ("ERP") system that we refer to as Project ONE, which will upgrade and standardize our information system. The North America adhesives business went live in 2014. In 2017, we began the implementation and upgrade of our ERP system in our Latin America adhesives business and implementation for all countries, with the exception of Brazil, was completed as of the end of 2018. During 2019, other entities in our North America adhesives business went live and in 2020 and beyond, we will continue implementation in North America, EIMEA and Asia Pacific.

Any delays or other failure to achieve our implementation goals may adversely impact our financial results. In addition, the failure to either deliver the application on time or anticipate the necessary readiness and training needs could lead to business disruption and loss of business. Failure or abandonment of any part of the ERP system could result in a write-off of part or all of the costs that have been capitalized on the project.

Risks Related to Acquisitions

Risks associated with acquisitions could have an adverse effect on us and the inability to execute organizational restructuring may affect our results.

As part of our growth strategy, we have made and intend to pursue additional acquisitions of complementary businesses or products and joint ventures. The ability to grow through acquisitions or joint ventures depends upon our ability to identify, negotiate, complete and integrate suitable acquisitions or joint venture arrangements. If we fail to successfully integrate acquisitions into our existing business, our results of operations and our cash flows could be adversely affected. Our acquisition strategy also involves other risks and uncertainties, including distraction of management from current operations, greater than expected liabilities and expenses, inadequate return on capital, unidentified issues not discovered in our investigations and evaluations of those strategies and acquisitions and difficulties implementing and maintaining consistent standards, controls, procedures, policies and systems. Future acquisitions could result in debt, dilution, liabilities, increased interest expense, restructuring charges and amortization expenses related to intangible assets.

In addition, our profitability is dependent on our ability to drive sustainable productivity improvements such as cost savings through organizational restructuring. Delays or unexpected costs may prevent us from realizing the full operational and financial benefits of such restructuring initiatives and may potentially disrupt our operations.

We may not realize the revenue growth opportunities and cost synergies that are anticipated from the Royal Adhesives acquisition as we may experience difficulties in integrating Royal Adhesives' business with ours.

The benefits that are expected to result from the Royal Adhesives acquisition will depend, in part, on our ability to realize the anticipated revenue growth opportunities and cost synergies as a result of the acquisition. Our success in realizing these revenue growth opportunities and cost synergies, and the timing of this realization, depends on the successful integration of Royal Adhesives. There is a significant degree of difficulty and management distraction inherent in the process of integrating an acquisition as sizable as Royal Adhesives. The process of integrating operations could cause an interruption of, or loss of momentum in, our Royal Adhesives' activities. Members of our senior management may be required to devote considerable amounts of time to this integration process, which will decrease the time they will have to manage our company, service existing customers, attract new customers and develop new products or strategies. If senior management is not able to effectively manage the integration process, or if any significant business activities are interrupted as a result of the integration process, our business could suffer. There can be no assurance that we will successfully or cost-effectively integrate Royal Adhesives. The failure to do so could have a material adverse effect on our business, financial condition or results of operations.

Even if we are able to integrate Royal Adhesives successfully, this integration may not result in the realization of the full benefits of the growth opportunities and cost synergies that we currently expect from this integration, and we cannot guarantee that these benefits will be achieved within anticipated timeframes or at all. For example, we may not be able to eliminate duplicative costs. Moreover, we may incur substantial expenses in connection with the integration of Royal Adhesives. While it is anticipated that certain expenses will be incurred to achieve cost synergies, such expenses are difficult to estimate accurately, and may exceed current estimates. Accordingly, the benefits from the acquisition may be offset by costs incurred to, or delays in, integrating the businesses.

The debt incurred in connection with the Royal Adhesives acquisition could have a negative impact on our liquidity or restrict our activities.

As a result of the Royal Adhesives acquisition, our outstanding indebtedness has significantly increased. Our current indebtedness contains various covenants that limit our ability to engage in specified types of transactions. Our overall leverage and the terms of our financing arrangements could:

- limit our ability to obtain additional financing in the future for working capital, capital expenditures and acquisitions;
- make it more difficult to satisfy our obligations under the terms of our indebtedness;
- limit our ability to refinance our indebtedness on terms acceptable to us or at all;
- limit our flexibility to plan for and adjust to changing business and market conditions in the industries in which we operate and increase our vulnerability to general adverse economic and industry conditions;
- require us to dedicate a substantial portion of our cash flow to make interest and principal payments on our debt, thereby limiting the availability of our cash flow to fund future acquisitions, working capital, business activities, and other general corporate requirements;
- limit our ability to obtain additional financing for working capital, to fund growth or for general corporate purposes, even when necessary to maintain adequate liquidity, particularly if any ratings assigned to our debt securities by rating organizations were revised downward; and
- subject us to higher levels of indebtedness than our competitors, which may cause a competitive disadvantage and may reduce our flexibility in responding to increased competition.

In addition, the restrictive covenants require us to maintain specified financial ratios and satisfy other financial condition tests. Our ability to meet those financial ratios and tests will depend on our ongoing financial and operating performance, which, in turn, will be subject to economic conditions and to financial, market and competitive factors, many of which are beyond our control. A breach of any of these covenants could result in a default under the instruments governing our indebtedness.

Legal and Regulatory Risks

The impact of changing laws or regulations or the manner of interpretation or enforcement of existing laws or regulations could adversely impact our financial performance and restrict our ability to operate our business or execute our strategies.

New laws or regulations, or changes in existing laws or regulations or the manner of their interpretation or enforcement, could increase our cost of doing business and restrict our ability to operate our business or execute our strategies. In addition, compliance with laws and regulations is complicated by our substantial global footprint, which will require significant and

additional resources to ensure compliance with applicable laws and regulations in the various countries where we conduct business.

Our global operations expose us to trade and economic sanctions and other restrictions imposed by the U.S., the EU and other governments and organizations. The U.S. Departments of Justice, Commerce, State and Treasury and other federal agencies and authorities have a broad range of civil and criminal penalties they may seek to impose against corporations and individuals for violations of economic sanctions laws, export control laws, the Foreign Corrupt Practices Act (the "FCPA") and other federal statutes and regulations, including those established by OFAC. Under these laws and regulations, as well as other anti-corruption laws, anti-money laundering laws, export control laws, customs laws, sanctions laws and other laws governing our operations, various government agencies may require export licenses, may seek to impose modifications to business practices, including cessation of business activities in sanctioned countries or with sanctioned persons or entities and modifications to compliance programs, which may increase compliance costs, and may subject us to fines, penalties and other sanctions. A violation of these laws, regulations, policies or procedures could adversely impact our business, results of operations and financial condition.

Although we have implemented policies and procedures in these areas, we cannot assure you that our policies and procedures are sufficient or that directors, officers, employees, representatives, manufacturers, suppliers and agents have not engaged and will not engage in conduct in violation of such policies and procedures.

We have lawsuits and claims against us with uncertain outcomes.

Our operations from time to time are parties to or targets of lawsuits, claims, investigations and proceedings, including product liability, personal injury, asbestos, patent and intellectual property, commercial, contract, environmental, antitrust, health and safety, and employment matters, which are handled and defended in the ordinary course of business. The results of any future litigation or settlement of such lawsuits and claims are inherently unpredictable, but such outcomes could be adverse and material in amount. See Item 3. Legal Proceedings for a discussion of current litigation.

Costs and expenses resulting from compliance with environmental laws and regulations may negatively impact our operations and financial results.

We are subject to numerous environmental laws and regulations that impose various environmental controls on us or otherwise relate to environmental protection, the sale and export of certain chemicals or hazardous materials, and various health and safety matters. The costs of complying with these laws and regulations can be significant and may increase as applicable requirements and their enforcement become more stringent and new rules are implemented. Adverse developments and/or periodic settlements could negatively impact our results of operations and cash flows. See Item 3. Legal Proceedings for a discussion of current environmental matters.

Additional income tax expense or exposure to additional income tax liabilities could have a negative impact on our financial results.

We are subject to income tax laws and regulations in the United States and various foreign jurisdictions. Significant judgment is required in evaluating and estimating our provision and accruals for these taxes. Our income tax liabilities are dependent upon the location of earnings among these different jurisdictions. Our income tax provision and income tax liabilities could be adversely affected by the jurisdictional mix of earnings, changes in valuation of deferred tax assets and liabilities and changes in tax laws and regulations. In the ordinary course of our business, we are also subject to continuous examinations of our income tax returns by tax authorities. Although we believe our tax estimates are reasonable, the final results of any tax examination or related litigation could be materially different from our related historical income tax provisions and accruals. Adverse developments in an audit, examination or litigation related to previously filed tax returns, or in the relevant jurisdiction's tax laws, regulations, administrative practices, principles and interpretations could have a material effect on our results of operations and cash flows in the period or periods for which that development occurs, as well as for prior and subsequent periods.

Income tax law changes could have unforeseen effects on our financial condition and results of operations.

On December 22, 2017, the President of the United States signed into law H.R. 1, originally known as the "Tax Cuts and Jobs Act", hereafter referred to as "U.S. Tax Reform". Since the passing of U.S. Tax Reform, additional guidance in the form of notices and proposed regulations which interpret various aspects of U.S. Tax Reform have been issued. As of the filing of this document, additional guidance is expected. Changes could be made to the proposed regulations as they become finalized, future legislation could be enacted, more regulations and notices could be issued, all of which may impact our financial results. We will continue to monitor all of these changes and will reflect the impact as appropriate in future financial

statements. Many state and local tax jurisdictions are still determining how they will interpret elements of U.S. Tax Reform. Final state and local governments' conformity, legislation and guidance relating to U.S. Tax Reform may impact our financial results.

In general, foreign tax changes could have an impact on our deferred taxes, as well as, the Company's tax expense. We continue to monitor such reform and record any such impact in the appropriate period.

Item 1B. Unresolved Staff Comments

None.

Item 2. Properties

Principal executive offices and central research facilities are located in the St. Paul, Minnesota area. These facilities are company-owned and contain 247,630 square feet. Manufacturing operations are carried out at 34 plants located throughout the United States and at 36 plants located in 21 other countries. In addition, numerous sales and service offices are located throughout the world. We believe that the properties owned or leased are suitable and adequate for our business. Operating capacity varies by product line, but additional production capacity is available for most product lines by increasing the number of shifts worked. The following is a list of our manufacturing plants as of November 30, 2019 (each of the listed properties are owned by us, unless otherwise specified):

Segment	Manufacturing Sq Ft	Segment	Manufacturing Sq Ft
Americas Adhesives		EIMEA	
California - Roseville	82,202	Egypt - 6th of October City	8,525
Georgia - Covington	73,500	France - Blois	48,438
- Tucker	69,000	- Surbourg	21,743
Illinois - Seneca	24,621	Germany - Lueneburg	64,249
- Elgin - River Ridge ¹	35,239	- Nienburg	139,248
- Elgin - Executive	30,000	- Langelsheim ¹	123,353
- Huntley ²	29,000	- Pirmasens	81,278
Indiana - South Bend	128,218	Greece - Lamia	11,560
Kentucky - Paducah	252,500	India - Pune	38,782
Ohio - Blue Ash	102,000	Italy - Pianezze	36,500
Michigan - Grand Rapids	65,689	Portugal - Mindelo	90,193
Minnesota - Fridley ¹	15,850	Kenya - Nairobi ¹	5,262
- Vadnais Heights	53,145	United Kingdom - Dukinfield	
New Jersey - Wayne ¹	16,000	EIMEA Total	686,596
	· ·	ETIVIEA TOTAL	000,370
New York - Syracuse ¹	23,000	4 · D · e	
South Carolina - Simpsonville	23,722	Asia Pacific	12.510
Texas - Mesquite	25,000	Australia - Dandenong South	43,540
Washington - Vancouver	35,768		12,968
Argentina - Buenos Aires	10,367	People's Republic of China - Guangzhou	36,055
Brazil - Sorocaba ²	7,535	- Nanjing	55,224
- Curitiba ¹	9,896	- Nanjing ¹	62,430
- Guarulhos	32,292	Indonesia - Mojokerto	52,991
Chile - Maipu, Santiago	46,732	Malaysia - Selongor	21,900
Colombia - Rionegro	17,072	New Zealand - Auckland ¹	7,330
Americas Adhesives Total	1,208,348	Philippines - Manila	9,295
		Vietnam - Binh Duong ¹	26,156
Construction Adhesives		Asia Pacific Total	327,889
California - La Mirada	15,206		
Canada - Ontario ¹	63,020	Engineering Adhesives	
- Toronto ¹	25,172	California - Irvine ¹	15,120
Florida - Gainesville	6,800	- Wilmington ¹	26,373
Georgia - Dalton	25,800	People's Republic of China - Beijing	78,120
Illinois - Aurora	149,000	- Beijing ¹	42,044
Michigan - Michigan Center	115,000	- Suzhou	73,622
New Jersey - Edison	9,780	- Yantai	23,890
Ohio - Chagrin Falls	16,500	Germany - Wunstorf	16,146
Texas - Houston	11,000	Georgia - Norcross ¹	12,398
- Mansfield	28,790	- Ball Ground ¹	4,800
Construction Adhesives Total	466,068	Illinois - Frankfort - Corsair	12,500
	100,000	- Frankfort - West Drive	17,000
1 Leased Property		Massachusetts - Peabody ¹	40,000
1 2		New Hampshire - Raymond ¹	12,950
2 Idle Property		United Kingdom - Preston ¹	
		Engineering Adhesives Total	408,963

Item 3. Legal Proceedings

Environmental Matters

From time to time, we become aware of compliance matters relating to, or receive notices from, federal, state or local entities regarding possible or alleged violations of environmental, health or safety laws and regulations. We review the circumstances of each individual site, considering the number of parties involved, the level of potential liability or our contribution relative to the other parties, the nature and magnitude of the hazardous substances involved, the method and extent of remediation, the estimated legal and consulting expense with respect to each site and the time period over which any costs would likely be incurred. Also, from time to time, we are identified as a potentially responsible party ("PRP") under the Comprehensive Environmental Response, Compensation and Liability Act ("CERCLA") and/or similar state laws that impose liability for costs relating to the clean up of contamination resulting from past spills, disposal or other release of hazardous substances. We are also subject to similar laws in some of the countries where current and former facilities are located. Our environmental, health and safety department monitors compliance with applicable laws on a global basis. To the extent we can reasonably estimate the amount of our probable liabilities for environmental matters, we establish a financial provision.

Currently, we are involved in various environmental investigations, clean up activities and administrative proceedings and lawsuits. In particular, we are currently deemed a PRP in conjunction with numerous other parties, in a number of government enforcement actions associated with landfills and/or hazardous waste sites. As a PRP, we may be required to pay a share of the costs of investigation and clean up of these sites.

We are engaged in environmental remediation and monitoring efforts at a number of current and former operating facilities. As of November 30, 2019, we accrued \$8.5 million, which represents our best estimate of probable liabilities with respect to environmental matters. Of the amount accrued, \$4.1 million is attributable to a facility we own in Simpsonville, South Carolina as a result of our Royal Adhesives acquisition that is a designated site under CERCLA. It is reasonably possible that we may have additional liabilities related to these known environmental matters. However, the full extent of our future liability for environmental matters is difficult to predict because of uncertainty as to the cost of investigation and clean up of the sites, our responsibility for such hazardous substances and the number of and financial condition of other potentially responsible parties.

While uncertainties exist with respect to the amounts and timing of the ultimate environmental liabilities, based on currently available information, we have concluded that these matters, individually or in the aggregate, will not have a material adverse effect on our results of operations, financial condition or cash flow. However, adverse developments and/or periodic settlements could negatively impact the results of operations or cash flows in one or more future periods.

Other Legal Proceedings

From time to time and in the ordinary course of business, we are a party to, or a target of, lawsuits, claims, investigations and proceedings, including product liability, personal injury, contract, patent and intellectual property, environmental, health and safety, tax and employment matters. While we are unable to predict the outcome of these matters, we have concluded, based upon currently available information, that the ultimate resolution of any pending matter, individually or in the aggregate, including the asbestos litigation described in the following paragraphs, will not have a material adverse effect on our results of operations, financial condition or cash flow.

We have been named as a defendant in lawsuits in which plaintiffs have alleged injury due to products containing asbestos manufactured more than 30 years ago. The plaintiffs generally bring these lawsuits against multiple defendants and seek damages (both actual and punitive) in very large amounts. In many cases, plaintiffs are unable to demonstrate that they have suffered any compensable injuries or that the injuries suffered were the result of exposure to products manufactured by us. We are typically dismissed as a defendant in such cases without payment. If the plaintiff presents evidence indicating that compensable injury occurred as a result of exposure to our products, the case is generally settled for an amount that reflects the seriousness of the injury, the length, intensity and character of exposure to products containing asbestos, the number and solvency of other defendants in the case, and the jurisdiction in which the case has been brought.

A significant portion of the defense costs and settlements in asbestos-related litigation is paid by third parties, including indemnification pursuant to the provisions of a 1976 agreement under which we acquired a business from a third party. Currently, this third party is defending and paying settlement amounts, under a reservation of rights, in most of the asbestos cases tendered to the third party.

In addition to the indemnification arrangements with third parties, we have insurance policies that generally provide coverage for asbestos liabilities (including defense costs). Historically, insurers have paid a significant portion of our defense costs and settlements in asbestos-related litigation. However, certain of our insurers are insolvent. We have entered into cost-sharing agreements with our insurers that provide for the allocation of defense costs and settlements and judgments in asbestos-related lawsuits. These agreements require, among other things, that we fund a share of settlements and judgments allocable to years in which the responsible insurer is insolvent.

A summary of the number of and settlement amounts for asbestos-related lawsuits and claims is as follows:

(\$ in millions)	Year Ended November 30, 2019	 ear Ended ecember 1, 2018	Year Ended December 2, 2017		
Lawsuits and claims settled	8	 7		9	
Settlement amounts	\$ 0.4	\$ 0.4	\$	1.7	
Insurance payments received or expected to be received	\$ 0.3	\$ 0.3	\$	1.4	

We do not believe that it would be meaningful to disclose the aggregate number of asbestos-related lawsuits filed against us because relatively few of these lawsuits are known to involve exposure to asbestos-containing products that we manufactured. Rather, we believe it is more meaningful to disclose the number of lawsuits that are settled and result in a payment to the plaintiff. To the extent we can reasonably estimate the amount of our probable liabilities for pending asbestos-related claims, we establish a financial provision and a corresponding receivable for insurance recoveries.

Based on currently available information, we have concluded that the resolution of any pending matter, including asbestos-related litigation, individually or in the aggregate, will not have a material adverse effect on our results of operations, financial condition or cash flow. However, adverse developments and/or periodic settlements could negatively impact the results of operations or cash flows in one or more future periods.

During 2018, we retained legal counsel to conduct an internal investigation of the possible resale of our hygiene products into Iran by certain customers of our subsidiaries in Turkey (beginning in 2011) and India (beginning in 2014), in possible violation of the economic sanctions against Iran administered by OFAC and our compliance policy. The sales to these customers represented less than one percent of our net revenue in each of our 2017 and 2018 fiscal years. The sales to the customers who were reselling our products into Iran ceased during fiscal year 2018 and we do not currently conduct any business in Iran. In January 2018, we voluntarily contacted OFAC to advise it of this internal investigation and our intention to cooperate fully with OFAC and, in September 2018, we submitted the results and findings of our investigation to OFAC. We have not yet received a response from OFAC. At this time, we cannot predict the outcome or effect of the investigation, however, based on the results of our investigation to date, we believe we could incur penalties ranging from zero to \$10.0 million.

Item 4. Mine Safety Disclosures

Not applicable.

Item 5. Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities

Our common stock is traded on the New York Stock Exchange under the symbol FUL. As of January 20, 2020, there were 1,420 common shareholders of record for our common stock.

(d)

Issuer Purchases of Equity Securities

Information on our purchases of equity securities during the fourth quarter of 2019 is as follows:

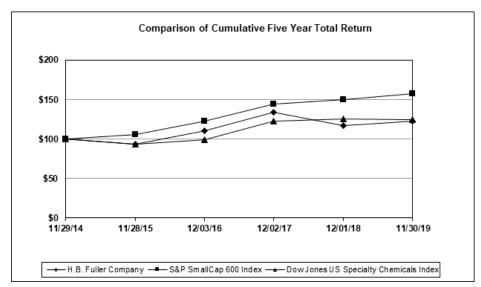
Period	(a) Total Number of Shares Purchased ¹	(b) Average Price Paid per Share	(c) Total Number of Shares Purchased as Part of a Publicly Announced Plan or Program	D Sh U	Maximum Approximate Dollar Value of Shares that may yet be Purchased Under the Plan or Program (thousands)		
September 1, 2019 - October 5, 2019	105	\$	45.80	-	\$	187,170	
October 6, 2019 - November 2, 2019	2,085	\$	47.82	-	\$	187,170	
November 3, 2019 - November 30, 2019.	_	\$	-	-	\$	187,170	

¹ The total number of shares purchased include shares withheld to satisfy employees' withholding taxes upon vesting of restricted stock.

On April 6, 2017, the Board of Directors authorized a new share repurchase program of up to \$200.0 million of our outstanding common shares. Under the program, we are authorized to repurchase shares for cash on the open market, from time to time, in privately negotiated transactions or block transactions, or through an accelerated repurchase agreement. The timing of such repurchases is dependent on price, market conditions and applicable regulatory requirements. Upon repurchase of the shares, we reduced our common stock for the par value of the shares with the excess being applied against additional paid in capital. This authorization replaces the September 30, 2010 authorization to repurchase shares.

Total Shareholder Return Graph

The line graph below compares the cumulative total shareholder return on our common stock for the last five fiscal years with cumulative total return on the S&P Small Cap 600 Index and Dow Jones U.S. Specialty Chemicals Index. This graph assumes a \$100 investment in each of H.B. Fuller, the S&P Small Cap 600 Index and the Dow Jones U.S. Specialty Chemicals Index at the close of trading on November 29, 2014, and also assumes the reinvestment of all dividends.



Item 6. Selected Financial Data

The table that follows presents selected financial data for each of the last five years from the Company's consolidated financial statements and should be read in conjunction with the Company's Consolidated Financial Statements and the related Notes and with Management's Discussion and Analysis of Financial Condition and Results of Operations included elsewhere in this Annual Report on Form 10-K. The selected financial data set forth below as of November 30, 2019 and December 1, 2018 and for the years ended November 30, 2019, December 1, 2018 and December 2, 2017 are derived from our audited financial statements included in this Annual Report on Form 10-K. All other selected financial data set forth below is derived from our audited financial statements not included in this Annual Report on Form 10-K.

(Dollars in thousands, except per share amounts)	Fiscal Years									
,	- 2	2019		2018		2017 4		2016 ^{2,4}		2015 ^{3,4}
Net revenue	\$ 2 ,	897,000	\$	3,041,002	\$	2,306,043	\$	2,094,605	\$	2,083,660
Net income including non-controlling interests ¹ . Percent of net revenue Total assets Long-term debt, excluding current maturities Total H.B. Fuller stockholders' equity	\$ 3, \$ 1,	130,844 4.5 985,734 898,384 222,347	\$	171,232 5.6 4,176,314 2,141,532 1,151,767	\$	59,466 2.6 4,373,243 2,398,927 1,051,424	\$ \$ \$	121,917 5.8 2,066,565 585,759 944,497	\$ \$ \$	84,287 4.0 2,056,930 669,606 882,006
Per Common Share:										
Basic Diluted		2.57 2.52	\$ \$	3.38 3.29	\$ \$	1.18 1.15	\$ \$	2.43 2.37	\$ \$	1.68 1.64
Dividends declared and paid		0.635 23.85	\$ \$	0.615 22.70	\$ \$	0.590 20.85	\$ \$	0.550 18.84	\$ \$	0.510 17.61
Number of employees		6,369		6,479		5,965		4,587		4,425

¹ 2016 and 2015 include after-tax charges of \$(0.2) million and \$4.7 million, respectively, related to special charges, net.

² 2016 contained 53 weeks.

³ Amounts have been adjusted retroactively for discontinued operations.

⁴ Amounts have been adjusted retrospectively for the change in accounting principle as discussed in Item 7.

⁵ Book value is calculated by dividing total H.B. Fuller stockholders' equity by the number of common stock shares outstanding as of our fiscal year end.

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations

Overview

H.B. Fuller Company is a global formulator, manufacturer and marketer of adhesives and other specialty chemical products. We have five reportable segments: Americas Adhesives, EIMEA, Asia Pacific, Construction Adhesives and Engineering Adhesives.

The Americas Adhesives, EIMEA and Asia Pacific operating segments manufacture and supply adhesives products in the assembly, packaging, converting, nonwoven and hygiene, performance wood, insulating glass, flooring, textile, flexible packaging, graphic arts and envelope markets. The Construction Adhesives operating segment provides floor preparation, grouts and mortars for tile setting, and adhesives for soft flooring, and pressure-sensitive adhesives, tapes and sealants for the commercial roofing industry as well as sealants and related products for heating, ventilation and air conditioning installations. The Engineering Adhesives operating segment provides high-performance adhesives to the transportation, electronics, medical, clean energy, aerospace and defense, appliance and heavy machinery markets.

Total Company

When reviewing our financial statements, it is important to understand how certain external factors impact us. These factors include:

- Changes in the prices of our raw materials that are primarily derived from refining crude oil and natural gas,
- Global supply of and demand for raw materials,
- Economic growth rates, and
- Currency exchange rates compared to the U.S. dollar

We purchase thousands of raw materials, the majority of which are petroleum/natural gas derivatives. The price of these derivatives impacts the cost of our raw materials. However, the supply of and demand for key raw materials has a greater impact on our costs. As demand increases in high-growth areas, the supply of key raw materials may tighten, resulting in certain materials being put on allocation. Natural disasters, such as hurricanes, also can have an impact as key raw material producers are shut down for extended periods of time. We continually monitor capacity utilization figures, market supply and demand conditions, feedstock costs and inventory levels, as well as derivative and intermediate prices, which affect our raw materials. With approximately 75 percent of our cost of sales accounted for by raw materials, our financial results are extremely sensitive to changing costs in this area.

The pace of economic growth directly impacts certain industries to which we supply products. For example, adhesives-related revenues from durable goods customers in areas such as appliances, furniture and other woodworking applications tend to fluctuate with the overall economic activity. In business components such as Construction Adhesives and insulating glass, revenues tend to move with more specific economic indicators such as housing starts and other construction-related activity.

The movement of foreign currency exchange rates as compared to the U.S. dollar impacts the translation of the foreign entities' financial statements into U.S. dollars. As foreign currencies weaken against the U.S. dollar, our revenues and costs decrease as the foreign currency-denominated financial statements translate into fewer U.S. dollars. The fluctuations of the Euro and the Chinese renminbi against the U.S. dollar have the largest impact on our financial results as compared to all other currencies. In 2019, currency fluctuations had a negative impact on net revenue of approximately \$100.0 million as compared to 2018.

Key financial results and transactions for 2019 included the following:

- Net revenue decreased 4.7 percent from 2018 primarily driven by a 3.3 percent decrease due to currency fluctuations, a 2.1 percent decrease in sales volume and a 0.3 percent decrease due to the divestiture of our surfactants and thickeners business. Negative drivers of growth were partially offset by a 1.0 percent increase in product pricing.
- Gross profit margin increased to 27.9 percent from 27.2 percent in 2018 primarily due to favorable product pricing and lower raw material costs. Positive drivers of growth were partially offset by lower sales volumes.

• Cash flow generated by operating activities was \$269.2 million in 2019 as compared to \$253.3 million in 2018 and \$166.3 million in 2017.

Our total year organic sales growth, which we define as the combined variances from sales volume and product pricing, decreased 1.1 percent for 2019 compared to 2018.

In 2019, our diluted earnings per share was \$ 2.52 compared to \$3.29 in 2018 and \$1.15 in 2017. The lower earnings per share in 2019 compared to 2018 was due to lower net revenue and higher income tax expense, which were partially offset by lower operating costs and the gain on the sale of our surfactants and thickeners business. The higher earnings per share in 2018 compared to 2017 was due to higher net revenue, lower transaction costs related to acquisitions, and one time discrete items related to U.S. Tax Reform, which were partially offset by higher operating expenses mainly due to the impact of acquired businesses and higher interest expense due to higher U.S. debt balances at higher interest rates from the issuance of new debt in 2017.

Changes in Accounting Principles

In the fourth quarter of 2018, we elected to change our method of accounting for certain inventories in the United States within the Company's Americas Adhesives and Construction Adhesives segments from the last-in, first-out method ("LIFO") to weighted-average cost. We have retrospectively adjusted the Consolidated Financial Statements as of and for the year ended December 2, 2017 to reflect this change.

In the first quarter of 2019, we adopted a new accounting standard related to revenue recognition which requires us to recognize the amount of revenue to which we expect to be entitled for the transfer of promised goods or services to customers. Prior periods were not restated for this adoption.

In the first quarter of 2019, we also adopted a new accounting standard related to the classification of pension expense which requires us to include only the service component of pension expense in operating expenses with the other components included in non-operating expenses. We have retrospectively adjusted the Consolidated Statements of Income for the years ended December 1, 2018 and December 2, 2017 to reflect this change.

Project ONE

In December 2012, our Board of Directors approved a multi-year project to replace and enhance our existing core information technology platforms. The scope for this project includes most of the basic transaction processing for the company including customer orders, procurement, manufacturing, and financial reporting. The project envisions harmonized business processes for all of our operating segments supported with one standard software configuration. The execution of this project, which we refer to as Project ONE, is being supported by internal resources and consulting services. The North America adhesives business went live in 2014. In 2017, we began the Project ONE implementation and upgrade of our ERP system in our Latin America adhesives business and, with the exception of Brazil, was completed as of the end of 2018. During 2019, other entities in our North America adhesives business went live and in 2020 and beyond, we will continue implementation in North America, EIMEA and Asia Pacific.

Total expenditures for Project ONE are estimated to be \$195 to \$210 million, of which 50-55% is expected to be capital expenditures. Our total project-to-date expenditures are approximately \$79 million, of which approximately \$41 million are capital expenditures. Given the complexity of the implementation, the total investment to complete the project may exceed our estimate.

Restructuring Plans

2020 Restructuring Plan

During the fourth quarter of 2019, we approved a restructuring plan related to organizational changes and other actions to optimize operations in connection with the realignment of the Company into three global business units ("2020 Restructuring Plan"). In implementing the 2020 Restructuring Plan, we expect to incur costs of approximately \$9.0 million to \$11.0 million (\$7.1 million to \$8.7 million after-tax), which includes (i) cash expenditures of approximately \$6.0 million to \$8.0 million (\$4.8 million to \$6.4 million after tax) for severance and related employee costs globally and (ii) \$3.0 million (\$2.3 million after-tax) related to streamlining of processes and other restructuring-related costs. All restructuring costs are expected to be cash costs. For the year ending November 30, 2019, we incurred costs of \$10.1 million under this plan. The 2020 Restructuring Plan was implemented in the fourth quarter of 2019 and is currently expected to be completed by mid-year of fiscal year 2021.

Royal Adhesives Restructuring Plan

During the first quarter of 2018, we approved a restructuring plan consisting of consolidation plans, organizational changes and other actions related to the integration of the operations of Royal Adhesives with the operations of the Company (the "Royal Adhesives Restructuring Plan"). In implementing the Royal Adhesives Restructuring Plan, we have incurred costs of approximately \$10.4 million, which includes (i) cash expenditures of approximately \$6.2 million for severance and related employee costs globally and (ii) other costs of approximately \$4.2 million related to the optimization of production facilities, streamlining of processes and accelerated depreciation of long-lived assets. Approximately \$7.9 million of the costs were cash costs. The Royal Adhesives Restructuring Plan was implemented in the first quarter of 2018 and is substantially complete.

Critical Accounting Policies and Significant Estimates

Management's discussion and analysis of our results of operations and financial condition are based upon the Consolidated Financial Statements, which have been prepared in accordance with accounting principles generally accepted in the United States of America. The preparation of these financial statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expenses and related disclosure of contingent assets and liabilities. We believe the critical accounting policies and areas that require the most significant judgments and estimates to be used in the preparation of the Consolidated Financial Statements relate to pension and other postretirement plans; goodwill impairment; long-lived assets recoverability; valuation of product, environmental and other litigation liabilities; valuation of deferred tax assets and accuracy of tax contingencies; and valuation of acquired assets and liabilities.

Pension and Other Postretirement Plan Assumptions

We sponsor defined-benefit pension plans in both the U.S. and non-U.S. entities. Also in the U.S., we sponsor other postretirement plans for health care and life insurance benefits. Expenses and liabilities for the pension plans and other postretirement plans are actuarially calculated. These calculations are based on our assumptions related to the discount rate, expected return on assets, projected salary increases and health care cost trend rates. Note 11 to the Consolidated Financial Statements includes disclosure of assumptions employed in these measurements for both the non-U.S. and U.S. plans.

The discount rate assumption is determined using an actuarial yield curve approach, which results in a discount rate that reflects the characteristics of the plan. The approach identifies a broad population of corporate bonds that meet the quality and size criteria for the particular plan. We use this approach rather than a specific index that has a certain set of bonds that may or may not be representative of the characteristics of our particular plan. A higher discount rate reduces the present value of the pension obligations. The discount rate for the U.S. pension plan was 3.19 percent at November 30, 2019, as compared to 4.51 percent at December 1, 2018 and 3.73 percent at December 2, 2017. Net periodic pension cost for a given fiscal year is based on assumptions developed at the end of the previous fiscal year. A discount rate change of 0.5 percentage points at November 30, 2019 would impact U.S. pension and other postretirement plan (income) expense by approximately \$0.2 million (pre-tax) in fiscal 2020. Discount rates for non-U.S. plans are determined in a manner consistent with the U.S. plans.

The expected long-term rate of return on plan assets assumption for the U.S. pension plan was 7.50 percent in 2019 and 7.75 in 2018 and 2017. Our expected long-term rate of return on U.S. plan assets was based on our target asset allocation assumption of 60 percent equities and 40 percent fixed-income. Management, in conjunction with our external financial advisors, determines the expected long-term rate of return on plan assets by considering the expected future returns and volatility levels for each asset class that are based on historical returns and forward looking observations. For 2019, the expected long-term rate of return on the target equities allocation was 8.00 percent and the expected long-term rate of return on the target fixed-income allocation was 4.45 percent. The total plan rate of return assumption included an estimate of the effect of diversification and the plan expense. For 2020, the expected long-term rate of return on assets will be 7.50 percent with an expected long-term rate of return on the target equities allocation of 8.00 percent and an expected long-term rate of return on target fixed-income allocation of 4.45 percent. A change of 0.5 percentage points for the expected return on assets assumption would impact U.S. net pension and other postretirement plan expense by approximately \$2.4 million (pre-tax).

Management, in conjunction with our external financial advisors, uses the actual historical rates of return of the asset categories to assess the reasonableness of the expected long-term rate of return on plan assets. The most recent 10-year and 20-year historical equity returns are shown in the table below. Our expected rate of return on our total portfolio is consistent with the historical patterns observed over longer time frames.

U.S. Pension Plan Historical Actual Rates of Return	Total Portfolio	Equities	Fixed Income	
10-year period		9.0 % 8.6 %	9.3 % 8.3 %	7.9 % 8.2 %*

* Beginning in 2006, our target allocation migrated from 100 percent equities to our current allocation of 60 percent equities and 40 percent fixed-income. The historical actual rate of return for the fixed income of 8.2 percent is since inception (13 years, 11 months).

The expected long-term rate of return on plan assets assumption for non-U.S. pension plans was a weighted-average of 6.21 percent in 2019 compared to 6.20 percent in 2018 and 6.21 percent in 2017. The expected long-term rate of return on plan assets assumption used in each non-U.S. plan is determined on a plan-by-plan basis for each local jurisdiction and is based on expected future returns for the investment mix of assets currently in the portfolio for that plan. Management, in conjunction with our external financial advisors, develops expected rates of return for each plan, considers expected long-term returns for each asset category in the plan, reviews expectations for inflation for each local jurisdiction, and estimates the effect of active management of the plan's assets. Our largest non-U.S. pension plans are in the United Kingdom and Germany. The expected long-term rate of return on plan assets for the United Kingdom was 6.75 percent and the expected long-term rate of return on plan assets for Germany was 5.75 percent. Management, in conjunction with our external financial advisors, uses actual historical returns of the asset portfolio to assess the reasonableness of the expected rate of return for each plan.

The projected salary increase assumption is based on historic trends and comparisons to the external market. Higher rates of increase result in higher pension expenses. As this rate is also a long-term expected rate, it is less likely to change on an annual basis. In the U.S., we have used the rate of 4.50 percent for 2019, 2018 and 2017. Benefits under the U.S. Pension Plan were locked-in as of May 31, 2011 and no longer include compensation increases. The 4.50 percent rate is for the supplemental executive retirement plan only. Projected salary increase assumptions for non-U.S. plans are determined in a manner consistent with the U.S. plans.

Goodwill

Goodwill is the excess of cost of an acquired entity over the amounts assigned to assets acquired and liabilities assumed in a purchase business combination. Goodwill is allocated to our reporting units, which are our operating segments or one level below our operating segments (the component level). Reporting units are determined by the discrete financial information available for the component and whether it is regularly reviewed by segment management. Components are aggregated into a single reporting unit if they share similar economic characteristics. Our reporting units are as follows: Americas Adhesives, EIMEA, Asia Pacific, Flooring, Roofing, Specialty Construction, Engineering Adhesives and Tonsan.

We evaluate our goodwill for impairment annually during the fourth quarter or earlier upon the occurrence of substantive unfavorable changes in economic conditions, industry trends, costs, cash flows, or ongoing declines in market capitalization. The quantitative impairment test requires judgment, including the identification of reporting units, the assignment of assets, liabilities and goodwill to reporting units, and the determination of fair value of each reporting unit. The impairment test requires the comparison of the fair value of each reporting unit with its carrying amount, including goodwill. In performing the impairment test, we determined the fair value of our reporting units by using discounted cash flow ("DCF") analyses. Determining fair value requires the Company to make judgments about appropriate discount rates, perpetual growth rates and the amount and timing of expected future cash flows. The cash flows employed in the DCF analysis for each reporting unit are based on the reporting unit's budget, long-term business plan, and recent operating performance. Discount rate assumptions are based on an assessment of the risk inherent in the future cash flows of the respective reporting unit and market conditions. Given the inherent uncertainty in determining the assumptions underlying a DCF analysis, actual results may differ from those used in our valuations. In assessing the reasonableness of the determined fair values, we also reconciled the aggregate determined fair value of the Company to the Company's market capitalization, which, at the date of our 2019 impairment test, included a 33 percent control premium.

For the 2019 impairment test, the fair value of the reporting units exceeded the respective carrying values by 8 percent to 109 percent ("headroom"). Significant assumptions used in the DCF analysis included long-term growth rates and discount rates that ranged from 7.8 percent to 9.9 percent. An increase in the discount rate and decrease in the long-term growth rates of 0.5 percent would result in the fair value of Flooring falling below its carrying value by 6 percent. The fair value of the remaining reporting units would exceed their respective carrying values by 10 percent to 83 percent.

The Flooring and EIMEA reporting units had headroom of 8 percent and 21 percent, respectively. The remaining reporting units had significant fair value in excess of carrying value. As of November 30, 2019, the carrying values of goodwill assigned to the Flooring and EIMEA reporting units were \$73.9 million and \$151.6 million, respectively. Management will continue to monitor these reporting units for changes in the business environment that could impact recoverability. The recoverability of goodwill is dependent upon the continued growth of cash flows from our business activities. If the economy or business environment falter and we are unable to achieve our assumed revenue growth rates or profit margin percentages, our projections used would need to be remeasured, which could impact the carrying value of our goodwill in one or more of our reporting units. Most significantly, for our Flooring and EIMEA reporting units, a decrease in the planned volume revenue growth would negatively impact the fair value of the reporting units and the calculation of excess carrying value.

See Note 5 to the Consolidated Financial Statements for further information regarding goodwill.

Recoverability of Long-Lived Assets

The assessment of the recoverability of long-lived assets reflects our assumptions and estimates. Factors that we must estimate when performing impairment tests include sales volume, prices, inflation, currency exchange rates, tax rates and capital spending. Significant judgment is involved in estimating these factors, and they include inherent uncertainties. The measurement of the recoverability of these assets is dependent upon the accuracy of the assumptions used in making these estimates and how the estimates compare to the eventual future operating performance of the specific businesses to which the assets are attributed.

Judgments made by us include the expected useful lives of long-lived assets. The ability to realize undiscounted cash flows in excess of the carrying amounts of such assets is affected by factors such as the ongoing maintenance and improvement of the assets, changes in economic conditions and changes in operating performance.

Product, Environmental and Other Litigation Liabilities

As disclosed in Item 3. Legal Proceedings and in Note 1 and Note 15 to the Consolidated Financial Statements, we are subject to various claims, lawsuits and other legal proceedings. Reserves for loss contingencies associated with these matters are established when it is determined that a liability is probable and the amount can be reasonably estimated. The assessment of the probable liabilities is based on the facts and circumstances known at the time that the financial statements are being prepared. For cases in which it is determined that a liability is probable but only a range for the potential loss exists, the minimum amount of the range is recorded and subsequently adjusted as better information becomes available.

For cases in which insurance coverage is available, the gross amount of the estimated liabilities is accrued, and a receivable is recorded for any probable estimated insurance recoveries. A discussion of environmental, product and other litigation liabilities is disclosed in Item 3. Legal Proceedings and Note 15 to the Consolidated Financial Statements.

Based upon currently available facts, we do not believe that the ultimate resolution of any pending legal proceeding, individually or in the aggregate, will have a material adverse effect on our long-term financial condition. However, adverse developments and/or periodic settlements could negatively affect our results of operations or cash flows in one or more future quarters.

Income Tax Accounting

As part of the process of preparing the Consolidated Financial Statements, we are required to estimate income taxes in each of the jurisdictions in which we operate. The process involves estimating actual current tax expense along with assessing temporary differences resulting from differing treatment of items for book and tax purposes. These temporary differences result in deferred tax assets and liabilities, which are included in the Consolidated Balance Sheets. We record a valuation allowance to reduce our deferred tax assets to the amount that is more-likely-than-not to be realized. We have considered future taxable income and ongoing tax planning strategies in assessing the need for the valuation allowance. Increases in the valuation allowance result in additional expense to be reflected within the tax provision in the Consolidated Statements of Income. As of November 30, 2019, the valuation allowance to reduce deferred tax assets totaled \$15.0 million.

We recognize tax benefits for tax positions for which it is more-likely-than-not that the tax position will be sustained by the applicable tax authority at the largest amount of tax benefit that is greater than fifty percent likely of being realized upon ultimate settlement. We do not recognize a financial statement benefit for a tax position that does not meet the more-likely-than-not threshold. We believe that our liabilities for income taxes reflect the most likely outcome. It is difficult to predict the final outcome or the timing of the resolution of any particular tax position. Future changes in judgment related to the resolution of tax positions will impact earnings in the quarter of such change. We adjust our income tax liabilities related to tax positions in light of changing facts and circumstances. Settlement with respect to a tax position would usually require cash. Based upon our analysis of tax positions taken on prior year returns and expected tax positions to be taken for the current year tax returns, we have identified gross uncertain tax positions of \$8.9 million as of November 30, 2019.

We have not recorded U.S. deferred income taxes for certain of our non-U.S. subsidiaries undistributed earnings as such amounts are intended to be indefinitely reinvested outside of the U.S. Should we change our business strategies related to these non-U.S. subsidiaries, additional U.S. tax liabilities could be incurred. It is not practical to estimate the amount of these additional tax liabilities. See Note 12 to the Consolidated Financial Statements for further information on income tax accounting.

Acquisition Accounting

As we enter into business combinations, we perform acquisition accounting requirements including the following:

- Identifying the acquirer,
- Determining the acquisition date,
- Recognizing and measuring the identifiable assets acquired and the liabilities assumed, and
- Recognizing and measuring goodwill or a gain from a bargain purchase

We complete valuation procedures and record the resulting fair value of the acquired assets and assumed liabilities based upon the valuation of the business enterprise and the tangible and intangible assets acquired. Enterprise value allocation methodology requires management to make assumptions and apply judgment to estimate the fair value of assets acquired and liabilities assumed. If estimates or assumptions used to complete the enterprise valuation and estimates of the fair value of the acquired assets and assumed liabilities significantly differed from assumptions made, the resulting difference could materially affect the fair value of net assets.

The calculation of the fair value of the tangible assets, including property, plant and equipment, utilizes the cost approach, which computes the cost to replace the asset, less accrued depreciation resulting from physical deterioration, functional obsolescence and external obsolescence. The calculation of the fair value of the identified intangible assets are determined using cash flow models following the income approach or a discounted market-based methodology approach. Significant inputs include estimated revenue growth rates, gross margins, operating expenses, and estimated attrition, royalty and discount rates. Goodwill is recorded as the difference in the fair value of the acquired assets and assumed liabilities and the purchase price.

Results of Operations

Net revenue

(\$ in millions)				2018		2017	2019 vs 2018	2018 vs 2017
Net revenue	\$	2,897.0	\$	3,041.0	\$	2,306.0	(4.7 %)	31.9 %

We review variances in net revenue in terms of changes related to sales volume, product pricing, business acquisitions and divestitures (M&A) and changes in foreign currency exchange rates. The following table shows the net revenue variance analysis the past two years:

	2019 vs 2018	2018 vs 2017
Organic growth	(1.1)%	3.7 %
M&A	(0.3)%	28.3 %
Currency	(3.3)%	(0.1)%
Total	(4.7)%	31.9 %

Organic growth was a negative 1.1 percent in 2019 compared to 2018. The 1.1 percent negative organic growth in 2019 was driven by a 12.0 percent decrease in Construction Adhesives and a 2.7 percent decrease in EIMEA, partially offset by 4.2 percent growth in Engineering Adhesives, 1.1 percent growth in Americas Adhesives and 1.1 percent growth in Asia Pacific. The decrease is predominately driven by a decrease in sales volume. There was a 0.3 percent decrease due to the divestiture of our surfactants and thickeners business during fiscal 2019. The negative 3.3 percent currency impact was primarily driven by a weaker Euro, Chinese renminbi, Argentinian peso, Brazilian real and Turkish lira compared to the U.S. dollar.

Organic growth was 3.7 percent in 2018 compared to 2017. The 3.7 percent organic growth in 2018 was driven by a 14.7 percent growth in Engineering Adhesives, 4.1 percent growth in EIMEA, 2.0 percent growth in Asia Pacific and 1.4 percent growth in Americas Adhesives, offset by a 1.1 percent decrease in Construction Adhesives. There was a 28.3 percent increase due to the acquisition of Royal Adhesives and Adecol. The negative 0.1 percent currency impact was primarily driven by a weaker Brazilian real, Argentinian peso, Australian dollar, Canadian dollar and Turkish lira offset by a stronger Mexican peso, Chinese renminbi and Euro compared to the U.S. dollar.

Cost of sales

(\$ in millions)	2019		2018		2017	2019 vs 2018	2018 vs 2017
Raw materials	\$ 1,535.7	\$	1,660.1	\$	1,288.0	(7.5)%	28.9 %
Other manufacturing costs	554.4		552.7		419.1	0.3 %	31.9 %
Cost of sales	\$ 2,090.1	\$	2,212.8	\$	1,707.1	(5.5)%	29.6 %
Percent of net revenue	72.1 %	Ó	72.8 %	o	74.0 %		

Cost of sales in 2019 compared to 2018 decreased 70 basis points as a percentage of net revenue. Raw material cost as a percentage of net revenue decreased 160 basis points in 2019 compared to 2018 primarily due to an increase in product pricing and lower raw material costs. Other manufacturing costs as a percentage of net revenue increased 90 basis points in 2019 compared to 2018 primarily due to the impact of lower sales volume and higher manufacturing waste and scrap costs.

Cost of sales in 2018 compared to 2017 decreased 120 basis points as a percentage of net revenue. Raw material costs as a percentage of net revenue decreased 130 basis points in 2018 compared to 2017 due to an increase in product pricing and the impact of the Royal Adhesives acquisition. Other manufacturing costs as a percentage of net revenue increased 10 basis points in 2018 compared to 2017.

Gross profit

						2019 vs	2018 vs
(\$ in millions)	2019		2018		2017	2018	2017
Gross profit\$	806.9	\$	828.2	\$	599.0	(2.6)%	38.3 %
Percent of net revenue	27.9 %	ó	27.2 %)	26.0 %		

Gross profit in 2019 decreased 2.6 percent and gross profit margin increased 70 basis points compared to 2018. The increase in gross profit margin was primarily due to increased product pricing and lower raw material costs partially offset by lower sales volume and higher manufacturing waste and scrap costs.

Gross profit in 2018 increased 38.3 percent and gross profit margin increased 120 basis points compared to 2017. The increase in gross profit margin was primarily due to increased product pricing and the impact of the Royal Adhesives acquisition and lower restructuring plan costs.

Selling, general and administrative expenses

(\$ in millions)	2019		2018		2017	2019 vs 2018	2018 vs 2017
SG&A \$	580.9	\$	590.3	\$	479.5	(1.6)%	23.1 %
Percent of net revenue	20.1 %	6	19.4 %	Ó	20.8 %		

SG&A expenses for 2019 decreased \$9.4 million, or 1.6 percent, compared to 2018. The decrease is primarily due to general spending reductions and the favorable impact of foreign currency exchange rates on spending outside the U.S.

SG&A expenses for 2018 increased \$110.8 million or 23.1 percent compared to 2017. The increase is mainly due to the impact of acquired businesses and the impact of unfavorable foreign currency exchange rates on spending outside the U.S.

Other income (expense), net

(\$ in millions)	2019	9	2018		2017
Other income (expense), net	\$	37.9	\$	18.1	\$ (19.2)

Other income (expense), net includes foreign transaction losses of \$1.2 million, \$4.5 million and \$2.4 million in 2019, 2018 and 2017, respectively. Gains on disposal of assets were \$24.1 million, \$3.1 million and nil in 2019, 2018 and 2017, respectively. Defined benefit pension benefit was \$13.7 million, \$16.9 million and \$8.5 million in 2019, 2018 and 2017, respectively. Other income of \$1.3 million, \$2.6 million and \$0.2 million was also included in 2019, 2018 and 2017, respectively. Additionally, 2017 includes \$25.5 million of expense related to make-whole costs associated with the early repayment of certain outstanding debt obligations which were refinanced upon entering into the Term Loan B Credit Agreement.

Interest expense

(\$ in millions)	2019		2018		2	2017
Interest expense	\$	103.3	\$	111.0	\$	43.7

Interest expense in 2019 compared to 2018 was lower due to lower U.S. debt balances. Interest expense in 2018 compared to 2017 was higher due primarily to higher U.S. debt balances at higher interest rates from the issuance of our 4.000% Notes and higher LIBOR rates on floating rate debt held in the U.S. We capitalized \$0.4 million of interest expense in 2019 and \$0.3 million of interest expense in each of 2018 and 2017.

Interest income

(\$ in millions)	2019)	201	8	 2017
Interest income	\$	12.2	\$	11.7	\$ 3.9

Interest income in 2019 and 2018 was higher due to our cross-currency swap cash flow hedges that were entered into at the end of 2017 in conjunction with the Royal Adhesives acquisition.

Income tax benefit (expense)

(\$ in millions)	20	19	2018	2017
Income tax benefit (expense)	\$	(49.4)	\$ 6.4	\$ (9.8)
Effective tax rate		(28.6)%	4.1 %	(16.2)%

Income tax expense of \$49.4 million in 2019 includes \$12.4 million of discrete tax expense related to the sale of the surfactants and thickeners business and return to accrual adjustments. Excluding the discrete tax expense of \$12.4 million, the overall effective tax rate was 24.9 percent. The decrease in the overall effective tax rate for 2019 compared to 2018, excluding the impact of discrete items, is primarily due to the geographic mix of earnings.

The income tax benefit in 2018 of \$6.4 million includes \$49.0 million of discrete tax benefits in both the U.S. and foreign jurisdictions, primarily related to the impact of U.S. Tax Reform. Excluding the discrete tax benefits of \$49.0 million, the overall effective tax rate was 27.2 percent. The increase in the overall effective tax rate for 2018 compared to 2017, excluding

the impact of discrete items, is primarily due to the geographic mix of earnings, as well as withholding tax expense in foreign jurisdictions.

Income tax expense in 2017 of \$9.8 million includes \$4.1 million of discrete tax benefits in both the U.S. and foreign jurisdictions, primarily related to the release of the valuation allowance in Brazil in conjunction with the Adecol acquisition. Excluding the discrete tax benefits, the overall effective tax rate was 23.0 percent.

Income from equity method investments

(\$ in millions)	2019)	2018		2017	
Income from equity method investments	\$	7.4	\$	8.2	\$ 	8.7

The income from equity method investments relates to our 50 percent ownership of the Sekisui-Fuller joint venture in Japan. The lower income for 2019 compared to 2018 and 2018 compared to 2017 relates to lower net income in our joint venture.

Net income attributable to H.B. Fuller

(\$ in millions)	2019		2018		2017	2019 vs 2018	2018 vs 2017
Net income attributable to H.B.	 						_
Fuller	\$ 130.8	\$	171.2	\$	59.4	(23.6)%	188.2 %
Percent of net revenue	4.5 %)	5.6 %	Ó	2.6 %		

Net income attributable to H.B. Fuller was \$130.8 million in 2019 compared to \$171.2 million in 2018 and \$59.4 million in 2017. Diluted earnings per share was \$2.52 per share in 2019, \$3.29 per share for 2018 and \$1.15 per share for 2017.

Operating Segment Results

We are required to report segment information in the same way that we internally organize our business for assessing performance and making decisions regarding allocation of resources. For segment evaluation by the chief operating decision maker, segment operating income is defined as gross profit less SG&A expenses. Inter-segment revenues are recorded at cost plus a markup for administrative costs. Corporate expenses are fully allocated to each operating segment.

We have five reportable segments: Americas Adhesives, EIMEA, Asia Pacific, Construction Adhesives and Engineering Adhesives. As of the beginning of 2019, we realigned certain customers across operating segments. Prior period segment information has been recast retrospectively to reflect the realignments. The tables below provide certain information regarding the net revenue and segment operating income of each of our operating segments.

Net Revenue by Segment

	2019	9	2018	3	2017			
	Net	% of	Net	% of	Net	% of		
(\$ in millions)	Revenue	Total	Revenue	Total	Revenue	Total		
Americas Adhesives	\$ 1,022.8	35 %	\$ 1,051.4	35 %	\$ 902.8	39 %		
EIMEA	640.9	22 %	697.4	23 %	564.4	24 %		
Asia Pacific	271.6	9 %	278.2	9 %	264.7	12 %		
Construction Adhesives	394.9	14 %	452.0	15 %	260.5	11%		
Engineering Adhesives	566.8	20 %	562.0	18 %	313.6	14 %		
Total	\$ 2,897.0	100 %	\$ 3,041.0	100 %	\$ 2,306.0	100 %		

Segment Operating Income (Loss)

		2019				2018			2017			
									Op	erating		
	O	perating	% of	•	Op	perating	% of		In	come	% of	
(\$ in millions)	_1	ncome	Tota	<u>l</u>	I1	ncome	Total		(Loss)	Total	
Americas Adhesives	\$	92.2		41 %	\$	99.0	4	42 %	\$	84.8	71 %	
EIMEA		22.3		10%		29.6		12%		17.2	14 %	
Asia Pacific		22.1		10%		17.7		7%		14.9	12 %	
Construction Adhesives		12.0		5 %		30.4		13%		(15.3)	(13)%	
Engineering Adhesives		77.4		34 %		61.2	2	<u> 26</u> %		17.9	16 %	
Total	\$	226.0		100%	\$	237.9	10	00 %	\$	119.5	100 %	

The following table provides a reconciliation of segment operating income to income before income taxes and income from equity method investments, as reported in the Consolidated Statements of Income.

(\$ in millions)	2019		2018	2017
Segment operating income	\$ 226.0	\$	237.9	\$ 119.5
Other income (expense), net	37.9		18.1	(19.1)
Interest expense	(103.3))	(111.0)	(43.7)
Interest income	12.2		11.7	 3.9
Income before income taxes and income from equity method				
investments	\$ 172.8	\$	156.7	\$ 60.6

Americas Adhesives

(\$ in millions)	2019		2018		2017	2019 vs 2018	2018 vs 2017
Net revenue	\$ 1,022.8	\$	1,051.4	\$	902.8	(2.7)%	16.5 %
Segment operating income	\$ 92.2	\$	99.0	\$	84.8	(6.9)%	16.7 %
Segment profit margin %	9.0%	ó	9.4 %	ó	9.4 %		

The following tables provide details of Americas Adhesives net revenue variances:

	2019 vs 2018	2018 vs 2017
Organic growth	1.1 %	1.4 %
M&A	(1.0)%	17.4 %
Currency	(2.8)%	(2.3)%
Total	(2.7)%	16.5 %

Net revenue decreased 2.7 percent in 2019 compared to 2018. The 1.1 percent increase in organic growth was attributable to increased product pricing, partially offset by a decrease in sales volume. There was a 1.0 percent decrease due to the divestiture of our surfactants and thickeners business in fiscal 2019. The negative currency effect was due to the weaker Argentinian peso, Brazilian real, Canadian dollar and Colombian peso compared to the U.S. dollar. As a percentage of net revenue, raw material costs decreased 30 basis points. Other manufacturing costs as a percentage of net revenue increased 30 basis points. SG&A expenses as a percentage of net revenue increased 40 basis points in 2019 as compared to 2018. Segment operating income decreased 6.9 percent and segment operating margin as a percentage of net revenue decreased 40 basis points in 2019 as compared to 2018.

Net revenue increased 16.5 percent in 2018 compared to 2017. The 1.4 percent increase in organic growth was attributable to increased product pricing offset by a decrease in sales volume. There was a 17.4 percent increase due to the Royal Adhesives, Adecol and Wisdom acquisitions. The negative currency effect was primarily due to the weaker Brazilian real and Argentinian peso compared to the U.S. dollar. As a percentage of net revenue, raw material costs decreased 60 basis points primarily due to increased product pricing and the impact of acquired businesses. Other manufacturing costs as a percentage of net revenue increased 70 basis points primarily due to higher delivery costs and the impact of acquired businesses. SG&A expense as a percentage of net revenue decreased 10 basis points. Segment operating income increased 16.7 percent and segment operating margin as a percentage of net revenue was flat in 2018 compared to 2017.

EIMEA

						2019 vs	2018 vs
(\$ in millions)	2019		2018		2017	2018	2017
Net revenue	\$ 640.9	\$	697.4	\$	564.4	(8.1 %)	23.6 %
Segment operating income	\$ 22.3	\$	29.6	\$	17.2	(24.7 %)	72.1 %
Segment profit margin %	3.5 %	o	4.2 %	Ó	3.0 %		

The following table provides details of the EIMEA net revenue variances:

	2019 vs 2018	2018 vs 2017
Organic growth	(2.7)%	4.1 %
M&A	-	18.0 %
Currency	(5.4)%	1.5 %
Total	(8.1)%	23.6 %

Net revenue decreased 8.1 percent in 2019 compared to 2018. The 2.7 percent decrease in organic growth was attributable to a decrease in sales volume, partially offset by increased product pricing. The negative currency effect was primarily the result of a weaker Euro and Turkish lira compared to the U.S. dollar. Raw material costs as a percentage of net revenue decreased 170 basis points due to lower raw material costs and favorable product mix. Other manufacturing costs as a percentage of net revenue increased 80 basis points due to lower sales volume. SG&A expenses as a percentage of net revenue increased 160 basis points primarily due to higher restructuring plan costs and lower net revenue. Segment operating income decreased 24.7 percent and segment operating margin decreased 70 basis points compared to 2018.

Net revenue increased 23.6 percent in 2018 compared to 2017. The 4.1 percent increase in organic growth was attributable to increased product pricing offset by a decrease in sales volume. There was an 18.0 percent increase due to the Royal Adhesives acquisition. The positive currency effect was primarily the result of a stronger Euro and British pound offset by a weaker Turkish lira and Indian rupee compared to the U.S. dollar. Raw material costs as a percentage of net revenue increased 80 basis points primarily due to higher raw material costs offset by increased product pricing. Other manufacturing costs as a percentage of net revenue decreased 60 basis points in 2018 compared to 2017 primarily due to lower restructuring plan costs and the impact of the Royal Adhesives acquisition. SG&A expense as a percentage of net revenue decreased 140 basis points due to lower restructuring plan costs. Segment operating income increased 72.1 percentand segment operating margin as a percentage of net revenue increased 120 basis points in 2018 compared to 2017.

Asia Pacific

						2019 vs	2018 vs
(\$ in millions)	2019		2018		2017	2018	2017
Net revenue	\$ 271.6	\$	278.2	\$	264.7	(2.4)%	5.1 %
Segment operating income	\$ 22.1	\$	17.7	\$	14.9	24.9 %	18.8 %
Segment profit margin %	8.1 %	ó	6.4 %	ó	5.6 %		

The following table provides details of Asia Pacific net revenue variances:

	2019 vs 2018	2018 vs 2017
Organic growth	1.1 %	2.0 %
M&A	-	1.5 %
Currency	(3.5)%	1.6 %
Total	(2.4)%	5.1 %

Net revenue in 2019 decreased 2.4 percent compared to 2018. The 1.1 percent increase in organic growth was attributable to an increase in sales volume and product pricing. The negative currency effect was primarily the result of a weaker Chinese renminbi and Australian dollar compared to the U.S. dollar. Raw material costs as a percentage of net revenue decreased 270 basis points primarily due to increased product pricing and lower raw material costs. Other manufacturing costs as a percentage of net revenue increased 20 basis points. SG&A expenses as a percentage of net revenue increased 80 basis points primarily due to lower net revenue. Segment operating income increased 24.9 percent and segment operating margin increased 170 basis points compared to 2018.

Net revenue in 2018 increased 5.1 percent compared to 2017. The 2.0 percent increase in organic growth was attributable to an increase in product pricing and sales volume. There was a 1.5 percent increase due to the Royal Adhesives acquisition. The positive currency effect was primarily driven by the stronger Chinese renminbi and Malaysian ringgit offset by the weaker Australian dollar and Indonesian rupiah compared to the U.S. dollar. Raw material costs as a percentage of net revenue decreased 60 basis points compared to 2017 primarily due to an increase in product pricing. Other manufacturing costs as a percentage of net revenue decreased 50 basis points compared to 2017. SG&A expense as a percentage of net revenue increased 30 basis points. Segment operating income increased 18.8 percent and segment operating margin increased 80 basis points in 2018 compared to 2017.

Construction Adhesives

						2019 vs	2018 vs
(\$ in millions)	 2019		2018		2017	2018	2017
Net revenue	\$ 394.9	\$	452.0	\$	260.5	(12.6)%	73.5 %
Segment operating income (loss)	\$ 12.0	\$	30.4	\$	(15.3)	(60.5)%	NMP
Segment profit margin %	3.0 %	Ó	6.7 %	,)	(5.9)%		

NMP = Non-meaningful percentage

The following tables provide details of Construction Adhesives net revenue variances:

	2019 vs 2018	2018 vs 2017
Organic growth	(12.0)%	(1.1)%
M&A	-	74.5 %
Currency	(0.6)%	0.1 %
Total	(12.6)%	73.5 %

Net revenue decreased 12.6 percent in 2019 compared to 2018. The 12.0 percent decrease in organic growth was attributable to lower sales volume partially offset by increased product pricing. The negative currency effect was due to the weaker Australian dollar compared to the U.S. dollar. Raw material costs as a percentage of net revenue decreased 70 basis points primarily due to increased product pricing and lower raw material costs. Other manufacturing costs as a percentage of net revenue increased 220 basis points primarily due to higher production costs, the impact of lower sales volume and higher manufacturing waste and scrap costs. SG&A expenses as a percentage of net revenue increased 220 basis points due to lower sales volume and higher restructuring plan costs. Segment operating income decreased 60.5 percent and segment operating margin decreased 370 basis points compared to 2018.

Net revenue increased 73.5 percent in 2018 compared to 2017. The 1.1 percent decrease in organic growth was attributable to a decrease in sales volume. There was a 74.5 percent increase due to the Royal Adhesives acquisition. The positive currency effect was due to the stronger Euro and Australian dollar compared to the U.S. dollar. Raw material costs as a percentage of net revenue increased 70 basis points compared to 2017 primarily due to higher raw material costs. Other manufacturing costs as a percentage of net revenue decreased 660 basis points primarily due to improved operating efficiencies related to the completion of the facility upgrade and expansion project and lower restructuring plan costs. SG&A expenses as a percentage of net revenue decreased by 670 basis points in 2018 compared to 2017 due to increased sales volume. Segment operating margin increased 1,260 basis points compared to 2017.

Engineering Adhesives

(\$ in millions)	2019		2018		2017	2019 vs 2018	2018 vs 2017
Net revenue	\$ 566.8	\$	562.0	\$	313.6	0.9 %	79.2 %
Segment operating income	\$ 77.4	\$	61.2	\$	17.9	26.5 %	241.9 %
Segment profit margin %	13.7 %	o	10.9 %	ó	5.7 %		

The following tables provide details of Engineering Adhesives net revenue variances:

	2019 vs 2018	2018 vs 2017
Organic growth	4.2 %	14.7 %
M&A	-	62.3 %
Currency	(3.3)%	2.2 %
Total	0.9 %	79.2 %

Net revenue increased 0.9 percent in 2019 compared to 2018. The 4.2 percent increase in organic growth was attributable to an increase in sales volume, partially offset by decreased product pricing. Sales volume growth was primarily driven by strong performance in the electronics and new energy markets. The negative currency effect was due to a weaker Chinese renminbi and Euro compared to the U.S. dollar. Raw material costs as a percentage of net revenue decreased 380 basis points due to favorable product mix and lower raw material costs. Other manufacturing costs as a percentage of net revenue increased 220 basis points due to higher production and integration costs. SG&A expense as a percentage of net revenue decreased 120 basis points due to lower compensation costs. Segment operating income increased 26.5 percent and segment operating margin increased 280 basis points compared to 2018.

Net revenue increased 79.2 percent in 2018 compared to 2017. The 14.7 percent increase in organic growth is attributable to an increase in sales volume and product pricing. Sales volume growth was primarily driven by strong performance in the Tonsan and automotive markets. There was a 62.3 percent increase due to the acquisition of Royal Adhesives. The positive currency effects were primarily driven by the stronger Chinese renminbi, Euro and British pound offset by the weaker Turkish lira and Brazilian real compared to the U.S. dollar. Raw material costs as a percentage of net revenue decreased 350 basis points due to increased product pricing and the impact of the Royal Adhesives acquisition partially offset by higher raw material costs. Other manufacturing costs as a percentage of net revenue increased 400 basis points primarily due to the impact of the Royal Adhesives acquisition. SG&A expense as a percentage of net revenue decreased 570 basis points compared to 2017 primarily due to higher sales volume and the impact of the Royal Adhesives acquisition. Segment operating income increased 241.9 percent and segment operating margin increased 520 basis points in 2018 compared to 2017.

Financial Condition, Liquidity and Capital Resources

Total cash and cash equivalents as of November 30, 2019 were \$112.2 million compared to \$150.8 million as of December 1, 2018. Total long and short-term debt was \$1,979.1 million as of November 30, 2019 and \$2,247.5 million as of December 1, 2018.

We believe that cash flows from operating activities will be adequate to meet our ongoing liquidity and capital expenditure needs. In addition, we believe we have the ability to obtain both short-term and long-term debt to meet our financing needs for the foreseeable future. Cash available in the United States has historically been sufficient and we expect it will continue to be sufficient to fund U.S. operations, U.S. capital spending and U.S. pension and other postretirement benefit contributions in addition to funding U.S. acquisitions, dividend payments, debt service and share repurchases as needed. For those international earnings considered to be reinvested indefinitely, we currently have no intention to, and plans do not indicate a need to, repatriate these funds for U.S. operations.

Our credit agreements include restrictive covenants that, if not met, could lead to a renegotiation of our credit lines and a significant increase in our cost of financing. At November 30, 2019, we were in compliance with all covenants of our contractual obligations as shown in the following table:

			Result as of
Covenant	Debt Instrument	Measurement	November 30, 2019
Total Indebtedness / TTM EBITDA	. Revolving Credit Agreement	Not greater than 5.9	3.8
	and Term Loan B Credit		
	Agreement		

- TTM = trailing 12 months
- EBITDA for covenant purposes is defined as consolidated net income, plus interest expense, expense for taxes paid or accrued, depreciation and amortization, certain non-cash impairment losses, extraordinary non-cash losses incurred other than in the ordinary course of business, nonrecurring extraordinary non-cash restructuring charges and the non-cash impact of purchase accounting, expenses related to the Royal Adhesives acquisition not to exceed \$40.0 million, expenses relating to the integration of Royal Adhesives during the fiscal years ending in 2017, 2018 and 2019 not exceeding \$30 million in aggregate, restructuring expenses that began prior to the Royal Adhesives acquisition incurred in fiscal years ending in 2017 and 2018 not exceeding \$28 million in aggregate, and non-capitalized charges relating to the SAP implementation during fiscal years ending in 2017 through 2021 not exceeding \$13 million in any single fiscal year, minus extraordinary non-cash gains. For the Total Indebtedness / TTM EBITDA ratio, TTM EBITDA is adjusted for the pro forma results from Material Acquisitions and Material Divestitures as if the acquisition or divestiture occurred at the beginning of the calculation period. The full definition is set forth in the Term Loan B Credit Agreement and the Amended Revolving Credit Agreement, and can be found in the Company's 8-K filings dated October 20, 2017 and November 17, 2017, respectively.

We believe we have the ability to meet all of our contractual obligations and commitments in fiscal 2020.

Net Financial Assets (Liabilities)

(\$ in millions)	2019	2018
Financial assets:	 _	
Cash and cash equivalents	\$ 112.2	\$ 150.8
Foreign exchange contracts	1.2	4.9
Cash flow hedges	26.9	0.7
Interest rate swaps	-	28.9
Fair value hedges	5.7	-
Financial liabilities:		
Notes payable	(15.7)	(14.8)
Long-term debt	(1,963.4)	(2,232.8)
Foreign exchange contracts	(1.8)	(2.2)
Interest rate swaps	(17.6)	-
Fair value hedges	 <u>-</u>	 (8.7)
Net financial liabilities	\$ (1,857.5)	\$ (2,073.2)

Of the \$112.2 million in cash and cash equivalents as of November 30, 2019, \$97.9 million was held outside the U.S. Of the \$97.9 million of cash held outside the U.S., earnings on \$91.9 million are indefinitely reinvested outside of the U.S. It is not practical for us to determine the U.S. tax implications of the repatriation of these funds.

There are no contractual or regulatory restrictions on the ability of consolidated and unconsolidated subsidiaries to transfer funds in the form of cash dividends, loans or advances to us, except for: 1) a credit facility limitation restricting investments, loans, advances or capital contributions from Loan Parties to non-Loan Parties in excess of \$100.0 million, 2) a credit facility limitation that provides total investments, loans, advances or guarantees not otherwise permitted in the credit agreement for all subsidiaries shall not exceed \$125.0 million in the aggregate, 3) a credit facility limitation that provides total investments, dividends, and distributions shall not exceed the Available Amount defined in these agreements, all three of which do not apply once our secured leverage ratio drops below 4.0x and 4) typical statutory restrictions, which prohibit distributions in excess of net capital or similar tests. The Royal Adhesives acquisition and any investments, loans, and advances established to consummate the Royal Adhesives acquisition, are excluded from the credit facility limitations described

above. Additionally, we have taken the income tax position that the majority of our cash in non-U.S. locations is indefinitely reinvested.

Debt Outstanding and Debt Capacity

Notes Payable

Notes payable were \$15.7 million at November 30, 2019 and \$14.8 million at December 1, 2018. These amounts primarily represented various foreign subsidiaries' short-term borrowings that were not part of committed lines. The weighted-average interest rates on these short-term borrowings were 8.9 percent in 2019 and 9.6 percent in 2018.

Long-Term Debt

Long-term debt consisted of a secured term loan ("Term Loan B") and an unsecured public note ("Public Notes"). The Term Loan B bears a floating interest rate at LIBOR plus 2.00 percent (3.72 percent at November 30, 2019) and matures in fiscal year 2024. The Public Notes bear interest at 4.00 percent fixed interest and mature in fiscal year 2027. We are subject to a par call of 1.00 percent except within three months of maturity date. We currently have no intention to prepay the Public Notes. Additional details on the Public Notes and the Term Loan B Credit Agreement can be found in Form 8-K dated February 9, 2017 and Form 8-K dated October 20, 2017, respectively.

We executed interest rate swap agreements for the purpose of obtaining a fixed interest rate on \$1,350.0 million of the \$2,150.0 million Term Loan B. We have designated forecasted interest payments resulting from the variability of 1-month LIBOR in relation to \$1,350.0 million of the Term Loan B as the hedged item in cash flow hedges. The combined fair value of the interest rate swaps in total was a liability of \$17.6 million at November 30, 2019 and was included in other liabilities in the Consolidated Balance Sheets. We are applying the hypothetical derivative method to assess hedge effectiveness for these interest rate swaps. Changes in the fair value of a hypothetically perfect swap with terms that match the critical terms of our \$1,350.0 million variable rate Term Loan B are compared with the change in the fair value of the swaps.

We entered into interest rate swap agreements for the purpose of obtaining a floating rate on \$150.0 million of our \$300.0 million Public Notes. We have designated the \$150.0 million of public debt as the hedged item in a fair value hedge. The combined fair value of the interest rate swaps in total was an asset of \$5.7 million at November 30, 2019 and was included in other assets in the Consolidated Balance Sheets. The swaps were designated for hedge accounting treatment as fair value hedges. We are applying the hypothetical derivative method to assess hedge effectiveness for these interest rate swaps. Changes in the fair value of a hypothetically perfect swap with terms that match the critical terms of our \$150.0 million fixed rate Public Notes are compared with the change in the fair value of the swaps.

Lines of Credit

We have a revolving credit agreement with a consortium of financial institutions at November 30, 2019. This credit agreement creates a secured multi-currency revolving credit facility that we can draw upon to repay existing indebtedness, finance working capital needs, finance acquisitions, and for general corporate purposes up to a maximum of \$400.0 million. Interest on the revolving credit facility is payable at LIBOR plus 2.00 percent (3.70 percent at November 30, 2019). A facility fee of 0.30 percent of the unused commitment under the revolving credit facility is payable quarterly. The interest rate and the facility fee are based on a leverage grid. The credit facility expires on April 12, 2022. As of November 30, 2019, our lines of credit were undrawn. Additional details on the revolving credit agreement can be found in the 8-K dated November 17, 2017. For further information related to debt outstanding and debt capacity, see Note 6 to the Consolidated Financial Statements.

Uncertainty relating to the LIBOR phase out at the end of 2021 may adversely impact the value of, and our obligations under, our Term Loan B, Public Notes and revolving credit facility. See the applicable discussion under Risk Factors.

Goodwill and Other Intangible Assets

As of November 30, 2019, goodwill totaled \$1,281.8 million (32 percent of total assets) and other intangible assets, net of accumulated amortization, totaled \$799.4 million (20 percent of total assets).

The components of goodwill and other identifiable intangible assets, net of amortization, by segment at November 30, 2019 are as follows:

	Am	iericas				Asia	Con	struction	Eng	ineering	
(\$ in millions)	Adl	hesives	El	IMEA	P	acific	Ac	lhesives	Ad	hesives	 Total
Goodwill	\$	322.8	\$	151.6	\$	21.4	\$	311.0	\$	475.0	\$ 1,281.8
Purchased technology & patents.		15.1		13.4		0.8		12.3		25.0	66.6
Customer relationships		152.1		57.1		7.6		278.6		195.0	690.4
Tradenames		7.5		2.6		-		11.5		16.1	37.7
Other finite-lived intangible											
assets		-		2.8		1.2		0.1		0.1	4.2
Indefinite-lived intangible assets.		-		0.5		-		-		-	0.5

Selected Metrics of Liquidity and Capital Resources

Key metrics we monitor are net working capital as a percent of annualized net revenue, trade account receivable days sales outstanding (DSO), inventory days on hand, free cash flow after dividends and debt capitalization ratio.

	November 30, 2019	December 1, 2018			
Net working capital as a percentage of annualized net revenue ¹	18.0 %	18.5 %			
Accounts receivable DSO (in days) ²	59	56			
Inventory days on hand (in days) ³	58	60			
Free cash flow after dividends ⁴	\$ 174.8	\$ 153.9			
Debt capitalization ratio ⁵	61.8 %	66.1 %			

¹ Current quarter net working capital (trade receivables, net of allowance for doubtful accounts plus inventory minus trade payables) divided by annualized net revenue (current quarter, multiplied by 4).

Free cash flow after dividends, a non-GAAP financial measure, is defined as net cash provided by operating activities less purchased property, plant and equipment and dividends paid. Free cash flow after dividends is an integral financial measure used by the Company to assess its ability to generate cash in excess of its operating needs, therefore, the Company believes this financial measure provides useful information to investors. The following table reflects the manner in which free cash flow after dividends is determined and provides a reconciliation of free cash flow after dividends to net cash provided by operating activities, the most directly comparable financial measure calculated and reported in accordance with U.S. GAAP.

² Trade receivables net of allowance for doubtful accounts multiplied by 56 (8 weeks) and divided by the net revenue for the last 2 months of the quarter.

³ Total inventory multiplied by 56 and divided by cost of sales (excluding delivery costs) for the last 2 months of the quarter.

⁴ Net cash provided by operations less purchased property, plant and equipment and dividends paid. See reconciliation to Net cash provided by operating activities below.

⁵ Total debt divided by (total debt plus total stockholders' equity).

Reconciliation of "Net cash provided by operating activities" to "Free cash flow after dividends"

Cash Flows from Operating Activities

(\$ in millions)	2019		2018		2017	
Net cash provided by operating activities	\$	269.2	\$	253.3	\$	166.3
Less: Purchased property, plant and equipment		62.0		68.3		54.9
Less: Dividends paid		32.4		31.1		29.6
Free cash flow after dividends	\$	174.8	\$	153.9	\$	81.8

Summary of Cash Flows

Cash Flows from Operating Activities

(\$ in millions)	 2019	 2018	 2017
Net cash provided by operating activities	\$ 269.2	\$ 253.3	\$ 166.3

Net income including non-controlling interest was \$130.8 million in 2019, \$171.2 million in 2018 and \$59.5 million in 2017. Depreciation and amortization expense totaled \$141.2 million in 2019 compared to \$145.1 million in 2018 and \$87.3 million in 2017. The higher depreciation and amortization expense in 2019 and 2018 was directly related to the assets acquired in our business acquisitions.

Changes in net working capital (trade receivables, inventory and trade payables) accounted for a source of cash of \$5.5 million, a use of cash of \$31.1 million and a source of cash of \$8.9 million in 2019, 2018 and 2017, respectively. Following is an assessment of each of the net working capital components:

- Trade Receivables, net Changes in trade receivables resulted in a \$25.6 million use of cash in 2019 compared to a \$39.4 million and \$26.8 million use of cash in 2018 and 2017, respectively. The lower use of cash in 2019 compared to 2018 was related to lower net revenue and lower trade receivables compared to the prior year. The higher use of cash in 2018 was related to higher net revenue and an increase in trade receivables compared to 2017. The DSO was 59 days at November 30, 2019, 56 days at December 1, 2018 and 61 days at December 2, 2017.
- Inventory Changes in inventory resulted in a \$19.6 million source of cash in 2019 compared to a \$17.1 million and an \$8.7 million use of cash in 2018 and 2017, respectively. The source of cash in 2019 compared to the use of cash in 2018 was due to higher raw material costs and higher inventory to maintain service levels while integrating our acquisitions in 2018. Inventory days on hand were 58 days at the end of 2019 compared to 60 days at the end of 2018 and 59 days at the end of 2017.
- Trade Payables Changes in trade payables resulted in an \$11.5 million, \$25.4 million and \$44.4 million source of cash in 2019, 2018 and 2017, respectively. Changes between all years were primarily related to the timing of payments, and extension of payment terms globally.

Contributions to our pension and other postretirement benefit plans were \$8.1 million, \$6.6 million and \$4.7 million in 2019, 2018 and 2017, respectively. Income taxes payable resulted in a \$21.0 million and \$4.0 million source of cash in 2019 and 2018, respectively, and a \$15.0 million use of cash in 2017. Other assets resulted in an \$18.3 million, \$35.2 million and \$13.0 million use of cash in 2019, 2018 and 2017, respectively. Accrued compensation was a \$1.3 million source of cash in 2019, a \$0.3 million use of cash in 2018 and a \$12.2 million source of cash in 2017. The source of cash in 2019 and 2017 relates to higher accruals for our employee incentive plans while the use of cash in 2018 relates to lower accruals. Other operating activity was a \$37.5 million and a \$81.5 million source of cash in 2019 and 2018, respectively, and an \$14.4 million use of cash in and 2017. This reflects the impact of a stronger U.S. dollar on certain foreign transactions in 2019, 2018 and 2017.

Cash Flows from Investing Activities

(\$ in millions)	2019	 2018	 2017
Net cash provided by (used in) investing activities	\$ 7.4	\$ (61.8)	\$ (1,800.9)

Purchases of property plant and equipment were \$62.0 million in 2019 compared to \$68.3 million in 2018 and \$54.9 million in 2017. The higher purchases in 2019 and 2018 compared to 2017 relates to higher purchases due to our acquisitions in 2017. Proceeds from the sale of property, plant and equipment were \$11.1 million in 2019 compared to \$2.9 million in 2018 and \$0.7 million in 2017. The higher proceeds in 2019 were due to the sale of certain properties.

In 2019, we acquired Ramapo Sales and Marketing, Inc. for \$8.3 million and paid a \$9.9 million contingent consideration payment for our 2015 acquisition of Tonsan Adhesive, Inc. In 2019, we also received \$70.3 million of cash related to the sale of our surfactants and thickeners business. In addition, we received payment of a government grant and expended cash related to the building of a plant in China of \$8.9 million and \$2.8 million, respectively. In 2018, we received \$3.5 million of cash resulting in an adjustment to the purchase price of Royal Adhesives and Adecol. In 2017, we acquired Adecol for \$44.7 million, net of cash acquired, Royal Adhesives for \$1,622.7 million, net of cash acquired. See Note 2 to the Consolidated Financial Statements for further information on acquisitions.

Cash Flows from Financing Activities

(\$ in millions)	 2019	 2018	2017
Net cash provided by (used in) financing activities	\$ (315.0)	\$ (288.6)	\$ 1,684.7

In 2019 and 2018, we repaid \$288.6 million and \$185.8 million of long-term debt, respectively. In 2017, we repaid \$1,079.3 million and borrowed \$2,856.3 million of debt in conjunction with our acquisition of Royal Adhesives and we paid \$49.7 million of debt issuance, prepayment and extinguishment costs. See Note 6 of the Consolidated Financial Statements for further discussion of debt borrowings and repayments.

Cash paid for dividends were \$32.4 million, \$31.1 million and \$29.6 million in 2019, 2018 and 2017, respectively. Cash generated from the exercise of stock options were \$10.9 million, \$6.2 million and \$17.7 million in 2019, 2018 and 2017, respectively. Repurchases of common stock were \$3.0 million in 2019 compared to \$4.7 million in 2018 and \$21.8 million in 2017, including \$19.1 million in 2017 from our share repurchase program. There were no repurchases from our share repurchase program in 2019 and 2018.

Contractual Obligations

Due dates and amounts of contractual obligations are as follows:

	Payments Due by Period											
			I	less than					M	ore than		
(\$ in millions)		Total		1 year	1-	3 years	3	-5 years	;	5 years		
Long-term debt	\$	1,975.7	\$	65.0	\$	-	\$	1,610.7	\$	300.0		
Interest payable on long-term debt ¹		393.7		80.7		152.4		132.4		28.2		
Notes payable		15.7		15.7		-		-		-		
Operating leases		37.9		11.5		13.5		9.0		3.9		
Pension contributions ²		2.0		2.0		-		=-		-		
Financial instrument liabilities ³		1.8		1.8		-		=.		-		
Total contractual obligations	\$	2,426.8	\$	176.7	\$	165.9	\$	1,752.1	\$	332.1		

¹ Some of our interest obligations on long-term debt are variable based on LIBOR. Interest payable for the variable portion is estimated based on a forward LIBOR curve.

² Pension contributions are only included for fiscal 2020. We have not determined our pension funding obligations beyond 2020 and thus, any potential future contributions have been excluded from the table.

³ Represents the fair value of our foreign exchange contracts with a payable position to the counterparty as of November 30, 2019, based on fair market values as of that date. Future changes in market values will impact the amount of cash ultimately paid or received to settle those instruments in the future.

We are subject to mandatory prepayments in the first quarter of each fiscal year equal to 50% of Excess Cash Flow, as defined in the Term Loan B Credit Agreement, of the prior fiscal year less any voluntary prepayments made during that fiscal year. The Excess Cash Flow Percentage (ECF Percentage) shall be reduced to 25% when our Secured Leverage Ratio is below 4.25:1.00 and to 0% when our Secured Leverage Ratio is below 3.75:1.00. The prepayment for the 2019 measurement period was satisfied through amounts prepaid during 2019. We have estimated the 2020 prepayment as shown in the table above and have classified it as current portion of long-term debt.

We expect to make cash outlays in the future related to uncertain tax positions. However, due to the uncertainty of the timing of future cash flows, we are unable to make reasonably reliable estimates of the period of cash settlement, if any, with the respective taxing authorities. Accordingly, gross unrecognized tax benefits of \$8.9 million as of November 30, 2019 have been excluded from the contractual obligations table above. For further information related to unrecognized tax benefits, see Note 12 to the Consolidated Financial Statements.

We expect 2020 capital expenditures to be approximately \$85.0 million.

Off-Balance Sheet Arrangements

There are no relationships with any unconsolidated, special-purpose entities or financial partnerships established for the purpose of facilitating off-balance sheet financial arrangements.

Forward-Looking Statements and Risk Factors

The Private Securities Litigation Reform Act of 1995 provides a safe harbor for forward-looking statements. This Annual Report on Form 10-K contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. These statements may be identified by the use of words like "plan," "expect," "aim," "believe," "project," "anticipate," "intend," "estimate," "will," "should," "could" (including the negative or variations thereof) and other expressions that indicate future events and trends. These plans and expectations are based upon certain underlying assumptions, including those mentioned with the specific statements. Such assumptions are in turn based upon internal estimates and analyses of current market conditions and trends, our plans and strategies, economic conditions and other factors. These plans and expectations and the assumptions underlying them are necessarily subject to risks and uncertainties inherent in projecting future conditions and results. Actual results could differ materially from expectations expressed in the forward-looking statements if one or more of the underlying assumptions and expectations proves to be inaccurate or is unrealized. In addition to the factors described in this report, Item 1A. Risk Factors identifies some of the important factors that could cause our actual results to differ materially from those in any such forward-looking statements. In order to comply with the terms of the safe harbor, we have identified these important factors which could affect our financial performance and could cause our actual results for future periods to differ materially from the anticipated results or other expectations expressed in the forward-looking statements. These factors should be considered, together with any similar risk factors or other cautionary language that may be made elsewhere in this Annual Report on Form 10-K.

The list of important factors in Item 1A. Risk Factors does not necessarily present the risk factors in order of importance. This disclosure, including that under Forward-Looking Statements and Risk Factors, and other forward-looking statements and related disclosures made by us in this report and elsewhere from time to time, represents our best judgment as of the date the information is given. We do not undertake responsibility for updating any of such information, whether as a result of new information, future events, or otherwise, except as required by law. Investors are advised, however, to consult any further public company disclosures (such as in filings with the SEC or in our press releases) on related subjects.

Item 7A. Quantitative and Qualitative Disclosures about Market Risk

Market Risk

We are exposed to various market risks, including changes in interest rates, foreign currency rates and prices of raw materials. Market risk is the potential loss arising from adverse changes in market rates and prices, such as interest rates and foreign currency exchange rates.

Our financial performance may be negatively affected by unfavorable economic conditions. Recessionary economic conditions may have an adverse impact on our sales volumes, pricing levels and profitability. As domestic and international economic conditions change, trends in discretionary consumer spending also become unpredictable and subject to reductions due to uncertainties about the future. A general reduction in consumer discretionary spending due to a recession in the domestic and international economies, or uncertainties regarding future economic prospects, could have a material adverse effect on our results of operations.

Interest Rate Risk

Exposure to changes in interest rates results primarily from borrowing activities used to fund operations. Committed floating rate credit facilities are used to fund a portion of operations. We believe that probable near-term changes in interest rates would not materially affect financial condition, results of operations or cash flows. The annual impact on interest expense of a one-percentage point interest rate change on the outstanding balance of our variable rate debt, net of interest rate swap derivatives as of November 30, 2019, would have resulted in a change in net income of approximately \$3.6 million or \$0.07 per diluted share.

Foreign Exchange Risk

As a result of being a global enterprise, there is exposure to market risks from changes in foreign currency exchange rates. Our operating results and financial condition are subject to both currency translation and currency transaction risk. Approximately 55 percent of net revenue was generated outside of the United States in 2019. Principal foreign currency exposures relate to the Euro, British pound sterling, Canadian dollar, Chinese renminbi, Japanese yen, Australian dollar, Argentine peso, Brazilian real, Colombian peso, Mexican peso, Turkish lira, Egyptian pound, Indian rupee, Indonesian rupiah and Malaysian ringgit.

We enter into cross border transactions through importing and exporting goods to and from different countries and locations. These transactions generate foreign exchange risk as they create assets, liabilities and cash flows in currencies other than their functional currency. This also applies to services provided and other cross border agreements among subsidiaries. Our objective is to balance, where possible, non-functional currency denominated assets to non-functional currency denominated liabilities to have a natural hedge and minimize foreign exchange impacts.

In the event a natural hedge is not available, we take steps to minimize risks from foreign currency exchange rate fluctuations through normal operating and financing activities and, when deemed appropriate, through the use of derivative instruments. We do not enter into any speculative positions with regard to derivative instruments.

Based on 2019 financial results, a hypothetical one percent change in our cost of sales due to foreign currency rate changes would have resulted in a change in net income attributable to H.B. Fuller of approximately \$8.1 million or \$0.16 per diluted share. Based on 2019 financial results and foreign currency balance sheet positions as of November 30, 2019, a hypothetical overall 10 percent change in the U.S. dollar would have resulted in a change in net income of approximately \$14.0 million or \$0.27 per diluted share.

Raw Materials

The principal raw materials used to manufacture products include resins, polymers, synthetic rubbers, vinyl acetate monomer and plasticizers. We generally avoid sole source supplier arrangements for raw materials. While alternate supplies of most key raw materials are available, unplanned supplier production outages may lead to strained supply-demand situations for several key raw materials such as ethylene and propylene, several polymers and other petroleum derivatives such as waxes.

The purchase of raw materials is our largest expenditure. Our objective is to purchase raw materials that meet both our quality standards and production needs at the lowest total cost. Most raw materials are purchased on the open market or under contracts that limit the frequency but not the magnitude of price increases. In some cases, however, the risk of raw material price changes is managed by strategic sourcing agreements which limit price increases to increases in supplier feedstock costs, while requiring decreases as feedstock costs decline. The leverage of having substitute raw materials approved for use wherever possible is used to minimize the impact of possible price increases. Based on 2019 financial results, a hypothetical one percent change in our raw material costs would have resulted in a change in net income of approximately \$11.5 million or \$0.22 per diluted share.

Recently Issued Accounting Pronouncements

See Note 1 to the Consolidated Financial Statements for information concerning new accounting standards and the impact of the implementation of these standards on our financial statements.

Item 8. Financial Statements and Supplementary Data

Report of Independent Registered Public Accounting Firm

To the Stockholders and Board of Directors H.B. Fuller Company

Opinions on the Consolidated Financial Statements and Internal Control Over Financial Reporting

We have audited the accompanying consolidated balance sheets of H.B. Fuller Company and subsidiaries (the Company) as of November 30, 2019 and December 1, 2018, the related consolidated statements of income, comprehensive income, total equity, and cash flows for each of the years in the three-year period ended November 30, 2019 and the related notes (collectively, the consolidated financial statements). We also have audited the Company's internal control over financial reporting as of November 30, 2019, based on criteria established in *Internal Control – Integrated Framework* (2013 Framework) issued by the Committee of Sponsoring Organizations of the Treadway Commission.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company as of November 30, 2019 and December 1, 2018, and the results of its operations and its cash flows for each of the years in the three-year period ended November 30, 2019, in conformity with U.S. generally accepted accounting principles. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of November 30, 2019 based on criteria established in *Internal Control – Integrated Framework (2013 Framework)* issued by the Committee of Sponsoring Organizations of the Treadway Commission.

Basis for Opinions

The Company's management is responsible for these consolidated financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Report on Internal Control over Financial Reporting appearing under Item 9A of the Company's November 30, 2019 Annual Report on Form 10-K. Our responsibility is to express an opinion on the Company's consolidated financial statements and an opinion on the Company's internal control over financial reporting based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud, and whether effective internal control over financial reporting was maintained in all material respects.

Our audits of the consolidated financial statements included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

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.

Critical Audit Matters

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

Evaluation of impairment analysis for the Europe, India, Middle East, and Africa (EIMEA) and Construction Adhesives Flooring (CA Flooring) reporting units

As discussed in Notes 1 and 5 to the consolidated financial statements, the goodwill balance as of November 30, 2019 was \$1,282 million, of which \$149 million and \$74 million related to the EIMEA and CA Flooring reporting units, respectively. The Company performs goodwill impairment testing on an annual basis and whenever events or changes in circumstances indicate that the carrying value of a reporting unit likely exceeds its fair value.

We identified the evaluation of the impairment analysis for the EIMEA and CA Flooring reporting units as a critical audit matter. The estimated fair values of the EIMEA and CA Flooring reporting units exceeded their carrying values by 21% and 8%, respectively, indicating a higher risk that the goodwill may be impaired and, therefore, resulted in the application of a high degree of auditor judgment. The expected future cash flows used to determine the fair values of the reporting units were challenging to test. This is due to minor changes to those assumptions having a significant effect on the Company's assessment of the carrying value of the goodwill.

The primary procedures we performed to address this critical audit matter included the following. We tested certain internal controls over the Company's goodwill impairment assessment process, including controls related to the determination of the fair values of the reporting units. We also tested internal controls over the Company's related expected future cash flows. We performed sensitivity analyses over the expected future cash flows. This was done to assess the impact of those assumptions on the Company's determination that the fair values of the EIMEA and CA Flooring reporting units exceeded their carrying values. We evaluated the Company's expected future cash flows for the EIMEA and CA Flooring reporting units, by comparing the growth assumptions to forecasted growth rates in the Company's and its peer companies' analyst reports. We compared the Company's historical cash flow forecasts to actual results to assess the Company's ability to accurately forecast.

/s/ KPMG LLP

We have served as the Company's auditor since 2003.

Minneapolis, Minnesota January 24, 2020

CONSOLIDATED STATEMENTS OF INCOME

H.B. Fuller Company and Subsidiaries (In thousands, except per share amounts)

			F	iscal Years		
	No	ovember 30, 2019	D	ecember 1, 2018	D	ecember 2, 2017
Net revenue	\$	2,897,000	\$	3,041,002	\$	2,306,043
Cost of sales		(2,090,078)		(2,212,844)		(1,707,051)
Gross profit		806,922		828,158		598,992
Selling, general and administrative expenses		(580,928)		(590,267)		(479,465)
Other income (expense), net		37,943		18,055		(19,154)
Interest expense		(103,287)		(110,994)		(43,701)
Interest income		12,178		11,774		3,927
Income before income taxes and income from equity method						
investments		172,828		156,726		60,599
Income tax benefit (expense)		(49,408)		6,356		(9,810)
Income from equity method investments		7,424		8,150		8,677
Net income including non-controlling interests		130,844		171,232		59,466
Net income attributable to non-controlling interests		(27)		(24)		(48)
Net income attributable to H.B. Fuller	\$	130,817	\$	171,208	\$	59,418
Earnings per share attributable to H.B. Fuller common stockholders:						
Basic	\$	2.57	\$	3.38	\$	1.18
Diluted	\$	2.52	\$	3.29	\$	1.15
Weighted-average common shares outstanding:						
Basic		50,920		50,591		50,370
Diluted		51,983		51,975		51,619
Dividends declared per common share	\$	0.635	\$	0.615	\$	0.590

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

H.B. Fuller Company and Subsidiaries (In thousands)

			Fi	iscal Years		
	No	vember 30, 2019	D	ecember 1, 2018	De	cember 2, 2017
Net income including non-controlling interests	\$	130,844	\$	171,232	\$	59,466
Other comprehensive income (loss)						
Foreign currency translation		(20,395)		(71,238)		29,288
Defined benefit pension plans adjustment, net of tax		(21,828)		(2,970)		34,930
Interest rate swaps, net of tax		(35,031)		19,771		1,894
Cash-flow hedges, net of tax		13,820		(6,735)		(4,047)
Other comprehensive income (loss)		(63,434)	-	(61,172)		62,065
Comprehensive income		67,410		110,060		121,531
Less: Comprehensive income attributable to non-controlling						
interests		41		8		39
Comprehensive income attributable to H.B. Fuller	\$	67,369	\$	110,052	\$	121,492

CONSOLIDATED BALANCE SHEETS

H.B. Fuller Company and Subsidiaries
(In thousands, except share and per share amounts)

	November 30, 2019		D	ecember 1, 2018
Assets				
Current assets:				
Cash and cash equivalents		112,191	\$	150,793
Trade receivables, net		493,181		495,008
Inventories		337,267		348,461
Other current assets		90,723		95,657
Total current assets		1,033,362		1,089,919
Property, plant and equipment, net		629,813		636,549
Goodwill		1,281,808		1,305,171
Other intangibles, net		799,399		908,151
Other assets		241,352		236,524
Total assets		3,985,734	\$	4,176,314
Liabilities, non-controlling interest and total equity Current liabilities:				
Notes payable	•	15,732	\$	14,770
Current maturities of long-term debt		65,000	Ψ	91,225
Trade payables		298,869		273,378
Accrued compensation		78,582		78,384
1		23,229		12,578
Income taxes payable Other accrued expenses		60,745		75,788
•		542,157	-	546,123
Total current liabilities		342,137		340,123
Long-term debt, net of current maturities		1,898,384		2,141,532
Accrued pension liabilities		80,214		70,680
Other liabilities		242,190		264,768
Total liabilities		2,762,945		3,023,103
Commitments and contingencies (Note 15)				
Equity:				
H.B. Fuller stockholders' equity:				
Preferred stock (no shares outstanding) Shares authorized – 10,045,900		_		-
Common stock, par value \$1.00 per share, Shares authorized – 160,000,000,				
Shares outstanding – 51,241,190 and 50,732,796, for 2019 and 2018,				
respectively		51,241		50,733
Additional paid-in capital		130,295		95,940
Retained earnings		1,384,411		1,286,289
Accumulated other comprehensive loss		(343,600)		(280,152)
Total H.B. Fuller stockholders' equity		1,222,347		1,152,810
Non-controlling interest		442		401
Total equity		1,222,789		1,153,211
Total liabilities, non-controlling interest and total equity		3,985,734	\$	4,176,314
i otal naomites, non-controlling interest and total equity	Ψ	3,703,734	Ψ	7,170,317

CONSOLIDATED STATEMENTS OF TOTAL EQUITY

H.B. Fuller Company and Subsidiaries

(In thousands)

Accumulated

						A	cumulated			
				dditional			Other		Non-	
	\mathbf{C}	ommon]	Paid-in	Retained	Cor	nprehensive	C	ontrolling	
		Stock	(Capital	Earnings	Inc	come (Loss)	_]	nterests	Total
Balance at December 3, 2016	\$	50,141	\$	59,564	\$1,097,521	\$	(262,729)	\$	393	\$ 944,890
Comprehensive income ¹		-		-	59,418		62,074		39	121,531
Dividends		-		-	(29,911)		-		-	(29,911)
Stock option exercises		514		17,191	-		-		-	17,705
Share-based compensation										
plans other, net		165		17,203	-		-		-	17,368
Tax benefit on share-based										
compensation plans		_		2,010	-		-		-	2,010
Repurchases of common stock		(431)		(21,400)	-		-		_	(21,831)
Purchase of redeemable non-		, ,		,						
controlling interest		-		94	-		-		-	94
Redeemable non-controlling										
interest		-		-	-		-		(39)	(39)
Balance at December 2, 2017	\$	50,389	\$	74,662	\$1,127,028	\$	(200,655)	\$	393	\$1,051,817
Comprehensive income (loss).		-		-	171,208		(61,156)		8	110,060
Dividends		-		-	(31,331)		-		-	(31,331)
Stock option exercises		199		6,038	-		-		- .	6,237
Share-based compensation										
plans other, net		237		19,836	=		-		-	20,073
Repurchases of common stock		(92)		(4,596)	-		-		-	(4,688)
Reclassification of AOCI tax										
effects	_				18,341		(18,341)			
Balance at December 1, 2018,										
as previously reported	\$	50,733	\$	95,940	\$1,285,246	\$	(280,152)	\$	401	\$1,152,168
Change in accounting principle				-	1,043		<u>-</u>		_	1,043
Balance at December 1, 2018,										
as adjusted		50,733		95,940	1,286,289		(280,152)		401	1,153,211
Comprehensive income (loss).		-		-	130,817		(63,448)		41	67,410
Dividends		-		-	(32,695)		-		-	(32,695)
Stock option exercises		373		10,506	=		-		-	10,879
Share-based compensation										
plans other, net		200		26,810	-		-		_	27,010
Repurchases of common stock		(65)		(2,961)					-	(3,026)
Balance at November 30,										
2019	\$	51,241	\$	130,295	\$1,384,411	\$	(343,600)	\$	442	\$1,222,789

H.B. Fuller Company Shareholders

¹ The Consolidated Statements of Total Equity have been adjusted to reflect retrospectively cumulative effect adjustments to retained earnings related to accelerated revenue recognition for certain arrangements upon the adoption of Topic 606 and the recognition of income tax effects of intercompany sales of assets upon the adoption of ASU 2016-16 in fiscal 2019.

CONSOLIDATED STATEMENTS of CASH FLOWS

H.B. Fuller Company and Subsidiaries

(In thousands)

			1	Fiscal Years		
		nber 30, 019		December 1, 2018	I	December 2, 2017
Cash flows from operating activities:	-	•				
Net income including non-controlling interests	\$	130,844	\$	171,232	\$	59,466
Depreciation		67,115		68,636		51,072
Amortization		74,091		76,490		36,243
Deferred income taxes		(29,028)		(47,446)		(21,660)
Income from equity method investments, net of dividends received		(39)		(3,172)		(2,640)
Gain on sale of assets		(24,104)		(3,050)		(19)
Share-based compensation		24,003		17,113		17,503
Pension and other postretirement benefit plan contributions		(8,063)		(6,558)		(4,704)
Pension and other postretirement benefit plan income		(11,300)		(14,332)		(6,069)
Excess tax benefit from share-based compensation Non-cash (gain) loss on mark to market adjustment related to contingent consideration liability		-		1,126		(2,010) (4,233)
Non-cash charge for the sale of inventories revalued at the date of		-		1,120		(4,233)
acquisition		_		_		11,289
Change in assets and liabilities, net of effects of acquisitions:						11,200
Trade receivables, net		(25,632)		(39,429)		(26,826)
Inventories		19,584		(17,068)		(8,660)
Other assets		(18,316)		(35,184)		(12,986)
Trade payables		11,553		25,401		44,365
Accrued compensation		1,342		(306)		12,249
Other accrued expenses		(1,882)		(4,282)		9,809
Income taxes payable		21,043		4,048		(14,973)
Other liabilities		448		(21,429)		14,685
Other		37,518		81,522		14,424
Net cash provided by operating activities		269,177		253,312		166,325
Cash flows from investing activities:						
Purchased property, plant and equipment		(61,982)		(68,263)		(54,934)
Purchased businesses, net of cash acquired		(8,292)		3,499		(1,745,415)
Purchased business remaining equity		(9,870)		-		(1,250)
Proceeds from sale of property, plant and equipment		11,133		2,923		672
Proceeds from sale of business		70,293		-		_
Cash received from government grant		8,881		-		-
Cash outflow related to government grant		(2,758)		-		-
Net cash provided by (used in) investing activities		7,405		(61,841)		(1,800,927)
Cash flows from financing activities:						
Proceeds from issuance of long-term debt		_		_		2,856,278
Repayment of long-term debt		(288,600)		(185,750)		(1,079,250)
Payment of debt issuance, prepayment and extinguishment costs		(200,000)		-		(49,742)
Net proceeds from (payments on) notes payable		1,662		(13,276)		(7,776)
Dividends paid		(32,357)		(31,124)		(29,612)
Contingent consideration payment		(3,610)		-		-
Proceeds from stock options exercised		10,885		6,237		17,705
Excess tax benefit from share-based compensation		-		-		2,010
Purchase of redeemable non-controlling interest		-		-		(3,127)
Repurchases of common stock		(3,026)		(4,688)		(21,831)
Net cash (used in) provided by financing activities		(315,046)		(228,601)		1,684,655
Effect of exchange rate changes on cash and cash equivalents		(138)		(6,475)		2,100
Net change in cash and cash equivalents		(38,602)		(43,605)		52,153
Cash and cash equivalents at beginning of year		150,793		194,398		142,245
Cash and cash equivalents at end of year	\$	112,191	\$	150,793	\$	194,398
Supplemental disabeture of each flow information.						
Supplemental disclosure of cash flow information: Dividends paid with company stock	•	338	\$	207	\$	299
Cash paid for interest, net of amount capitalized of \$416, \$285, and \$306 for the years ended November 30, 2019, December 1, 2018 and	J	336	Φ	207	ψ	239
December 2, 2017, respectively	\$	107,088	\$	109,428	\$	43,790
Cash paid for income taxes, net of refunds	\$	37,232	\$	36,841	\$	37,986

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

H.B. Fuller Company and Subsidiaries

(In thousands, except share and per share amounts)

Note 1: Nature of Business and Summary of Significant Accounting Policies

Nature of Business

H.B. Fuller Company and our subsidiaries formulate, manufacture and market specialty adhesives, sealants, coatings, polymers, tapes, encapsulants, additives and other specialty chemical products globally, with sales operations in 32 countries in North America, Europe, Latin America, the Asia Pacific region, India, the Middle East and Africa.

Our business is reported in five operating segments: Americas Adhesives, EIMEA (Europe, India, Middle East and Africa), Asia Pacific, Construction Adhesives and Engineering Adhesives. In 2019, as a percentage of total net revenue by operating segment, Americas Adhesives accounted for 35 percent, EIMEA 22 percent, Asia Pacific 9 percent, Construction Adhesives 14 percent and Engineering Adhesives 20 percent.

Our Americas Adhesives, EIMEA and Asia Pacific operating segments produce and supply industrial adhesives products for applications in various markets, including durable assembly (appliances and filters), packaging (food and beverage containers, flexible packaging, consumer goods, package integrity and re-enforcement, and durable and non-durable goods), converting (corrugation, folding carton, tape and label, paper converting, envelopes, books, multi-wall bags, sacks, and tissue and towel), nonwoven and hygiene (disposable diapers, feminine care and medical garments), performance wood (windows, doors and wood flooring), insulating glass (windows) and textile (footwear and sportswear).

The Americas Adhesives, EIMEA and Asia Pacific operating segments include a full range of specialty adhesives such as thermoplastic, thermoset, reactive, water-based and solvent-based products.

The Construction Adhesives operating segment includes products used for tile setting (adhesives, grouts, mortars, sealers and levelers), the commercial roofing industry (pressure-sensitive adhesives, tapes and sealants) and heating, ventilation and air conditioning and insulation applications (duct sealants, weather barriers and fungicidal coatings and block fillers). This operating segment also includes caulks and sealants for the consumer market and professional trade, sold through retailers, primarily in Australia.

The Engineering Adhesives operating segment produces and supplies high performance industrial adhesives to the transportation, electronics, medical, clean energy, aerospace and defense, appliance and heavy machinery markets.

Principles of Consolidation

The Consolidated Financial Statements include the accounts of H.B. Fuller Company and its wholly-owned and majority-owned subsidiaries. All significant intercompany transactions and accounts have been eliminated. Investments in affiliated companies in which we exercise significant influence, but which we do not control, are accounted for in the Consolidated Financial Statements under the equity method of accounting. As such, consolidated net income includes our equity portion in current earnings of such companies, after elimination of intercompany profits. Investments in which we do not exercise significant influence (generally less than a 20 percent ownership interest) are accounted for using the measurement alternative.

Our 50 percent ownership in Sekisui-Fuller Company, Ltd., our Japan joint venture, is accounted for under the equity method of accounting as we do not exercise control over the investee. In fiscal years 2019 and 2018, this equity method investment was not significant as defined in Regulation S-X under the Securities Exchange Act of 1934. As such, financial information as of November 30, 2019 and December 1, 2018 for Sekisui-Fuller Company, Ltd. is not required.

In fiscal year 2017, this equity method investment was significant as defined in Regulation S-X under the Securities Exchange Act of 1934. As such, income statement information as of December 2, 2017 for Sekisui-Fuller Company, Ltd. is as follows:

	For t	he year ended
	Dece	ember 2, 2017
Net revenue	\$	171,302
Gross profit		50,607
Net income		17,735

Our fiscal year ends on the Saturday closest to November 30. Fiscal year-end dates were November 30, 2019, December 1, 2018 and December 2, 2017 for 2019, 2018 and 2017, respectively.

Use of Estimates

Preparation of the Consolidated Financial Statements in conformity with U.S. generally accepted accounting principles ("U.S. GAAP") requires us to make estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes. Actual results could differ from those estimates.

Revenue Recognition

For shipments made to customers, title generally passes to the customer when all requirements of the sales arrangement have been completed, which is generally at the time of shipment. Revenue from product sales is recorded when title to the product transfers, no remaining performance obligations exist, the terms of the sale are fixed and collection is probable. Shipping terms include title transfer at either shipping point or destination. Stated terms in sale agreements also include payment terms and freight terms. Net revenues include shipping revenues as appropriate.

Provisions for sales returns are estimated based on historical experience, and are adjusted for known returns, if material. Customer incentive programs (primarily volume purchase rebates) and arrangements such as cooperative advertising, slotting fees and buy-downs are recorded as a reduction of net revenue in accordance with Financial Accounting Standards Board ("FASB") Accounting Standard Codification ("ASC") Topic 606. Customer incentives recorded in the Consolidated Statements of Income as a reduction of net revenue were \$22,795, \$21,265 and \$18,158 in 2019, 2018 and 2017, respectively.

For certain products, consigned inventory is maintained at customer locations. For this inventory, revenue is recognized in the period that the inventory is consumed. Sales to distributors require a distribution agreement or purchase order. As a normal practice, distributors do not have a right of return.

Cost of Sales

Cost of sales includes raw materials, container costs, direct labor, manufacturing overhead, freight costs, and other less significant indirect costs related to the production of our products.

Selling, General and Administrative Expenses

Selling, general and administrative ("SG&A") expenses include sales and marketing, research and development, technical and customer service, finance, legal, human resources, general management and similar expenses.

Income Taxes

The income tax provision is computed based on income before income from equity method investments included in the Consolidated Statement of Income. The asset and liability approach is used to recognize deferred tax assets and liabilities for the expected future tax consequences of temporary differences between the carrying amounts and the tax bases of assets and liabilities. Enacted statutory tax rates applicable to future years are applied to differences between the financial statement carrying amounts and the tax basis of existing assets and liabilities. The effect on deferred taxes of a change in tax rates is recognized in income in the period that includes the enactment date. Valuation allowances reduce deferred tax assets when it is not more-likely-than-not that a tax benefit will be realized. See Note 12 for further information.

Acquisition Accounting

As we enter into business combinations, we perform acquisition accounting requirements including the following:

- Identifying the acquirer,
- Determining the acquisition date,
- Recognizing and measuring the identifiable assets acquired and the liabilities assumed, and
- Recognizing and measuring goodwill or a gain from a bargain purchase

We complete valuation procedures and record the resulting fair value of the acquired assets and assumed liabilities based upon the valuation of the business enterprise and the tangible and intangible assets acquired. Enterprise value allocation methodology requires management to make assumptions and apply judgment to estimate the fair value of assets acquired and liabilities assumed. If estimates or assumptions used to complete the enterprise valuation and estimates of the fair value of the acquired assets and assumed liabilities significantly differed from assumptions made, the resulting difference could materially affect the fair value of net assets.

The calculation of the fair value of the tangible assets, including property, plant and equipment, utilizes the cost approach, which computes the cost to replace the asset, less accrued depreciation resulting from physical deterioration, functional obsolescence and external obsolescence. The calculation of the fair value of the identified intangible assets are determined using cash flow models following the income approach or a discounted market-based methodology approach. Significant inputs include estimated revenue growth rates, gross margins, operating expenses and estimated attrition, royalty and discount rates. Goodwill is recorded as the difference in the fair value of the acquired assets and assumed liabilities and the purchase price.

Cash Equivalents

Cash equivalents are highly liquid instruments with an original maturity of three months or less. We review cash and cash equivalent balances on a bank by bank basis to identify book overdrafts. Book overdrafts occur when the amount of outstanding checks exceed the cash deposited at a given bank. Book overdrafts, if any, are included in trade payables in our Consolidated Balance Sheets and in operating activities in our Consolidated Statements of Cash Flows.

Restrictions on Cash

There were no restrictions on cash as of November 30, 2019. There are no contractual or regulatory restrictions on the ability of consolidated and unconsolidated subsidiaries to transfer funds to us, except for typical statutory restrictions which prohibit distributions in excess of net capital or similar tests. The majority of our cash in non-U.S. locations is considered indefinitely reinvested.

Trade Receivable and Allowances

Trade receivables are recorded at the invoiced amount and do not bear interest. Allowances are maintained for doubtful accounts, credits related to pricing or quantities shipped and early payment discounts. The allowance for doubtful accounts includes an estimate of future uncollectible receivables based on the aging of the receivable balance and our collection experience. The allowance also includes specific customer accounts when it is probable that the full amount of the receivable will not be collected. See Note 4 for further information.

Inventories

Prior to the fourth quarter of 2018, certain inventories in the United States within the Company's Americas Adhesives and Construction Adhesives segments were recorded at cost (not in excess of net realizable value) as determined by the last-in, first-out method ("LIFO"), which represented approximately 25.7 percent of consolidated inventories. During the fourth quarter of 2018, we changed our method of costing for these inventories from LIFO to the weighted-average cost method. This change in accounting principle is preferable because the weighted-average cost method better measures the current value of our inventories and conforms the inventory costing methodology for inventory in the United States within the Company's Americas Adhesives and Construction Adhesives segments to the weighted-average cost method used for the majority of our inventories. We retrospectively adjusted the Consolidated Financial Statements as of and for the year ended December 2, 2017 to reflect this change.

Investments

Investments with a value of \$5,062 and \$5,048 represent the cash surrender value of life insurance contracts as of November 30, 2019 and December 1, 2018, respectively. These assets are held to primarily support supplemental pension plans and are recorded in other assets in the Consolidated Balance Sheets. The corresponding gain or loss associated with these contracts is reported in earnings each period as a component of other income (expense), net.

Equity Investments

Investments in an entity where we own less than 20% of the voting stock of the entity and do not exercise significant influence over operating and financial policies of the entity are accounted for using the measurement alternative at cost less impairment plus or minus observable price changes in orderly transactions. We have a policy in place to review our investments at least annually, to evaluate the accounting method and identify observable price changes that could indicate impairment. If we believe that an impairment exists, it is our policy to calculate the fair value of the investment and recognize as impairment any amount by which the carrying value exceeds the fair value of the investment. We did not have any impairment of our equity investments for the years ended November 30, 2019, December 1, 2018 and December 2, 2017. The book value of the equity investments was \$1,667 as of November 30, 2019 and \$1,669 as of December 1, 2018.

Property, Plant and Equipment

Property, plant and equipment are carried at cost and depreciated over the useful lives of the assets using the straight-line method. Estimated useful lives range from 20 to 40 years for buildings and improvements, 3 to 20 years for machinery and equipment, and the shorter of the lease or expected life for leasehold improvements. Fully depreciated assets are retained in property and accumulated depreciation accounts until removed from service. Upon disposal, assets and related accumulated depreciation are removed. Upon sale of an asset, the difference between the proceeds and remaining net book value is charged or credited to other income (expense), net on the Consolidated Statements of Income. Expenditures that add value or extend the life of the respective assets are capitalized, while expenditures that are typical recurring repairs and maintenance are expensed as incurred. Interest costs associated with construction and implementation of property, plant and equipment of \$416, \$285 and \$306 were capitalized in 2019, 2018 and 2017, respectively.

Goodwill

We evaluate our goodwill for impairment annually during the fourth quarter or earlier upon the occurrence of substantive unfavorable changes in economic conditions, industry trends, costs, cash flows, or ongoing declines in market capitalization. The quantitative impairment test requires judgment, including the identification of reporting units, the assignment of assets, liabilities and goodwill to reporting units, and the determination of fair value of each reporting unit. The impairment test requires the comparison of the fair value of each reporting unit with its carrying amount, including goodwill. In performing the impairment test, we determined the fair value of our reporting units by using discounted cash flow ("DCF") analyses. Determining fair value requires the Company to make judgments about appropriate discount rates, perpetual growth rates and the amount and timing of expected future cash flows. The cash flows employed in the DCF analysis for each reporting unit are based on the reporting unit's budget, long-term business plan, and recent operating performance. Discount rate assumptions are based on an assessment of the risk inherent in the future cash flows of the respective reporting unit and market conditions. If the estimated fair value of a reporting unit exceeds its carrying value, goodwill is considered to not be impaired. If the carrying value exceeds estimated fair value, an impairment charge is recorded for any excess of the carrying value over the estimated fair value. Based on the analysis performed for our fiscal 2019 annual impairment test, there were no indications of impairment for any of our reporting units. See Note 5 for further information.

Intangible Assets

Intangible assets include patents, customer lists, technology, trademarks and other intangible assets acquired from independent parties and are amortized on a straight-line basis with estimated useful lives ranging from 3 to 20 years. The straight-line method of amortization of these assets reflects an appropriate allocation of the costs of the intangible assets to earnings in proportion to the amount of economic benefits obtained in each reporting period.

Impairment of Long-Lived Assets

Our long-lived assets are tested for impairment whenever events or circumstances indicate that a carrying amount of an asset (asset group) may not be recoverable. An impairment loss would be measured and recognized when the carrying amount of an asset (asset group) exceeds the estimated undiscounted future cash flows expected to result from the use of the asset (asset group) and its eventual disposition. The impairment loss to be recorded would be the excess of the asset's carrying value over its fair value. Fair value is generally determined using a DCF analysis or other valuation technique. Costs related to internally developed intangible assets are expensed as incurred.

Foreign Currency Translation

Assets and liabilities of non-U.S. functional currency entities are translated to U.S. dollars at period-end exchange rates, and the resulting gains and losses arising from the translation of those net assets are recorded as a cumulative translation adjustment, a component of accumulated other comprehensive income (loss) in stockholders' equity. Revenues and expenses are translated using average exchange rates during the year. Foreign currency transaction gains and losses are included in other income (expense), net in the Consolidated Statements of Income.

We consider a subsidiary's sales price drivers, currency denomination of sales transactions and inventory purchases to be the primary indicators in determining a foreign subsidiary's functional currency. Our subsidiaries in certain European countries have a functional currency different than their local currency. All other foreign subsidiaries, which are located in North America, Latin America, Europe and the Asia Pacific region, have the same local and functional currency.

Pension and Other Postretirement Benefits

We sponsor defined benefit pension plans in both the U.S. and non-U.S. entities. Also in the U.S., we sponsor other postretirement plans for health care and life insurance benefits. Expenses and liabilities for the pension plans and other postretirement plans are actuarially calculated. These calculations are based on our assumptions related to the discount rate, expected return on assets, projected salary increases, health care cost trend rates and mortality rates. The discount rate assumption is determined using an actuarial yield curve approach, which results in a discount rate that reflects the characteristics of the plan. The approach identifies a broad population of corporate bonds that meet the quality and size criteria for the particular plan. We use this approach rather than a specific index that has a certain set of bonds that may or may not be representative of the characteristics of our particular plan. Our expected long-term rate of return on U.S. plan assets was based on our target asset allocation assumption of 60 percent equities and 40 percent fixed income. Management, in conjunction with our external financial advisors, determines the expected long-term rate of return on plan assets by considering the expected future returns and volatility levels for each asset class that are based on historical returns and forward-looking observations. The expected long-term rate of return on plan assets assumption used in each non-U.S. plan is determined on a plan-by-plan basis for each local jurisdiction and is based on expected future returns for the investment mix of assets currently in the portfolio for that plan. Management, in conjunction with our external financial advisors, develops expected rates of return for each plan, considers expected long-term returns for each asset category in the plan, reviews expectations for inflation for each local jurisdiction, and estimates the impact of active management of the plan's assets. Note 11 includes disclosure of assumptions employed in these measurements for both the non-U.S. and U.S. plans.

Asset Retirement Obligations

We recognize asset retirement obligations (AROs) in the period in which we have an existing legal obligation associated with the retirement of a tangible long-lived asset, and the amount can be reasonably estimated. The ARO is recognized at fair value when the liability is incurred. Upon initial recognition of a liability, that cost is capitalized as part of the related long-lived asset and depreciated on a straight-line basis over the remaining estimated useful life of the related asset. We have recognized a liability related to special handling of asbestos related materials in certain facilities for which we have plans or expectation of plans to undertake a major renovation or demolition project that would require the removal of asbestos or have plans or expectation of plans to exit a facility. In addition, we have determined that we have facilities with some level of asbestos that will require abatement action in the future. Once the probability and timeframe of an action are determined, we apply certain assumptions to determine the related liability and asset. These assumptions include the use of inflation rates, the use of credit adjusted risk-free discount rates and the estimation of costs to handle asbestos related materials. The recorded liability is required to be adjusted for changes resulting from the passage of time and/or revisions to the timing or the amount of the original estimate. The asset retirement obligation liability was \$2,952 and \$3,646 at November 30, 2019 and December 1, 2018, respectively.

Environmental Costs

Environmental expenditures that relate to current operations are expensed or capitalized as appropriate. Expenditures that relate to an existing condition caused by past operations, and which do not contribute to current or future revenue generation, are expensed. Liabilities are recorded when environmental assessments are made, or remedial efforts are probable, and the costs can be reasonably estimated. The timing of these accruals is generally no later than the completion of feasibility studies.

Contingent Consideration Liability

Concurrent with business acquisitions, we enter into agreements that require us to pay the sellers a certain amount based upon a formula related to the entity's financial results. The change in fair value of the contingent consideration liability is recorded in SG&A expenses in the Consolidated Statements of Income.

Share-based Compensation

We have various share-based compensation programs which provide for equity awards, including non-qualified stock options, incentive stock options, restricted stock shares, restricted stock units, performance awards and deferred compensation. We use the straight-line attribution method to recognize compensation expense associated with share-based awards based on the fair value on the date of grant, net of the estimated forfeiture rate. Expense is recognized over the requisite service period related to each award, which is the period between the grant date and the earlier of the award's stated vesting term or the date the employee is eligible for early retirement based on the terms of the plan. The fair value of stock options is estimated using the Black-Scholes option pricing model. All of our stock compensation expense is recorded in SG&A expenses in the Consolidated Statements of Income. See Note 9 for additional information.

Earnings per Share

Basic earnings per share is calculated by dividing net income attributable to H.B. Fuller by the weighted-average number of common shares outstanding during the applicable period. Diluted earnings per share is based upon the weighted-average number of common and common equivalent shares outstanding during the applicable period. The difference between basic and diluted earnings per share is attributable to share-based compensation awards. We use the treasury stock method to calculate the effect of outstanding awards, which computes total employee proceeds as the sum of (a) the amount the employee must pay upon exercise of the award and (b) the amount of unearned share-based compensation costs attributed to future services. Share-based compensation awards for which total employee proceeds exceed the average market price over the applicable period have an antidilutive effect on earnings per share, and accordingly, are excluded from the calculation of diluted earnings per share. The computations for basic and diluted earnings per share are as follows:

(in thousands, except per share data)	2019	2018	2017
Net income attributable to H.B. Fuller	\$ 130,817	\$ 171,208	\$ 59,418
Weighted-average common shares – basic	50,920	50,591	50,370
Equivalent shares from share-based compensation plans	1,063	1,384	1,249
Weighted-average common and common equivalent shares -			
diluted	 51,983	51,975	51,619
Basic earnings per share	\$ 2.57	\$ 3.38	\$ 1.18
Diluted earnings per share	\$ 2.52	\$ 3.29	\$ 1.15

Share-based compensation awards for 2,951,697, 1,905,411 and 163,140 shares for 2019, 2018 and 2017, respectively, were excluded from the diluted earnings per share calculation because they were antidilutive.

Financial Instruments and Derivatives

As a part of our ongoing operations, we are exposed to market risks such as changes in foreign currency exchange rates and interest rates. To manage these risks, we may enter into derivative transactions pursuant to our established policies.

Our objective is to balance, where possible, non-functional currency denominated assets to non-functional currency denominated liabilities to have a natural hedge and minimize foreign exchange impacts. We minimize risks from foreign currency exchange rate fluctuations through normal operating and financing activities and, when deemed appropriate, through the use of derivative instruments. Derivatives consisted primarily of forward currency contracts used to manage foreign currency denominated assets and liabilities. For derivative instruments outstanding that were not designated as hedges for accounting purposes, the gains and losses related to mark-to-market adjustments were recognized as other income or expense in the income statement during the periods the derivative instruments were outstanding. To manage exposure to currency rate movements on expected cash flows, the company may enter into cross-currency swap agreements.

The company manages interest expense using a mix of fixed and floating rate debt. To manage exposure to interest rate movements and to reduce borrowing costs, the company may enter into interest rate swap agreements.

Changes in the fair values of derivatives are recorded in net earnings or other comprehensive income, based on the type of derivative, and whether the instrument is designated and effective as a hedge transaction. Gains or losses on derivative instruments reported in accumulated other comprehensive income (loss) are reclassified to earnings in the period the hedged item affects earnings. Any ineffectiveness is recognized in earnings in the current period. We maintain master netting arrangements that allow us to net settle contracts with the same counterparties; we do not elect to offset amounts in our Consolidated Balance Sheet. These arrangements generally do not call for collateral. We do not enter into any speculative positions with regard to derivative instruments. See Note 13 for further information regarding our financial instruments.

Purchase of Company Common Stock

Under the Minnesota Business Corporation Act, repurchased stock is included in authorized shares, but is not included in shares outstanding. The excess of the repurchase cost over par value is charged to additional paid-in capital. When additional paid-in capital is exhausted, the excess reduces retained earnings. We repurchased 73,043, 71,181 and 56,230 shares of common stock in 2019, 2018 and 2017, respectively, in connection with the statutory minimum for the tax withholdings related to vesting of restricted shares.

Change in Accounting Principle - Revenue Recognition

In May 2014, the FASB issued ASU No. 2014-09, *Revenue from Contracts with Customers (Topic* 606), which requires an entity to recognize the amount of revenue to which it expects to be entitled for the transfer of promised goods or services to customers. We adopted this ASU during the quarter ended March 2, 2019 using the modified retrospective method of adoption. As a result of the adoption of this ASU, we recorded an increase to opening retained earnings of \$1,776 as of December 1, 2018 related to accelerated recognition for arrangements where we provide shipping and handling services after control of the goods has transferred to the customer. Prior periods were not restated. We have included the disclosures required by this ASU in Note 10.

In March 2016, the FASB issued ASU No. 2016-08, Revenue from Contracts with Customers (Topic 606), Principal versus Agent Considerations (Reporting Revenue Gross versus Net). This ASU provides guidance on recording revenue on a gross basis versus a net basis based on the determination of whether an entity is a principal or an agent when another party is involved in providing goods or services to a customer. The amendments in this ASU affect the guidance in ASU No. 2014-09 and were adopted during the quarter ended March 2, 2019 with ASU No. 2014-09 as discussed above.

Change in Accounting Principle – Income Tax Impact of Intra-Entity Transfers of Assets Other Than Inventory

In October 2016, the FASB issued ASU No. 2016-16, *Income Taxes (Topic 740): Intra-Entity Transfers of Assets Other Than Inventory.* This ASU changes the timing of income tax recognition for an intercompany sale of assets. The ASU requires the seller's tax effects and the buyer's deferred taxes to be recognized immediately upon the sale instead of deferring accounting for the income tax implications until the assets are sold to a third party or recovered through use. We adopted this ASU during the quarter ended March 2, 2019. We recorded a decrease to opening retained earnings of \$733 as of December 1, 2018 as a result of the adoption of this ASU.

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 requires employers to include only the service cost component of net periodic pension cost and net periodic postretirement benefit cost in operating expenses. The other components of net benefit cost, including amortization of prior service cost/credit, and settlement and curtailment effects, are to be included in non-operating expenses. The classification requirements of this ASU are applied on a retrospective basis. The ASU also stipulates that only the service cost component of net benefit cost is eligible for capitalization on a prospective basis. We adopted this ASU during the quarter ended March 2, 2019. As a result of adoption, the components of our net periodic defined benefit pension and postretirement benefit costs other than service cost are now presented as non-operating expenses for all periods presented. Service cost remains in operating expenses. As a result of the retrospective adjustment for the change in accounting principle, certain amounts in our Consolidated Statements of Income for the years ended December 1, 2018 and December 2, 2017 were adjusted as follows:

]		cember 1, 2018 Impact of Adoption of		
	Α	s Reported		ASU 2017-07	A	As Adjusted
Cost of sales	\$	(2,204,108)	_	(8,736)		(2,212,844)
Gross profit	Ψ	836,894	4	(8,736)	Ψ	828,158
Selling, general and administrative expenses		(582,132)		(8,135)		(590,267)
Other income (expense), net		1,184		16,871		18,055
Net income including non-controlling interests		171,232		-		171,232
Net income attributable to H.B. Fuller		171,208		-		171,208
Basic	\$	3.38	\$	-	\$	3.38
Diluted		3.29		-		3.29
]	De	cember 2, 2017		
				Impact of Adoption of		
	A	s Reported	A	ASU 2017-07	A	As Adjusted_
Cost of sales	\$	(1,700,973)	\$	(6,078)	\$	(1,707,051)
Gross profit		605,070		(6,078)		598,992
Selling, general and administrative expenses		(477,030)		(2,435)		(479,465)
Other income (expense), net		(27,667)		8,513		(19,154)
Net income including non-controlling interests		59,466		-		59,466
Net income attributable to H.B. Fuller		59,418		-		59,418
Basic	\$	1.18	\$	-	\$	1.18
Diluted		1.15		_		1.15

New Accounting Pronouncements

In December 2019, the FASB issued ASU No. 2019-12, *Income Taxes (Topic* 740): Simplifying the Accounting for Income Taxes. This ASU simplifies the accounting for income taxes by clarifying and amending existing guidance related to the recognition of franchise tax, the evaluation of a step up in the tax basis of goodwill, and the effects of enacted changes in tax laws or rates in the effective tax rate computation, among other clarifications. Our effective date for adoption of this ASU is our fiscal year beginning November 28, 2021 with early adoption permitted. We have evaluated the effect that this guidance will have on our Consolidated Financial Statements and determined it will not have a material impact.

In August 2016, the FASB issued ASU No. 2016-15, Statement of Cash Flows (Topic 230): Classification of Certain Cash Receipts and Cash Payments (a consensus of the Emerging Issues Task Force). This ASU requires changes in the presentation of certain items including, but not limited to, debt prepayment or debt extinguishment costs; contingent consideration payments made after a business combination; proceeds from the settlement of insurance claims; proceeds from the settlement of corporate-owned life insurance policies and distributions received from equity method investees. We adopted this ASU during the quarter ended March 2, 2019. Adoption of this ASU resulted in a retrospective reclassification of debt prepayment and extinguishment costs of \$25,535 (\$16,598, net of tax) within the Consolidated Statement of Cash Flows for the year ended December 2, 2017 from operating to financing cash outflows.

In June 2016, the FASB issued ASU No. 2016-13, Financial Instruments - Credit Losses (Topic 326), Measurement of Credit Losses on Financial Statements. This ASU requires a financial asset (or a group of financial assets) measured at amortized cost basis to be presented at the net amount expected to be collected. The allowance for credit losses is a valuation account that is deducted from the amortized cost basis of the financial asset(s) to present the net carrying value at the amount expected to be collected on the financial asset. The FASB also issued ASU No. 2018-19, Codification Improvements to Topic 326, Financial Instruments - Credit Losses in November 2018, ASU No. 2019-04, Codification Improvements to Topic 326, Financial Instruments in April 2019 and ASU No. 2019-11, Codification Improvements to Topic 326, Financial Instruments in November 2019. ASU No. 2018-19 clarifies that receivables arising from operating leases are within the scope of Topic 842, Leases. ASU No. 2019-04 and ASU No. 2019-11 clarify various scoping and other issues arising from ASU No. 2016-13. The amendments in this ASU affect the guidance in ASU No. 2016-13 and are effective in the same timeframe as ASU No. 2016-13. Our effective date for adoption of this ASU is our fiscal year beginning November 29, 2020. We are currently evaluating the effect that this ASU will have on our Consolidated Financial Statements.

Leases

In February 2016, the FASB issued ASU No. 2016-02, *Leases (Subtopic* 842). This ASU changes accounting for leases and requires lessees to recognize the assets and liabilities arising from all leases, including those classified as operating leases under previous accounting guidance, on the balance sheet and requires disclosure of key information about leasing arrangements to increase transparency and comparability among organizations. In December 2018, the FASB also issued ASU No. 2018-20, *Leases (Topic* 842): *Narrow-Scope Improvements for Lessors*, which clarifies the accounting for lessors for variable payments that relate to both a lease component and a nonlease component and is effective in the same timeframe as ASU 2016-02, and ASU No. 2019-01, *Leases (Topic* 842): *Codification Improvements*, which clarifies the transition disclosure requirements. Our effective date for adoption of this ASU is our fiscal year beginning December 1, 2019 with early adoption permitted. The new ASU must be adopted using a modified retrospective transition approach, and provides for certain practical expedients.

In July 2018, the FASB issued ASU No. 2018-11, *Leases (Topic* 842): *Targeted Improvements*. This ASU allows entities to not recast comparative periods in transition to ASC 842 and instead report the comparative periods presented in the period of adoption under ASC 840. The ASU also includes a practical expedient for lessors to not separate the lease and nonlease components of a contract. The amendments in this ASU are effective in the same timeframe as ASU No. 2016-02 as discussed above. We are incorporating this ASU into our assessment and adoption of ASU No. 2016-02.

In July 2018, the FASB issued ASU No. 2018-10, *Codification Improvements to Topic* 842, *Leases*. This ASU includes certain clarifications to address potential narrow-scope implementation issues which we are incorporating into our assessment and adoption of ASU No. 2016-02. The amendments in this ASU are effective in the same timeframe as ASU No. 2016-02 as discussed above.

We have substantially completed the accumulation of our lease data, detailed reviews of our lease contracts and implementation of our new lease accounting software. We have also substantially completed our analysis of the impact on the new standard on our business processes, systems and controls to support recognition and disclosure requirements under this ASU. We will adopt the package of transition practical expedients, which includes carryforward of historical lease classification for existing leases. As a result of the adoption of this ASU, we expect to record approximately \$27,000 of right-of-use assets and liabilities in the first quarter of 2020. Adoption of this standard is not expected to have a significant impact on the Consolidated Statements of Income. Note 14 provides information regarding rent expense for operating leases and minimum lease payments for capital and operating leases under existing lease guidance.

Note 2: Acquisitions and Divestiture

Ramapo Sales and Marketing, Inc.

On May 17, 2019, we acquired certain assets from a window and insulating glass sealants sales and distribution company, Ramapo Sales and Marketing, Inc. ("Ramapo"), headquartered in Charleston, South Carolina. This acquisition supports the integration of the insulating glass business that we acquired as part of the Royal Adhesives acquisition. The purchase price of \$8,292 was funded through existing cash. In addition, we are required to pay up to \$3,400 in contingent consideration based upon financial results for the twelve months ended December 31, 2019. Existing receivables of \$2,166 from Ramapo were effectively settled as a result of the acquisition. The acquisition fair value measurement was preliminary as of November 30, 2019, which includes goodwill of \$910, customer relationship intangible of \$8,800, and additional acquired assets of \$4,148. Goodwill is deductible for tax purposes. Ramapo and the related goodwill are reported in our Americas Adhesives operating segment.

Dalton Holdings, LLC

On July 1, 2019, the Company completed the sale of Dalton Holdings, LLC ("Dalton Holdings"), which primarily manufactures surfactants and thickeners, within the Americas Adhesives segment. The sale resulted in a pre-tax gain on sale of \$18,764, which is recorded in other income (expense), net in the Consolidated Statements of Income for the year ended November 30, 2019.

Adecol

On November 1, 2017, we acquired Adecol Industria Quimica, Limitada ("Adecol"), headquartered in Guarulhos, Brazil. Adecol works with customers to develop innovative, high-quality hot melt, reactive and polymer-based adhesive solutions in the packaging, converting and assembly markets. The initial purchase price was 145.9 million Brazilian real, or approximately \$44,682, and was funded through borrowings on our revolving credit facility and existing cash. During 2018, we received 3.6 million Brazilian real, or approximately \$1,110, of cash, and made other purchase accounting adjustments of \$3,227 resulting in a final purchase price of \$40,345. Adecol is reported in our Americas Adhesives operating segment. We incurred acquisition related costs of approximately \$951, which were recorded as SG&A expenses in the Consolidated Statement of Income for the year ended December 2, 2017.

The following table summarizes the final fair value measurement of the assets acquired and liabilities assumed as of the date of acquisition:

	Final	Valuation
	Decem	ber 1, 2018
Current assets		16,137
Property, plant and equipment		8,047
Goodwill		21,401
Other intangibles		
Customer relationships		16,633
Trademarks/trade names		1,298
Other assets		4,811
Current liabilities		(14,274)
Other liabilities		(13,708)
Total purchase price	\$	40,345

The expected lives of the acquired intangible assets are 13 years for customer relationships and five years for trademarks/trade names.

Based on the fair value measurement of the assets acquired and liabilities assumed, we allocated \$21,401 to goodwill for the expected synergies from combining Adecol with our existing business. Such goodwill is not deductible for tax purposes. The goodwill was assigned to our Americas Adhesives operating segment.

Royal Adhesives

On October 20, 2017, we acquired Royal Adhesives and Sealants ("Royal Adhesives"), a manufacturer of high-value specialty adhesives and sealants. Royal Adhesives is a supplier of industrial adhesives in a diverse set of end markets, including aerospace, transportation, commercial roofing, insulating glass, solar, packaging and flooring applications and operates 19 manufacturing facilities in five countries. The initial purchase price of \$1,622,728 was funded through new debt financing. See Note 6 for further information on our debt financing. During 2018, we received \$2,389 of cash adjusting the purchase price to a final purchase price of \$1,620,339. Royal Adhesives is reported in multiple operating segments. We incurred acquisition related costs of approximately \$11,625, which were recorded as SG&A expenses in the Consolidated Statement of Income for the year ended December 2,2017.

The following table summarizes the final fair value measurement of the assets acquired and liabilities assumed as of the date of acquisition:

	Fina	l Valuation
	Decer	nber 1, 2018
Accounts receivable	\$	65,896
Inventory		93,485
Other current assets		59,297
Property, plant and equipment		118,783
Goodwill		867,743
Other intangibles		
Developed technology		59,700
Customer relationships		664,700
Trademarks/trade names		31,000
Other assets		1,400
Accounts payable		(38,759)
Other current liabilities		(33,483)
Other liabilities		(269,423)
Total purchase price	\$	1,620,339

The expected lives of the acquired intangible assets are 15 years for developed technology, 18 years for customer relationships and 15 years for trademarks/trade names.

Based on the fair value measurement of the assets acquired and liabilities assumed, we allocated \$867,743 to goodwill for assembled workforce and the expected synergies from combining Royal Adhesives with our existing business. The goodwill was assigned to multiple operating segments. The amount of goodwill that is deductible for tax purposes is \$41,638. The remaining goodwill is not deductible for tax purposes.

The following unaudited pro forma information gives effect to the Royal Adhesives acquisition as if the acquisition was in effect for the year ended December 2, 2017. The historical financial information has been adjusted to give effect to pro forma events that are directly attributable to the acquisition, supportable and expected to have a continuing impact on the combined results. Pro forma earnings for the year ended December 2, 2017 was adjusted to exclude \$62,985 (pre-tax) of acquisition-related costs and \$10,812 (pre-tax) of nonrecurring expense related to the fair value adjustment of acquisition-date inventory. The unaudited pro forma results do not include any anticipated cost savings from operating efficiencies or synergies that could result from the acquisition. Accordingly, the unaudited pro forma results are not necessarily indicative of what actually would have occurred had the acquisition been in effect for the period presented. The unaudited pro forma information for the year ended December 2, 2017, assuming that the acquisition was in effect for the year ended December 2, 2017, is presented below:

	December 2, 2017
Net revenue	\$ 2,886,762
Net income attributable to H.B. Fuller	123,618
Pro forma earnings per share:	2.45
Basic	2.39
Diluted	

Wisdom Adhesives

On January 27, 2017, we acquired substantially all of the assets of H.E. Wisdom & Sons, Inc. and its affiliate Wisdom Adhesives Southeast, L.L.C., ("Wisdom Adhesives") headquartered in Elgin, Illinois. Wisdom Adhesives is a provider of adhesives for the packaging, paper converting and durable assembly markets. The purchase price of \$123,549 was financed through borrowings on our revolving credit facility and is reported in our Americas Adhesives operating segment. We incurred acquisition related costs of approximately \$555, which were recorded as SG&A expenses in the Consolidated Statement of Income for the year ended December 2, 2017.

The following table summarizes the final fair value measurement of the assets acquired and liabilities assumed as of the acquisition date:

	Final Va December	
Current assets	\$	13,844
Property, plant and equipment		8,641
Goodwill		59,826
Customer relationships		45,300
Trademarks/trade names		4,400
Current liabilities		(8,462)
Total purchase price	\$	123,549

The expected lives of the acquired intangible assets are 15 years for customer relationships and 10 years for trademarks/trade names.

Based on the fair value measurement of the assets acquired and liabilities assumed, we allocated \$59,826 to goodwill for the expected synergies from combining Wisdom Adhesives with our existing business. Such goodwill is deductible for tax purposes. The goodwill was assigned to our Americas Adhesives operating segment.

Note 3: Restructuring Actions

The Company has approved restructuring plans consisting of consolidation plans, organizational changes and other actions related to the integration of the operations of Royal Adhesives with the operations of the Company and other actions to optimize operations during the year ended November 30, 2019 and December 1, 2018. The following table summarizes the pre-tax distribution of charges under these restructuring plans by income statement classification:

	Noven	nber 30, 2019	Decei	mber 1, 2018
Cost of sales	\$	2,082	\$	5,699
Selling, general and administrative		12,453		3,182
	\$	14,535	\$	8,881

The following table summarizes the pre-tax impact of restructuring charges by segment:

	Novem	ber 30, 2019	Decem	ber 1, 2018
Americas Adhesives	\$	3,340	\$	1,601
EIMEA		6,959		2,842
Asia Pacific		915		10
Construction Adhesives		2,103		3,706
Engineering Adhesives		1,218		722
	\$	14,535	\$	8,881

A summary of the restructuring liability is presented below:

	Employee- Related				Other		Total
Balance at end December 2, 2017	\$	1,486	\$	_	\$	20	\$ 1,506
Expense incurred		6,223		2,353		305	8,881
Non-cash charges		-		(1,666)		-	(1,666)
Cash payments		(3,395)		(687)		(325)	(4,407)
Foreign currency translation		(58)		<u>-</u>		<u>-</u>	 (58)
Balance at end December 1, 2018	\$	4,256	\$	_	\$	-	\$ 4,256
Expense incurred		9,140		1,929		3,466	14,535
Non-cash charges		-		(968)		-	(968)
Cash payments		(3,494)		(961)		(2,542)	(6,997)
Foreign currency translation		(72)		<u>-</u>		<u>-</u>	 (72)
Balance at end November 30, 2019	\$	9,830	\$	_	\$	924	\$ 10,754

Non-cash charges include accelerated depreciation resulting from the cessation of use of certain long-lived assets. Restructuring liabilities have been classified as a component of other accrued expenses on the Consolidated Balance Sheets.

Note 4: Supplemental Financial Statement Information

Statement of Income Information

Additional details of income statement amounts for 2019, 2018 and 2017 follow.

	2019	2018	2017
Foreign currency transaction losses, net	\$ (1,156)	\$ (4,450)	\$ (2,411)
Gain on disposal of assets	24,304	2,177	22
Other, net ¹	14,795	20,328	(16,765)
Total other income (expense), net	\$ 37,943	\$ 18,055	\$ (19,154)
Research and development expenses (included in SG&A expenses)	\$ 36,624	\$ 35,534	\$ 30,072

¹ 2017 includes a make whole premium of \$25,535 paid on the refinancing of our long-term debt. See Note 6 for further information.

Balance Sheet Information

Additional details of balance sheet amounts as of November 30, 2019 and December 1, 2018 follow.

<u>Inventories</u>		2019		2018
Raw materials	\$	150,338	\$	169,228
Finished goods		186,929		179,233
Total inventories	\$	337,267	\$	348,461
- C	<u> </u>			2.0,.01
Other current assets				
Other receivables	\$	26,258	\$	26,542
Prepaid income taxes		23,112		31,899
Prepaid taxes other than income taxes		16,836		16,718
Prepaid expenses		20,862		19,161
Assets held for sale		3,655		1,337
Total other current assets	\$	90,723	\$	95,657
	-		·	
Property, plant and equipment	s	70 (21	\$	70.745
Land	3	79,631	Э	79,745
Buildings and improvements		362,114		369,072
Machinery and equipment		808,154		815,084
Construction in progress		54,332		39,689
Total, at cost		1,304,231		1,303,590
Accumulated depreciation		(674,418)		(667,041)
Net property, plant and equipment	\$	629,813	\$	636,549
Other assets		0.0=0		0.506
Investments and company owned life insurance	\$	8,870	\$	8,596
Equity method investments		53,696		51,454
Equity investments		1,667		1,669
Long-term deferred income taxes		29,037		27,112
Prepaid pension costs		28,759		37,881
Prepaid postretirement other than pension		58,307		48,872
Other long-term receivables		46,887		46,755
Other long-term assets		14,129		14,185
Total other assets	\$	241,352	\$	236,524
Other account owners				
Other accrued expenses	en en	15.021	e.	16.500
Taxes other than income taxes	\$	15,031	\$	16,592
Miscellaneous services		5,541		7,694
Customer rebates		11,293		10,082
Interest		4,572		5,996
Insurance		178		401
Product liability		978		1,249
Contingent consideration liability		3,400		3,610
Accrued expenses		19,752		30,164
Total other accrued expenses	\$	60,745	\$	75,788
Other liabilities				
Asset retirement obligations	\$	2,952	\$	3,646
Long-term deferred income taxes	Φ	177,530	Φ	214,295
ě		10,088		9,609
Long-term income tax liability		/		5,974
Long-term deferred compensation		6,929		- ,
Postretirement other than pension		2,879		2,603
Environmental liabilities		4,657		5,183
Other long-term liabilities		37,155	Φ.	23,458
Total other liabilities	\$	242,190	\$	264,768

Additional details on the trade receivables allowance for doubtful accounts, credits related to pricing or quantities shipped and early payment discounts for 2019, 2018 and 2017 are as follows:

	2019			2018	2017		
Balance at beginning of year	\$	14,017	\$	11,670	\$	12,310	
Charged to expenses and other adjustments		2,678		6,445		744	
Write-offs		(5,947)		(2,187)		(1,546)	
Foreign currency translation effect		(66)		(1,911)		162	
Balance at end of year	\$	10,682	\$	14,017	\$	11,670	

Statement of Comprehensive Income Information

The following tables provides details of total comprehensive income (loss):

				November	r 30,	2019		
		нв	Ful	ler Stockho	ldar	2	con	Non- trolling terests
		Pretax	r ui	Tax	iuei	Net		Net
Net income attributable to H.B. Fuller and non-controlling		TICLAX	_	1 ax		1161		1161
interests		-		_	\$	130,817	\$	27
Other comprehensive income (loss) Foreign currency translation adjustment ¹	\$	(20,409)		-		(20,409)		14
Reclassification to earnings: Defined benefit pension plans adjustment ²		(28,635)		6,807		(21,828)		
Interest rate swap ³		(46,254)		11,223		(21,020) (35,031)		-
Other cash flow hedges ³		14,429		(609)		13,820		_
Other comprehensive income (loss)	\$	(80,869)	\$	17,421		(63,448)		14
Comprehensive income	<u>-</u>		<u>-</u>		\$	67,369	\$	41
						<u> </u>		
				Decembe	r 1,	2018		
		и в	D11	lou Stoolshol	سماما		cont	Non- trolling
		Pretax	rui	ler Stockhol Tax	luers	Net		terests Net
Net income attributable to H.B. Fuller and non-controlling		Tictax		1 41		1101		100
interests		_		_	\$	171,208	\$	24
Other comprehensive income (loss) Foreign currency translation adjustment ¹	\$	(71,222)		-		(71,222)		(16)
Reclassification to earnings:		(2 671)		701		(2.070.)		
Defined benefit pension plans adjustment ² Interest rate swap ³		(3,671) 25,819		(6,048)		(2,970) 19,771		-
Other cash flow hedges ³		(4,047)		(2,688)		(6,735)		_
Other comprehensive loss	\$	(53,121)	\$	(8,035)		(61,156)		(16)
Comprehensive income	<u> </u>	(,)	<u>-</u>	(=)===)	\$	110,052	\$	8
-								
				Decembe	r 2,	2017		
		н.в.	Full	ler Stockhol	lders	s	cont	Non- trolling terests
		Pretax		Tax		Net		Net
Net income attributable to H.B. Fuller and non-controlling interests		-		-	\$	59,418	\$	48
Other comprehensive income (loss) Foreign currency translation adjustment ¹ Reclassification to earnings:	\$	29,297		-		29,297		(9)
Defined benefit pension plans adjustment ²		51,282		(16,352)		34,930		_
Interest rate swap ³		3,060		(1,166)		1,894		_
Other cash flow hedges ³		(6,538)		2,491		(4,047)		-
Other comprehensive income (loss)	\$	77,101	\$	(15,027)		62,074		(9)
Comprehensive income					\$	121,492	\$	39

¹ Income taxes are not provided for foreign currency translation relating to indefinite investments in international subsidiaries. The foreign currency translation adjustment for the year ended December 2, 2017 includes the impact of the change in functional currency for our subsidiaries in Latin America.

² Loss reclassified from accumulated other comprehensive income (loss) into earnings as part of net periodic cost related to pension and other postretirement benefit plans is reported in cost of sales and SG&A expenses.

³ Loss reclassified from accumulated other comprehensive income (loss) into earnings is reported in other income (expense), net.

Statement of Total Equity Information

Components of accumulated other comprehensive income (loss) are as follows:

	November 30, 2019					
		Total	H.B. Fulle Stockholde		Non- controlling Interests	
Foreign currency translation adjustment	\$	(147,821)	\$ (147,7	$\sqrt{16}$)	§ (105)	
Interest rate swap, net of taxes of (\$4,300)		(13,338)	(13,3			
Cash flow hedges, net of taxes of \$21		1,763	1,7	763	-	
Defined benefit pension plans adjustment, net of taxes of \$81,891		(165,968)	(165,9	,	-	
Reclassification of AOCI tax effects		(18,341)	(18,3	<u>(41</u>)		
Total accumulated other comprehensive loss	\$	(343,705)	\$ (343,6	<u>(00</u>)	§ (105)	
		I	December 1, 2	2018		
					Non-	
			H.B. Fulle	r	controlling	
		Total	Stockholde		Interests	
Foreign currency translation adjustment		(127,398)	\$ (127,3	307) S	\$ (91)	
Interest rate swap, net of taxes of (\$7,231)		21,693	21,6		-	
Cash flow hedges, net of taxes of \$588		(12,057)	(12,0		-	
Defined benefit pension plans adjustment, net of taxes of \$75,083		(144,140)	(144,1		-	
Reclassification of AOCI tax effects		(18,341)	(18,3		<u>-</u>	
Total accumulated other comprehensive loss	\$	(280,243)	(280,1	.52)	(91)	
		I	December 2, 2	2017		
	-				Non-	
			H.B. Fulle	r	controlling	
		Total	Stockholde		Interests	
Foreign currency translation adjustment		(56,159)	\$ (56,0)84) \$	\$ (75)	
Interest rate swap, net of taxes of (\$1,183)		1,922		922	-	
Cash flow hedges, net of taxes of \$3,276		(5,322)		322)	-	
Defined benefit pension plans adjustment, net of taxes of \$74,382	Φ.	(141,171)	(141,1		- • (75)	
Total accumulated other comprehensive loss	\$	(200,730)	\$ (200,6	<u> </u>	\$ (75)	

Note 5: Goodwill and Other Intangible Assets

Goodwill balances by reportable segment as of November 30, 2019 and December 1, 2018 consisted of the following:

	 2019	 2018
Americas Adhesives	\$ 322,875	\$ 339,800
EIMEA	151,626	155,552
Asia Pacific	21,357	21,428
Construction Adhesives	310,979	310,720
Engineering Adhesives	474,971	477,671
Total	\$ 1,281,808	\$ 1,305,171

Additional details related to goodwill for 2019 and 2018 are as follows.

	2019	2018
Balance at beginning of year	\$ 1,305,171	\$ 1,336,684
Ramapo acquisition	910	-
Dalton Holdings divestiture	(15,757)	-
Adecol acquisition		(1,881)
Royal Adhesives acquisition	_	1,730
Foreign currency translation effect	(8,516)	(31,362)
Balance at end of year	\$ 1,281,808	\$ 1,305,171

We evaluate our goodwill for impairment annually during the fourth quarter or earlier upon the occurrence of substantive unfavorable changes in economic conditions, industry trends, costs, cash flows, or ongoing declines in market capitalization. The quantitative impairment test requires judgment, including the identification of reporting units, the assignment of assets, liabilities and goodwill to reporting units, and the determination of fair value of each reporting unit. The impairment test requires the comparison of the fair value of each reporting unit with its carrying amount, including goodwill. In performing the impairment test, we determined the fair value of our reporting units by using DCF analyses. Determining fair value requires the Company to make judgments about appropriate discount rates, perpetual growth rates and the amount and timing of expected future cash flows. The cash flows employed in the DCF analysis for each reporting unit are based on the reporting unit's budget, long-term business plan, and recent operating performance. Discount rate assumptions are based on an assessment of the risk inherent in the future cash flows of the respective reporting unit and market conditions. Based on the analysis performed during the fourth quarter of 2019, there were no indications of impairment for any of our reporting units.

Balances of amortizable identifiable intangible assets, excluding goodwill and other non-amortizable intangible assets, are as follows:

Amortizable Intangible Assets	Purchased Technology and Patents		Customer Relationships				echnology Cu		Tradename		All Other		<u>Total</u>
As of November 30, 2019 Original cost	\$ \$	109,967 (43,351) 66,616 13	\$ \$	913,968 (223,563) 690,405	\$ <u>\$</u>	62,537 (24,819) 37,718 14	\$ <u>\$</u>	27,453 (23,273) 4,180 10	\$1,113,925 (315,006) \$798,919 17				
As of December 1, 2018 Original cost	\$	118,930 (41,503) 77,427 12	\$	953,929 (175,318) 778,611 17	\$	65,975 (21,573) 44,402 14	\$	33,550 (26,332) 7,218 9	\$ 1,172,384 (264,726) \$ 907,658 17				

Amortization expense with respect to amortizable intangible assets was \$74,091, \$76,490 and \$36,243 in 2019, 2018 and 2017, respectively.

Estimated aggregate amortization expense based on the current carrying value of amortizable intangible assets for the next five fiscal years are as follows:

Fiscal Year	2020		 2021		2022		2023	 2024	Thereafter		
Amortization Expense	\$	69,467	\$ 67,800	\$	66,298	\$	63,448	\$ 58,655	\$	473,251	

The above amortization expense forecast is an estimate. Actual amounts may change from such estimated amounts due to fluctuations in foreign currency exchange rates, additional intangible asset acquisitions, potential impairment, accelerated amortization or other events.

Non-amortizable intangible assets as of November 30, 2019 and December 1, 2018 were \$480 and \$493, respectively, and relate to trademarks and trade names. The change in non-amortizable assets in 2019 compared to 2018 was due to changes in foreign currency exchange rates.

Note 6: Notes Payable, Long-Term Debt and Lines of Credit

Notes Payable

Notes payable were \$15,732 and \$14,770 at November 30, 2019 and December 1, 2018, respectively. This amount primarily represents various foreign subsidiaries' other short-term borrowings that were not part of committed lines. The weighted-average interest rates on short-term borrowings were 8.9 percent, 9.6 percent and 11.0 percent in 2019, 2018 and 2017, respectively. Fair values of these short-term obligations approximate their carrying values due to their short maturity. There were no funds drawn from the short-term committed lines at November 30, 2019.

Long-Term Debt

Long-Term Debt	Weighted- Average Interest Rate at November 30, 2019	Fiscal Year Maturity Date	No	lance at vember), 2019	Balance at December 1, 2018		
Revolving credit facility	3.70%	2022	\$	-	\$	-	
Term Loan B ¹	4.06%	2024		1,675,650		1,964,250	
Public Notes ²	3.78%	2027		300,000		300,000	
Other, including debt issuance cost and discount.				(12,266)		(31,493)	
Total debt			\$	1,963,384	\$	2,232,757	
Less: current maturities				(65,000)		(91,225)	
Total long-term debt, excluding current maturities			\$	1,898,384	\$	2,141,532	

¹ Term Loan B, due on October 20, 2024, \$2,150,000 variable rate at the London Interbank Offered Rate (LIBOR) plus 2.00 percent (3.72 percent at November 30, 2019); \$1,350,000 swapped to various fixed rates as detailed below.

Term Loans

On October 20, 2017, we entered into a secured term loan credit agreement ("Term Loan B Credit Agreement") with a consortium of financial institutions under which we established a \$2,150,000 term loan ("Term Loan B") that we used to repay existing indebtedness, finance working capital needs, finance acquisitions, and for general corporate purposes. The Term Loan B Credit Agreement is secured by a security interest in substantially all of the personal property assets of the Company and each Guarantor, including 100% of the equity interests in certain domestic subsidiaries and 65% of the equity interests of first-tier foreign subsidiaries together with certain domestic material real property. At November 30, 2019, a balance of \$1,675,650 was drawn on the Term Loan B. The interest rate on the Term Loan B is payable at the LIBOR rate plus 2.00 percent (3.72 percent at November 30, 2019). The interest rate is based on a leverage grid. The Term Loan B Credit Agreement expires on October 20, 2024.

On March 9, 2018, we entered into an interest rate swap agreement to convert \$100,000 of our Term Loan B to a fixed interest rate of 4.490 percent. On February 27, 2018, we entered into an interest rate swap agreement to convert \$200,000 of our Term Loan B to a fixed rate of 4.589 percent. On October 20, 2017, we entered into interest rate swap agreements to convert \$1,050,000 of our Term Loan B to a fixed interest rate of 4.0275%. See Note 13 for further discussion of these interest rate swaps.

We are subject to mandatory prepayments in the first quarter of each fiscal year equal to 50% of Excess Cash Flow, as defined in the Term Loan B Credit Agreement, of the prior fiscal year less any voluntary prepayments made during that fiscal year. The Excess Cash Flow Percentage (ECF Percentage) shall be reduced to 25% when our Secured Leverage Ratio is

² Public Notes, due February 15, 2027, \$300,000 4.00 percent fixed; \$150,000 swapped to a variable rate of 1-month LIBOR plus 1.86 percent

below 4.25:1.00 and to 0% when our Secured Leverage Ratio is below 3.75:1.00. The prepayment for the 2019 measurement period was satisfied through amounts prepaid during 2019. We have estimated the 2020 prepayment as shown in the table above, and have classified it as current maturities of long-term debt as of November 30, 2019.

On December 16, 2016 and February 24, 2017, our Senior Notes, Series A and B matured, respectively. On October 20, 2017, we repaid the Term Loan A and Senior Notes, Series C, D and E, with proceeds from the Term Loan B issuance. Interest rate swaps associated with Senior Notes, Series C and E, were terminated with the repayment of these instruments. We recognized a \$168 net gain related to the termination of these interest rate swaps which was recorded as other income, net in our Consolidated Statement of Income as of December 2, 2017. We paid a make whole premium of \$25,535 which was recorded as other expense, net in our Consolidated Statement of Income as of December 2, 2017. Proceeds from the issuance of the Term Loan B were also used to acquire Royal Adhesives. See Note 2 for further discussion of our acquisition of Royal Adhesives.

Public Notes

On February 14, 2017, we issued \$300,000 aggregate principal of 10-year unsecured public notes ("Public Notes") due February 15, 2027 with a fixed coupon of 4.00 percent. Proceeds from this debt issuance were used to repay \$138,000 outstanding under the revolving credit facility at that time and prepay \$158,750 of our Term Loan A. On February 14, 2017, we entered into interest rate swap agreements to hedge \$150,000 of the \$300,000 Public Notes to a variable interest rate of 1-month LIBOR plus 1.86 percent. As a result of applying the hypothetical derivative method of assessing hedge effectiveness in our fair value hedge accounting, the change in the fair value of the interest rate swap and an equivalent amount for the change in the fair value of the debt will be reflected in other income (expense), net. See Note 13 for further discussion of this interest rate swap.

Fair Value of Long-Term Debt

Long-term debt had an estimated fair value of \$2,016,516 and \$2,123,447 as of November 30, 2019 and December 1, 2018, respectively. The fair value of long-term debt is based on quoted market prices for the same or similar issues or on the current rates offered for debt of similar maturities. The estimated fair value of these long-term obligations is not necessarily indicative of the amount that would be realized in a current market exchange.

Long-term Debt Maturities

Maturities of long-term debt for the next five fiscal years are as follows:

Fiscal Year	2020	2021		2022		2023		2024	Tl	hereafter
Long-term debt obligations	\$ 65,000	\$	-	\$	-	\$	-	\$ 1,610,650	\$	300,000

Revolving Credit Facility

On September 29, 2017, we amended our revolving credit facility to become effective with consummation of our acquisition of Royal Adhesives. The revolving credit facility is now secured along with the Term Loan B Credit Agreement, by a first-priority security interest in substantially all of the personal property assets of the Company and each Guarantor, including 100% of the equity interests in certain domestic subsidiaries and 65% of the equity interests of first-tier foreign subsidiaries. Interest on the revolving credit facility is payable at the LIBOR plus 2.00 percent (3.70 percent at November 30, 2019). A facility fee of 0.30 percent of the unused commitment under the revolving credit facility is payable quarterly. The interest rates and the facility fee are based on a leverage grid. The revolving credit facility matures April 12, 2022.

As of November 30, 2019, amounts related to our revolving credit facility was as follows:

	Committed		Drawn		Unused		
Revolving credit facility	\$	400,000	\$	-	\$	393,054	

The secured, multi-currency revolving credit facility can be drawn upon for general corporate purposes up to a maximum of \$400,000, less issued letters of credit. At November 30, 2019, letters of credit reduced the available amount under the revolving credit facility by \$6,946.

Covenants

The secured Term Loan B Credit Agreement and secured revolving credit facility are subject to certain covenants and restrictions. Restrictive covenants include, but are not limited to, limitations on secured and unsecured borrowings, intercompany transfers and investments, third party investments, dispositions of assets, leases, liens, dividends and distributions, and contains a maximum secured debt to trailing twelve months EBITDA requirement. Certain covenants becomes less restrictive after meeting leverage or other financial ratios. In addition, we cannot be a member of any consolidated group as defined for income tax purposes other than with our subsidiaries. At November 30, 2019 and December 1, 2018, all financial covenants were met.

Note 7: Stockholders' Equity

Preferred Stock

The Board of Directors is authorized to issue up to 10,045,900 shares of preferred stock that may be issued in one or more series and with such stated value and terms as the Board of Directors may determine.

Common Stock

There were 160,000,000 shares of common stock with a par value of \$1.00 authorized and 51,241,190 and 50,732,796 shares issued and outstanding at November 30, 2019 and December 1, 2018, respectively.

On April 6, 2017, the Board of Directors authorized a share repurchase program of up to \$200,000 of our outstanding common shares for a period of up to five years. Under the program, we are authorized to repurchase shares for cash on the open market, from time to time, in privately negotiated transactions or block transactions, or through an accelerated repurchase agreement. The timing of such repurchases is dependent on price, market conditions and applicable regulatory requirements. Upon repurchase of the shares, we reduce our common stock for the par value of the shares with the excess being applied against additional paid-in capital. This authorization replaces the September 30, 2010 authorization to repurchase shares. We did not repurchase any shares during 2019 and 2018 under our share repurchase program. During 2017, we repurchased 375,000 shares for \$19,114 under our repurchase programs. Up to \$187,170 of our outstanding common shares may still be repurchased under the current share repurchase program.

Common Shares Outstanding	2019	2018	2017
Beginning balance	50,732,796	50,388,839	50,141,343
Stock options exercised	378,734	198,849	514,064
Deferred compensation paid	5,354	7,152	24,048
Restricted units vested	197,349	209,137	140,614
Shares withheld for taxes	(73,043)	(71,181)	(56,230)
Shares repurchased under repurchase program	<u>-</u>	· -	(375,000)
Ending balance	51,241,190	50,732,796	50,388,839

Note 8: Redeemable Non-Controlling Interest

Prior to the end of the first quarter of 2017, we had a non-controlling interest in H.B. Fuller Kimya Sanayi Ticaret A.S. ("HBF Kimya") which was accounted for as a redeemable non-controlling interest because both the non-controlling shareholder and H.B. Fuller had an option, exercisable beginning August 1, 2018, to require the redemption of the shares owned by the non-controlling shareholder at a price determined by a formula based on 24 months trailing EBITDA. Since the option made the redemption of the non-controlling ownership shares of HBF Kimya outside of our control, these shares were classified as a redeemable non-controlling interest in temporary equity in the Consolidated Balance Sheets. The non-controlling shareholder was entitled to increase his ownership by 1 percent per year for 5 years up to a maximum of 13 percent ownership based on the achievement of profitability targets in each year. The option was subject to a minimum price of €3,500.

The results of operations for the HBF Kimya non-controlling interest were consolidated in our financial statements. Both the non-controlling interest and the accretion adjustment to redemption value were included in net income attributable to non-controlling interests in the Consolidated Statement of Income for the first quarter ended March 4, 2017.

During the first quarter ended March 4, 2017, we purchased the remaining shares from the non-controlling shareholder for €4,206. The difference between the non-controlling interest balance and the purchase price was recorded in additional paidin capital in the first quarter ended March 4, 2017.

Note 9: Accounting for Share-Based Compensation

Overview

We have various share-based compensation programs, which provide for equity awards including non-qualified stock options, incentive stock options, restricted stock shares, restricted stock units, performance awards and deferred compensation. These equity awards fall under several plans and are described below. Starting in 2014, we no longer grant restricted stock shares.

Share-based Compensation Plans

We currently grant stock options and restricted stock units under equity compensation and deferred compensation plans.

Stock options are granted to officers and key employees at prices not less than fair market value at the date of grant. Non-qualified stock options are generally exercisable beginning one year from the date of grant in cumulative yearly amounts of 33.3 percent. Incentive stock options are based on certain performance based criteria and are generally exercisable at a stated date when the performance criteria is measured. Stock options generally have a contractual term of 10 years. Options exercised represent newly issued shares.

Restricted stock awards are nonvested stock-based awards that may include grants of restricted stock shares or restricted stock units. Restricted stock awards are independent of option grants and are subject to forfeiture if employment terminates prior to the release of the restrictions. Such awards generally vest beginning one year from the date of grant or 33.3 percent per year for three years, depending on the grant. During the vesting period, ownership of the shares cannot be transferred.

Restricted stock shares granted represent newly issued shares and have the same cash dividend and voting rights as other common stock and are considered to be currently issued and outstanding. The cash dividends on restricted stock shares are forfeitable.

Restricted stock units have dividend equivalent rights equal to the cash dividend paid on restricted stock shares. However, restricted stock units do not have voting rights of common stock and are not considered issued and outstanding upon grant. Restricted stock units become newly issued shares when vested. The dividend equivalent rights for restricted stock units are forfeitable.

We expense the cost, which is the grant date fair market value, of both the restricted stock shares and the restricted stock units ratably over the period during which the restrictions lapse. The grant date fair value is our closing stock price on the date of grant.

We are required to recognize compensation expense when an employee is eligible to retire. We consider employees eligible to retire at age 55 and after 10 years of service. Accordingly, the related compensation expense is recognized immediately for awards granted to retirement eligible employees or over the period from the grant date to the date retirement eligibility is achieved, if less than the stated vesting period.

2018 Master Incentive Plan

This plan allows for granting of awards to employees. The plan permits granting of (a) stock options; (b) stock appreciation rights; (c) restricted stock and restricted stock units; (d) performance awards; (e) dividend equivalents; (f) other awards based on our common stock, including shares for amounts employees deferred under the Key Employee Deferred Compensation Plan. There were 1,474,436 common shares available for grant as of November 30, 2019.

Year 2016 Master Incentive Plan

This plan allows for granting of awards to employees. The plan permits granting of (a) stock options; (b) stock appreciation rights; (c) restricted stock awards; (d) performance awards; (e) dividend equivalents; and (f) other awards based on our common stock, including shares for amounts employees deferred under the Key Employee Deferred Compensation Plan.

2009 Directors' Stock Incentive Plan

This plan permits granting of (a) shares for amounts non-employee directors defer under the Directors' Deferred Compensation Plan and (b) discretionary grants of restricted stock, stock options, stock appreciation rights, performance awards and other stock awards.

Directors' Deferred Compensation Plan

This plan allows non-employee directors to defer all or a portion of their retainer and meeting fees in a number of investment choices, including units representing shares of our common stock. We provide a 10 percent match on deferred compensation invested in these units. These units are required to be paid out in our common stock.

Key Employee Deferred Compensation Plan

This plan allows key employees to defer a portion of their eligible compensation in a number of investment choices, including units representing shares of company common stock. We provide a 10 percent match on deferred compensation invested in these units.

Grant-Date Fair Value

We use the Black-Scholes option-pricing model to calculate the grant-date fair value of stock option awards. The fair value of options granted during 2019, 2018 and 2017 were calculated using the following assumptions:

	2019	2018	2017
Expected life (in years)	4.75	4.75	4.75
Weighted-average expected volatility	24.26 %	23.31 %	24.17 %
Expected volatility range	23.88% - 24.76%	23.18% - 23.58 %	23.48% - 24.88 %
Risk-free interest rate	1.34% - 2.55%	2.38% - 2.95 %	1.80% - 1.99 %
Weighted-average expected dividend	1.40 %	1.14 %	1.07 %
Expected dividend yield range	1.25% - 1.45%	1.12% - 1.24%	1.02% - 1.16%
Weighted-average fair value of grants	\$ 9.76	\$ 11.38	\$ 11.49

Expected life – We use historical employee exercise and option expiration data to estimate the expected life assumption for the Black-Scholes grant-date valuation. We believe that this historical data is currently the best estimate of the expected term of a new option. We use a weighted-average expected life for all awards.

Expected volatility – Volatility is calculated using our stock's historical volatility for the same period of time as the expected life. We have no reason to believe that its future volatility will differ from the past.

Risk-free interest rate – The rate is based on the U.S. Treasury yield curve in effect at the time of the grant for the same period of time as the expected life.

Expected dividend yield – The calculation is based on the total expected annual dividend payout divided by the average stock price.

Expense

We use the straight-line attribution method to recognize share-based compensation expense for option awards, restricted stock shares and restricted stock units with graded and cliff vesting. Incentive stock options and performance awards are based on certain performance-based metrics and the expense is adjusted quarterly, based on our projections of the achievement of those metrics. The amount of share-based compensation expense recognized during a period is based on the value of the portion of the awards that are ultimately expected to vest. The expense is recognized over the requisite service period, which for us is the period between the grant date and the earlier of the award's stated vesting term or the date the employee is eligible for early vesting based on the terms of the plans.

Total share-based compensation expense was \$24,003, \$17,113 and \$17,503 for 2019, 2018 and 2017, respectively. All share-based compensation was recorded as SG&A expense.

As of November 30, 2019, \$6,348 of unrecognized compensation costs related to unvested stock option awards is expected to be recognized over a weighted-average period of 0.8 years. Unrecognized compensation costs related to unvested restricted stock units was \$7,477 which is expected to be recognized over a weighted-average period of 0.9 years.

Stock Option Activity

The stock option activity for the years ended November 30, 2019, December 1, 2018 and December 2, 2017 is summarized below:

			eighted- verage
	Options	Exer	cise Price
Outstanding at December 3, 2016	2,986,481	\$	34.92
Granted	1,493,133		53.97
Exercised	(514,064)		34.51
Forfeited or cancelled	(104,786)		37.20
Outstanding at December 2, 2017	3,860,764	\$	42.28
Granted	818,537		53.06
Exercised	(198,849)		31.37
Forfeited or cancelled	(14,346)		48.62
Outstanding at December 1, 2018	4,466,106	\$	44.72
Granted	1,020,246		45.53
Exercised	(378,734)		28.74
Forfeited or cancelled	(47,308)		48.90
Outstanding at November 30, 2019	5,060,310	\$	46.04

The fair value of options granted during 2019, 2018 and 2017 was \$9,956, \$9,217 and \$17,157, respectively. Total intrinsic value of options exercised during 2019, 2018 and 2017 was \$7,590, \$4,534 and \$8,677, respectively. For options outstanding at November 30, 2019, the weighted-average remaining contractual life was 6.8 years and the aggregate intrinsic value was \$28,160. There were 2,669,829 options exercisable at November 30, 2019, with a weighted-average remaining contractual life of 5.4 years and an aggregate intrinsic value of \$23,850. Intrinsic value is the difference between our closing stock price on the respective trading day and the exercise price, multiplied by the number of options exercised. Proceeds received from option exercises during the year ended November 30, 2019, December 1, 2018 and December 2, 2017 were \$10,885, \$6,237 and \$17,705, respectively. The Company's actual tax benefits realized for the tax deductions related to the exercise of stock options for 2019, 2018 and 2017 was \$1,298, \$868 and \$2,723, respectively.

Restricted Stock Activity

The nonvested restricted stock activity for the years ended November 30, 2019, December 1, 2018 and December 2, 2017 is summarized below:

	Units	Shares	Total	A D	eighted- Average Grant ate Fair Value	Weighted- Average Remaining Contractual Life (in Years)
Nonvested at December 3, 2016	352,744	36,953	389,697	\$	38.36	1.0
Granted	287,684	-	287,684		50.05	1.2
Vested	(156,152)	(36,953)	(193,105)		39.92	-
Forfeited	(22,035)	<u>-</u>	(22,035)		39.67	1.1
Nonvested at December 2, 2017	462,241	_	462,241	\$	44.80	1.0
Granted	165,909	-	165,909		45.92	2.2
Vested	(209,137)	-	(209,137)		40.38	-
Forfeited	(4,660)	<u> </u>	(4,660)		47.27	1.1
Nonvested at December 1, 2018	414,353	-	414,353	\$	47.45	1.0
Granted	302,132	-	302,132		44.29	2.2
Vested	(197,349)	-	(197,349)		45.45	-
Forfeited	(31,139)		(31,139)		43.37	0.4
Nonvested at November 30, 2019	487,997	-	487,997	\$	46.56	0.8

Total fair value of restricted stock vested during 2019, 2018, and 2017 was \$8,970, \$8,892 and \$7,708, respectively. The total fair value of nonvested restricted stock at November 30, 2019 was \$22,722.

We repurchased 73,043, 71,181 and 56,230 restricted stock shares during 2019, 2018 and 2017, respectively, in conjunction with restricted stock share vestings. The repurchases relate to statutory minimum tax withholding. The Company's actual tax benefits realized for the tax deductions related to the restricted stock vested for 2019, 2018 and 2017 was \$1,574, \$2,649 and \$3,059 respectively.

Deferred Compensation Activity

Deferred compensation units are fully vested at the date of contribution. The deferred compensation units outstanding for the years ended November 30, 2019, December 1, 2018 and December 2, 2017 is summarized below:

	Non-employee Directors	Employees	Total
Units outstanding December 3, 2016	424,319	41,116	465,435
Participant contributions	16,051	5,567	21,618
Company match contributions ¹	17,343	557	17,900
Payouts	(14,143)	(15,634)	(29,777)
Units outstanding December 2, 2017	443,570	31,606	475,176
Participant contributions	16,164	7,589	23,753
Company match contributions ¹	20,053	759	20,812
Payouts	· -	(10,219)	(10,219)
Units outstanding December 1, 2018	479,787	29,735	509,522
Participant contributions	22,153	11,166	33,319
Company match contributions ¹	23,720	1,117	24,837
Payouts	· -	(5,354)	(5,354)
Units outstanding November 30, 2019	525,660	36,664	562,324

The non-employee directors' company match includes 21,504 and 18,436 and 15,738 deferred compensation units paid as discretionary awards to all non-employee directors in 2019, 2018 and 2017, respectively.

The fair value of non-employee directors' company matches for 2019, 2018 and 2017 was \$167, \$152 and \$133, respectively. The fair value of the non-employee directors' discretionary award was \$1,035 for 2019 and 2018 and \$805 for 2017. The fair value of employee company matches was \$41, \$27 and \$26 for 2019, 2018 and 2017, respectively.

Note 10: Revenue

Revenue Recognition

We sell a variety of adhesives, sealants and other specialty chemical products to a diverse customer base. The vast majority of our arrangements contain a single performance obligation to transfer manufactured goods to the customer as governed by an individual purchase order.

We recognize revenue at the amount of consideration to which we expect to be entitled in exchange for transferring the promised goods to the customer. The transaction price includes an estimation of any variable amounts of consideration to which we will be entitled. The most common forms of variable consideration within our arrangements are customer rebates, which are recorded as a reduction to revenue at the time of the initial sale using the expected value method. The expected value method is the sum of probability-weighted amounts in a range of possible consideration amounts and is based on a consideration of historical, current and forecast information. Changes in estimates are updated each reporting period. There are no material instances where variable consideration is constrained and not recorded at the initial time of sale. Product returns are recorded as a reduction to revenue based on historical experience and anticipated sales returns that occur in the normal course of business. We primarily have assurance-type warranties that do not result in separate performance obligations. We have elected to present revenue net of sales taxes and other similar taxes.

We recognize revenue when control of goods is transferred to the customer. For the vast majority of our arrangements, control transfers at a point in time either upon shipment or upon delivery of the goods to the customer. The timing of transfer of control is determined considering the timing of the transfer of legal title, physical possession, and risks and rewards of goods to the customer.

We record shipping and handling revenue in net revenues and outbound shipping and handling costs in cost of goods sold. The majority of our shipping and handling activities are performed prior to transfer of control of the goods to the customer. For those arrangements where we provide shipping and handling services after control of the goods has transferred to the customer, we have elected the practical expedient allowed under ASC 606 to account for these activities as a fulfillment cost rather than as a separate performance obligation. Election of this practical expedient resulted in an increase in the balance of retained earnings of \$1,776 at the beginning of fiscal 2019. Based on an analysis of the financial statement line items affected in the application of ASU No. 2014-09 as compared with previous reporting, the Company has determined that the quantitative changes to each financial statement line item are not material. As a result, for the year ended November 30, 2019, the Company is not disclosing the quantitative amount by which each financial statement line item is affected in the current reporting by the application of this ASU as compared with the guidance that was in effect before the change.

Practical Expedients Elected

We have elected the following practical expedients allowable under ASC 606:

- Election to present revenue net of sales taxes and other similar taxes
- Election to account for shipping and handling services performed after control has transferred to the customer as fulfillment activities

We view the following disaggregation of revenue by product type as useful to understanding the composition of revenue recognized during year ended November 30, 2019, December 1, 2018 and December 2, 2017:

			Novem	ber 30, 2019					
	Americas Adhesives	EIMEA	Asia Pacific	Construction Adhesives	Engineering Adhesives	Total			
Durable assembly	\$ 277,759 128,527 284,100 332,389 - \$1,022,775	\$ 249,482 175,857 125,820 89,754 - \$ 640,913	\$ 66,366 113,144 55,941 36,134 - \$ 271,585	\$ - - 394,912 \$ 394,912	\$ - - - 566,815 \$ 566,815	\$ 593,607 417,528 465,861 458,277 394,912 566,815 \$2,897,000			
		December 1, 2018							
	Americas Adhesives	EIMEA	Asia Pacific	Construction Adhesives	Engineering Adhesives	Total			
Durable assembly	\$ 287,520 129,628 286,979 347,238 - - \$ 1,051,365	\$ 275,294 191,008 133,077 98,069 - - \$ 697,448	\$ 67,083 115,687 55,232 40,160 - \$ 278,162	\$ - - - 452,046 - \$ 452,046	\$ - - - 561,981 \$ 561,981	\$ 629,897 436,323 475,288 485,467 452,046 561,981 \$3,041,002			
			Decem	ber 2, 2017					
	Americas Adhesives	EIMEA	Asia Pacific	Construction Adhesives	Engineering Adhesives	Total			
Durable assembly	\$ 250,699 131,150 280,775 240,153 - - \$ 902,777	\$ 171,731 179,249 120,275 93,184 - - \$ 564,439	\$ 61,253 108,777 54,408 40,258 - - \$ 264,696	\$ - - 260,466 - \$ 260,466	\$ - - - 313,665 \$ 313,665	\$ 483,683 419,176 455,458 373,595 260,466 313,665 \$ 2,306,043			

Note 11: Pension and Postretirement Benefits

Defined Contribution Plan

All U.S. employees have the option of contributing up to 75 percent of their pre-tax earnings to a 401(k) plan, subject to IRS limitations. We match up to the first 4 percent of each employee's pre-tax earnings, based on the employee's contributions. All U.S. employees are eligible for a separate annual retirement contribution to the 401(k) plan of 3 percent of pay, that is invested based on the election of the individual participant. The 3 percent contribution is in addition to our 4 percent matching contribution described above and is in lieu of participation in our defined benefit pension plan. The total contribution to the 401(k) plan for 2019 was \$10,784 which included the cost of the 4 percent company match of \$6,418 and the additional 3 percent contribution of \$4,366. The total contributions to the 401(k) plan were \$11,034 and \$10,899 in 2018 and 2017, respectively.

The defined contribution plan liability recorded in the Consolidated Balance Sheets was \$8,494 and \$20,183 in 2019 and 2018, respectively for the U.S. Plan and several statutorily required non-U.S. Plans.

Defined Benefit Plans

Noncontributory defined benefit pension plans cover all U.S. employees employed prior to January 1, 2007. Benefits for these plans are based primarily on each employee's years of service and average compensation. During 2011, we made significant changes to our U.S. Pension Plan. The changes included: benefits under the Plan were locked-in using service and salary as of May 31, 2011, participants no longer earn benefits for future service and salary as they had in the past, affected participants receive a three percent increase to the locked-in benefit for every year they continue to work for us and we are making a retirement contribution of three percent of eligible compensation to the 401(k) Plan for those participants. The funding policy is consistent with the funding requirements of federal law and regulations. Plan assets consist principally of listed equity securities and bonds. During 2015, we amended the U.S. Pension Plan to add a program for eligible employees to take a lump sum distribution. No lump sum payments were paid during 2019, 2018 and 2017. Other U.S. postretirement benefits are funded through a Voluntary Employees' Beneficiaries Association Trust.

Health care and life insurance benefits are provided for eligible retired employees and their eligible dependents. These benefits are provided through various insurance companies and health care providers. Costs are accrued during the years the employee renders the necessary service.

Certain non-U.S. subsidiaries provide pension benefits for their employees consistent with local practices and regulations. These plans are primarily defined benefit plans covering substantially all employees upon completion of a specified period of service. Benefits for these plans are generally based on years of service and annual compensation.

Following is a reconciliation of the beginning and ending balances of the benefit obligation and fair value of plan assets as of November 30, 2019 and December 1, 2018:

Pancian Ranafite

Other Postrotirement

		Pension	Benefits			Other Postretirement				
	U.S. F	Plans	N	on-U.S. l	Plans	Benefits				
	2019	2018	2019)	2018	2019	2018			
Change in projected benefit										
<u>obligation</u>										
Benefit obligation at beginning of										
year	\$ 336,889	\$ 379,359	\$ 208	3,075 \$	223,982	\$ 36,842	\$ 43,325			
Service cost	4	56	2	2,237	2,311	98	173			
Interest cost	14,691	12,251	4	1,678	4,671	1,550	1,484			
Participant contributions	-	-		-	-	240	330			
Plan amendments	-	-		-	1,600	-	-			
Actuarial (gain)/loss ¹	49,211	(33,052)	30),517	(3,377)	3,749	(5,225)			
Other	_	-		(103)	-	-	-			
Settlement payments	-	-		(307)	-	-	-			
Benefits paid	(20,407)	(21,725)	(8	3,356)	(10,059)	(3,223)	(3,245)			
Foreign currency translation effect		-	,	2,199)	(11,053)	-	-			
Benefit obligation at end of year	380,388	336,889	234	1,542	208,075	39,256	36,842			
Change in plan assets										
Fair value of plan assets at										
beginning of year	346,460	378,099	169	9,455	187,708	82,910	79,300			
Actual return on plan assets	54,527	(11,768)		2,945	(1,240)	12,046	4,058			
Employer contributions	3,124	1,854		2,437	2,237	2,501	2,467			
Participant contributions		1,051	-	-,	2,237	240	330			
Other	_	_		(103)	_		-			
Benefits paid ²	(20,584)	(21,725)		3,356)	(10,059)	(3,223)	(3,245)			
Foreign currency translation effect	(20,001)	(21,723)	,	1,047)	(9,191)	(0,220)	(3,2 13)			
Fair value of plan assets at end of			(-	1,017)	(2,121)					
year	383,527	346,460	194	5,331	169,455	94,474	82,910			
Plan assets in excess of (less than)	303,347	370,700	10.	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	107,733	77,77	02,710			
	\$ 3,139	\$ 9,571	\$ (49	9,211) \$	(38,620)	\$ 55,218	\$ 46,068			

¹ Actuarial loss in 2019 and actuarial gain in 2018 for the U.S. Plans is primarily due to assumption changes. Actuarial loss in 2019 and actuarial gain in 2018 for the Non-U.S. Plans are due to both assumption changes and plan experience.

² Amount excludes benefit payments made from sources other than plan assets.

Amounts in accumulated other comprehensive income (loss) that have not been recognized as components of net periodic

<u>benefit cost</u>	Pension Benefits								Other Postretirement			
	U.S.	Plar	ıs	Non-U.S. Plans					Benefits			
	2019		2018		2019		2018		2019		2018	
Unrecognized actuarial loss	\$ 146,149	\$	130,661	\$	83,457	\$	69,762	\$	2,114	\$	3,430	
Unrecognized prior service												
(benefit) cost	 (9)		4		1,476		1,520		-		=	
Ending balance	\$ 146,140	\$	130,665	\$	84,933	\$	71,282	\$	2,114	\$	3,430	

	Pension Benefits								(Other Postretirement				
		U.S.	Plar	18		Non-U.	lans		Benefits					
		2019		2018		2019		2018		2019		2018		
Statement of financial position														
as of fiscal year-end														
Non-current assets	\$	22,480	\$	28,396	\$	6,263	\$	9,467	\$	58,307	\$	48,872		
Accrued benefit cost														
Current liabilities		(1,418)		(1,493)		(1,723)		(2,077)		(210)		(201)		
Non-current liabilities		(17,922)		(17,332)		(53,750)	1	(46,010)		(2,879)		(2,603)		
Ending balance	\$	3,140	\$	9,571	\$	(49,210)	\$	(38,620)	\$	55,218	\$	46,068		

The accumulated benefit obligation of the U.S. pension and other postretirement plans was \$409,800 at November 30, 2019 and \$364,788 at December 1, 2018. The accumulated benefit obligation of the non-U.S. pension plans was \$224,619 at November 30, 2019 and \$200,193 at December 1, 2018.

The following amounts relate to pension plans with accumulated benefit obligations in excess of plan assets as of November 30, 2019 and December 1, 2018:

	P	ension Ber	ıefit	s and Oth	er P	ostretirem	ent	Benefits
		U.S.	Plai	18		Non-U.	S. P	lans
		2019		2018		2019	2018	
Accumulated benefit obligation	\$	24,344	\$	23,289	\$	125,073	\$	115,725
Fair value of plan assets		5,004		4,514		79,437		75,397

The following amounts relate to pension plans with projected benefit obligations in excess of plan assets as of November 30, 2019 and December 1, 2018:

	P	ension Ber	ıefit	s and Oth	er P	ostretirem	ent	Benefits
		U.S.	Plar	ıs		Non-U.	S. P	lans
		2019 2018				2019	2018	
Projected benefit obligation	\$	24,344	\$	23,338	\$	134,910	\$	123,484
Fair value of plan assets		5,004		4,514		79,437		75,397

Information about the expected cash flows is as follows:

Expected return on plan assets ...

Rate of compensation increase¹...

7.49 %

4.50 %

7.75 %

4.50%

	Pension Benefits					Other	
	U	.S. Plans		Non-U.S. Plans	Postretirement Benefits		
Employer contributions							
2020	\$	312	\$	173	\$	1,500	
Expected benefit payments							
2020	\$	21,252	\$	8,091	\$	3,023	
2021		21,022		8,548		3,003	
2022		21,288		8,620		2,971	
2023		21,698		8,562		2,921	
2024		21,742		8,581		2,865	
2025-2029		108,959		45,646		12,832	

Components of net periodic benefit cost and other supplemental information for the years ended November 30, 2019, December 1, 2018 and December 2, 2017 are as follows:

				Other							
		U.S. Plans		No	n-U.S. Plans	}	Postretirement Benefits				
Net periodic cost											
<u>(benefit)</u>	2019	2018	2017	2019	2018	2017	2019	2018	2017		
Service cost	\$ 4	\$ 56	\$ 111	\$ 2,237	\$ 2,311	\$ 2,125	\$ 98	\$ 173	\$ 208		
Interest cost	14,691	12,251	15,836	4,678	4,671	4,709	1,550	1,484	1,593		
Expected return											
on assets	(25,305)	(26,167)	(25,458)	(10,224)	(11,105)	(9,853)	(7,013)	(6,896)	(5,788)		
Amortization:											
Prior service cost											
(benefit)	13	29	29	64	(4)	(4)	-	-	-		
Actuarial loss	4,677	5,904	5,905	3,114	2,901	3,492	33	60	1,010		
Curtailment loss	-	-	-	83	-	_	-	-	=		
Settlement charge		-	-	-	-	16	-	-	=		
Net periodic											
(benefit) cost	\$ (5,920)	\$ (7,927)	\$ (3,577)	\$ (48)	\$ (1,226)	\$ 485	\$ (5,332)	\$ (5,179)	\$ (2,977)		

]	Pension E	Benefits				Other		
	U.	S. Plans		Non	-U.S. Plar	18	Postretirement Benefits			
Weighted-average assumptions										
used to determine benefit										
<u>obligations</u>	2019	2018	2017	2019	2018	2017	2019	2018	2017	
Discount rate	3.17 %	4.50 %	3.72 %	1.35 %	2.29 %	2.12 %	3.00 %	4.37 %	3.54 %	
Rate of compensation increase ¹	4.50 %	4.50 %	4.50 %	1.71 %	1.75 %	1.71 %	N/A	N/A	N/A	
Weighted-average assumptions										
used to determine net costs										
for years ended	2019	2018	2017	2019	2018	2017	2019	2018	2017	
Discount rate	4.50 %	3.72 %	4.08 %	2.30 %	2.10 %	2.15 %	4.37 %	3.54 %	3.85 %	

¹ Benefits under the U.S. Pension Plan were locked-in as of May 31, 2011 and no longer include compensation increases. The 4.50 percent rate for 2019, 2018 and 2017 are for the supplemental executive retirement plan only.

7.75 %

4.50%

6.21 %

1.71 %

6.20%

1.75 %

6.21 %

1.47 %

8.50 %

N/A

8.75%

N/A

8.75%

N/A

The discount rate assumption is determined using an actuarial yield curve approach, which results in a discount rate that reflects the characteristics of the plan. The approach identifies a broad population of corporate bonds that meet the quality and size criteria for the particular plan. We use this approach rather than a specific index that has a certain set of bonds that may or may not be representative of the characteristics of our particular plan. A higher discount rate decreases the present value of the pension obligations. The discount rate for the U.S. pension plan was 3.19 percent at November 30. 2019, compared to 4.51 percent at December 1, 2018 and 3.73 percent at December 2, 2017. Net periodic pension cost for a given

fiscal year is based on assumptions developed at the end of the previous fiscal year. A discount rate change of 0.5 percentage points at November 30, 2019 would impact U.S. pension and other postretirement plan (income) expense by approximately \$235 (pre-tax) in fiscal 2020. Discount rates for non-U.S. plans are determined in a manner consistent with the U.S. plan.

For the U.S. Pension Plan, we adopted the Adjusted Pri-2012 base mortality table projected generationally using scale MP-2019.

The expected long-term rate of return on plan assets assumption for the U.S. pension plan was 7.50 percent in 2019 and 7.75 percent in 2018 and 2017. Our expected long-term rate of return on U.S. plan assets was based on our target asset allocation assumption of 60 percent equities and 40 percent fixed-income. Management, in conjunction with our external financial advisors, determines the expected long-term rate of return on plan assets by considering the expected future returns and volatility levels for each asset class that are based on historical returns and forward-looking observations. For 2019, the expected long-term rate of return on the target equities allocation was 8.00 percent and the expected long-term rate of return on the target fixed-income allocation was 4.45 percent. The total plan rate of return assumption included an estimate of the effect of diversification and the plan expense. A change of 0.5 percentage points for the expected return on assets assumption would impact U.S. net pension and other postretirement plan expense by approximately \$2,390 (pre-tax).

Management, in conjunction with our external financial advisors, uses the actual historical rates of return of the asset categories to assess the reasonableness of the expected long-term rate of return on plan assets.

The expected long-term rate of return on plan assets assumption for non-U.S. pension plans was a weighted-average of 6.21 percent in 2019 compared to 6.20 percent in 2018 and 6.21 percent in 2017. The expected long-term rate of return on plan assets assumption used in each non-U.S. plan is determined on a plan-by-plan basis for each local jurisdiction and is based on expected future returns for the investment mix of assets currently in the portfolio for that plan. Management, in conjunction with our external financial advisors, develops expected rates of return for each plan, considers expected long-term returns for each asset category in the plan, reviews expectations for inflation for each local jurisdiction, and estimates the effect of active management of the plan's assets. Our largest non-U.S. pension plans are in the United Kingdom and Germany. The expected long-term rate of return on plan assets for the United Kingdom was 6.75 percent and the expected long-term rate of return on plan assets for Germany was 5.75 percent. Management, in conjunction with our external financial advisors, uses actual historical returns of the asset portfolio to assess the reasonableness of the expected rate of return for each plan.

Assumed health care trend rates	2019	2018	2017
Health care cost trend rate assumed for next year	7.00 %	6.25 %	6.50 %
Rate to which the cost trend rate is assumed to decline (the			
ultimate trend rate)	0.25 %	0.25 %	5.00 %
Fiscal year that the rate reaches the ultimate trend rate	2028	2024	2024

The asset allocation for the company's U.S. and non-U.S. pension plans at the end of 2019 and 2018 follows.

						Other Postretirement				
	U.S. Pension Plans			Non-U.S.	Pension	Plans	Plans			
		Percentage of			Percenta	age of	Percentage of			
		Plan Ass	ets at		Plan Ass	sets at		Plan Ass	sets at	
	Target	Year-l	End	Target	Year-l	End	Target	Year-	End	
Asset Category	2019	2019	2018	2019	2019	2018	2019	2019	2018	
Equities	60.0 %	57.7 %	59.5 %	49.0 %	49.6 %	50.8 %	0.0 %	0.0%	0.0%	
Fixed income	40.0%	63.8 %	40.0%	51.0 %	50.1 %	48.7 %	0.0%	0.0%	0.0%	
Insurance	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	99.6%	99.4 %	
Cash ¹	0.0 %	<u>-21.5</u> %	0.5 %	0.0 %	0.3 %	0.5 %	0.0 %	0.4 %	0.6%	
Total	100 %	100 %	100 %	100 %	100 %	100 %	100 %	100 %	100 %	
Total	100 %	100 %	100 %	<u>100</u> %	100 %	100 %	<u>100</u> %	100 %	<u>100</u> %	

¹ Negative cash for 2019 represents unsettled pending trades within an investment that are classified in cash and cash equivalents until settled.

Plan Asset Management

Plan assets are held in trust and invested in mutual funds, separately managed accounts and other commingled investment vehicles holding U.S. and non-U.S. equity securities, fixed income securities and other investment classes. We employ a total return approach whereby a mix of equities and fixed income investments are used to maximize the long-term return of plan assets for a prudent level of risk. Futures and options may also be used to enhance risk-adjusted long-term returns while improving portfolio diversification and duration. Risk management is accomplished through diversification across asset classes, utilization of multiple investment managers and general plan-specific investment policies. Risk tolerance is established through careful consideration of the plan liabilities, plan funded status and our assessment of our overall liquidity position. This asset allocation policy mix is reviewed annually and actual versus target allocations are monitored regularly and rebalanced on an as-needed basis. Plan assets are invested using a combination of active and passive investment strategies. Passive, or "indexed" strategies, attempt to mimic rather than exceed the investment performance of a market benchmark. The plans' active investment strategies employ multiple investment management firms which in aggregate cover a range of investment styles and approaches. Performance is monitored and compared to relevant benchmarks on a regular basis.

The U.S. pension plans consist of two plans: a pension plan and a supplemental executive retirement plan ("SERP"). There were no assets in the SERP in 2019 and 2018. Consequently, all of the data disclosed in the asset allocation table for the U.S. pension plans pertain to our U.S. pension plan.

During 2019, we maintained our assets within the allowed ranges of the target asset allocation mix of 60 percent equities and 40 percent fixed income plus or minus 5 percent and continued our focus to reduce volatility of plan assets in future periods and to more closely match the duration of the assets with the duration of the liabilities of the plan.

The non-U.S. pension plans consist of all the pension plans administered by us outside the U.S., principally consisting of plans in Germany, the United Kingdom, France and Canada. During 2019 we maintained our assets for the non-U.S. pension plans at the specific target asset allocation mix determined for each plan plus or minus the allowed rate and continued our focus to reduce volatility of plan assets in future periods and to more closely match the duration of the assets with the duration of the liabilities of the individual plans. We plan to maintain the portfolios at their respective target asset allocations in 2020.

Other postretirement benefits plans consist of two U.S. plans: a retiree medical health care plan and a group term life insurance plan. There were no assets in the group term life insurance plan for 2019 and 2018. Consequently, all of the data disclosed in the asset allocation table for other postretirement plans pertain to our retiree medical health care plan. Our investment strategy for other postretirement benefit plans is to own insurance policies that maintain an asset allocation nearly completely in equities. These equities are invested in a passive portfolio indexed to the S&P 500.

Fair Value of Plan Assets

The following table presents plan assets categorized within a three-level fair value hierarchy as described in Note 14.

	November 30, 2019									
U.S. Pension Plans	Level 1		Level 2		Level 3		Total Assets			
Equities	\$	126,178	\$	95,271	\$	-	\$	221,449		
Fixed income		119,103		125,329		219		244,651		
Cash ²		(83,099)		140				(82,959)		
Total categorized in the fair value hierarchy		162,182		220,740		219		383,141		
Other investments measured at NAV ¹								386		
Total	\$	162,182	\$	220,740	\$	219	\$	383,527		
Non-U.S. Pension Plans		Level 1		Level 2		Level 3	To	tal Assets		
Equities	\$	32,045	\$	1,247	\$		\$	33,292		
Fixed income		46,262		6,819		675		53,756		
Cash		506		-		-		506		
Total categorized in the fair value hierarchy		78,813		8,066		675		87,554		
Other investments measured at NAV ¹								97,777		
Total	\$	78,813	\$	8,066	\$	675	\$	185,331		
	_				_					

Other Postretirement Benefits	Level 1		Level 2		Level 3		Total Assets	
Insurance	\$	-	\$	-	\$	94,082	\$	94,082
Cash		392				-		392
Total	\$	392	\$	-	\$	94,082	\$	94,474
				Decembe				
U.S. Pension Plans	_	Level 1		Level 2		Level 3	To	tal Assets
Equities	\$	121,087	\$	85,007	\$	-	\$	206,094
Fixed income		33,892		104,484		266		138,642
Cash		1,222		148				1,370
Total categorized in the fair value hierarchy		156,201		189,639		266		346,106
Other investments measured at NAV ¹								354
Total	\$	156,201	\$	189,639	\$	266	\$	346,460
No. H.C. Don'd at Disco		T11		T13		I12	TP -	
Non-U.S. Pension Plans		Level 1	Φ.	Level 2		Level 3		tal Assets
Equities	\$	30,123	\$	1,073	\$	-	\$	31,196
Fixed income		44,158		6,394		662		51,214
(asn		150						
		450	_	7.467		-		450
Total categorized in the fair value hierarchy		450 74,731		7,467		662		82,860
Total categorized in the fair value hierarchy Other investments measured at NAV ¹	_	74,731	Φ.		Φ.		<u></u>	82,860 86,595
Total categorized in the fair value hierarchy	\$		\$	7,467	\$	662	\$	82,860
Total categorized in the fair value hierarchy Other investments measured at NAV ¹		74,731	\$			662		82,860 86,595 169,455
Total categorized in the fair value hierarchy Other investments measured at NAV ¹ Total		74,731 74,731	<u>\$</u>	7,467		662 Level 3		82,860 86,595 169,455
Total categorized in the fair value hierarchy Other investments measured at NAV ¹ Total Other Postretirement Benefits	<u> </u>	74,731 74,731	_	7,467		662	То	82,860 86,595 169,455

¹ In accordance with ASC Topic 820-10, Fair Value Measurement, certain investments that are measured at NAV (Net Asset Value per share) (or its equivalent) practical expedient have not been classified in the fair value hierarchy. The fair value amounts represented in this table are intended to permit reconciliation of the fair value hierarchy to the amounts presented in the statement of financial position.

The definitions of fair values of our pension and other postretirement benefit plan assets at November 30, 2019 and December 1, 2018 by asset category are as follows:

Equities—Primarily publicly traded common stock for purposes of total return and to maintain equity exposure consistent with policy allocations. Investments include: (i) U.S. and non-U.S. equity securities and mutual funds valued at closing prices from national exchanges; and (ii) commingled funds valued at unit values or net asset values provided by the investment managers, which are based on the fair value of the underlying investments. Funds valued at net asset value have various investment strategies including seeking maximum total returns consistent with prudent investment management, seeking current income consistent with preservation of capital and daily liquidity and seeking to approximate the risk and return characterized by a specific index fund. There are no restrictions for redeeming holdings out of these funds and the funds have no unfunded commitments.

Fixed income—Primarily corporate and government debt securities for purposes of total return and managing fixed income exposure to policy allocations. Investments include (i) mutual funds valued at closing prices from national exchanges, (ii) corporate and government debt securities valued at closing prices from national exchanges, (iii) commingled funds valued at unit values or net asset value provided by the investment managers, which are based on the fair value of the underlying investments, and (iv) an annuity contract, the value of which is determined by the provider and represents the amount the plan would receive if the contract were cashed out at year-end.

Insurance—Insurance contracts for purposes of funding postretirement medical benefits. Fair values are the cash surrender values as determined by the providers which are the amounts the plans would receive if the contracts were cashed out at year end.

² Negative cash for 2019 represents unsettled pending trades within an investment that are classified in cash and cash equivalents until settled.

Cash-Cash balances on hand, accrued income and pending settlements of transactions for purposes of handling plan payments. Fair values are the cash balances as reported by the Trustees of the plans.

The following is a roll forward of the Level 3 investments of our pension and postretirement benefit plan assets during the year ended November 30, 2019 and December 1, 2018:

Purchases, sales, issuances and settlements, net (47) (2 Level 3 balance at end of year Tixet Immediate and settlements, net Tixet Immediate and settlements, net 2019 2018 Non-U.S. Pension Plans \$ 662 \$ 6	II S Pension Plans				Fixed I	ncon	ne	
Purchases, sales, issuances and settlements, net. (47) (2)	C.S. I Chiston I luns		2	2019)			2018
Purchases, sales, issuances and settlements, net. (47) (2 Level 3 balance at end of year. Fixed Irome Non-U.S. Pension Plans Tixed Irome Level 3 balance at beginning of year. \$ 662 \$ \$ 668 6 Net transfers into / (out of) level 3 \$ 5 6 Currency change effect. \$ 675 \$ \$ \$ 666 6 Currency change effect. \$ 100 \$ \$ 675 \$ \$ \$ 666 7 Currency change of year. \$ 210 \$ \$ \$ \$ 675 \$ \$ \$ 666 7 8 8 9 6 7 8 8 8 8 8 8 8 8 9	Level 3 balance at beginning of year		\$		266	\$		291
Non-U.S. Pension Plans 2019 2018 Level 3 balance at beginning of year 8 662 8 66 Net gains. 28 3 3 Net gains. 20 20 3 Currency change effect. 20 120 3 Level 3 balance at end of year 8 120 5 666 Currency Change effect. 20 120 5 666 Level 3 balance at end of year 8 120 7 666 Evel 3 balance at beginning of year 8 82,446 78,89 78,89 Net transfers into / (out of) level 3 8 42,46 72,00 67 Net gains. 7 10 6 72 16 Net gains. 8 12,45 9 82,44 19 82,44 19 82,44 19 18 42 14 12 10 16 16 12 10 16 16 16 16 12 18 18 <t< td=""><td></td><td></td><td></td><td></td><td>(47)</td><td></td><td></td><td>(25)</td></t<>					(47)			(25)
Non-U.S. Pension Plans 2019 2018 Level 3 balance at beginning of year \$ 662 \$ 662 Net transfers into / (out of) level 3 \$ 28 3 Net gains. \$ 20 \$ 3 Currency change effect \$ 675 \$ 666 Evel 3 balance at end of year \$ 15 vers. \$ 666 Chere Postretirement Benefits \$ 15 vers. \$ 78.8 Evel 3 balance at beginning of year \$ 2019 \$ 78.8 Evel 3 balance at beginning of year \$ 77.0 \$ 67.0 Net transfers into / (out of) level 3 \$ 24.4 \$ 78.8 Net transfers into / (out of) level 3 \$ 77.0 \$ 67.0 Net gains. \$ 77.0 \$ 67.0 Level 3 balance at end of year \$ 12.759 \$ 4.64 Post gains. \$ 2019 \$ 2018 \$ 2017 Net 21: Income Taxes \$ 2019 \$ 2018 \$ 2017 Used 3 balance at end of year \$ 2019 \$ 2018 \$ 2017 Used 1: Income Taxes \$ 2019 \$ 2018 \$ 2017 Used 1: Income Taxes	Level 3 balance at end of year		§		219	\$		266
Part Salance at beginning of year Salance Salanc						ncon		
Net transfers into / (out of) level 3 28 3 Net gains 5			-	2019)			2018
Net gains. Currency change effect. 5 (20) 3 Currency change effect. \$ 675 \$ 666 Level 3 balance at end of year. \$ 131 years 2019 2018 Chrier Postretirement Benefits \$ 82,446 \$ \$ 78,89 Level 3 balance at beginning of year. \$ (403) (42 Purchases, sales, issuances and settlements, net. (403) (42 Purchases, sales, issuances and settlements, net. \$ 12,759 4,64 Level 3 balance at end of year. \$ 94,082 \$ 82,444 Note 12: Income Taxes Turneme before income taxes and income from equity method investments \$ 2019 2018 2017 United States \$ 31,796 \$ 19,388 \$ (33,27) Non-U.S. \$ 141,032 \$ 137,338 93,87 Total \$ 172,828 \$ 156,726 \$ 60,59 Components of the provision for income tax expense (benefit) 2019 2018 2017 Current \$ 9,122 \$ 9,652 \$ 44 State \$ 9,122 \$ 9,652 \$ 44 State						\$		660
Currency change effect. (20) (3) Level 3 balance at end of year Insurance Insurance Other Postretirement Benefits 2019 2018 Level 3 balance at beginning of year \$ 82,446 \$ 78,89 Net transfers into / (out of) level 3 (403) (42 Purchases, sales, issuances and settlements, net (720) (67 Net gains 12,759 4,64 Level 3 balance at end of year 2019 2018 2017 Note 12: Income Taxes 2019 2018 2017 United States 31,796 19,388 3,32,74 Non-U.S. 311,796 19,388 3,32,74 Yon-U.S. 311,796 19,388 3,33,27 Total 31,796 19,388 3,33,27 Total 31,796 19,388 3,33,27 Total 31,796 19,388 3,33,27 Total 31,796 20,18 20,17 Components of the provision for income tax expense (benefit) 2019 20,18 20,17 <tr< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>30</td></tr<>								30
Level 3 balance at end of year Insurance Other Postretirement Benefits 2019 2018 Level 3 balance at beginning of year \$ 82,446 \$ 78,89 Net transfers into / (out of) level 3 (403) (42 Purchases, sales, issuances and settlements, net 12,759 4,64 Purchases, sales and end of year \$ 94,082 \$ 82,44 Net 21: Income Taxes 2019 2018 2017 United States \$ 31,796 \$ 19,388 33,274 Non-U.S. 141,032 137,338 93,87 Total \$ 172,828 \$ 156,726 60,59 Components of the provision for income tax expense (benefit) 2019 2018 2017 Current: U.S. federal \$ 9,122 9,652 \$ 44 State 3,294 1,597 2 Non-U.S. 47,848 37,980 29,55 Non-U.S. 60,644 49,229 30,02 Deferred: U.S. federal (432) (50,115) (7,65)								6
Other Postretirement Benefits 2019 2018 Level 3 balance at beginning of year \$8,2446 \$78,89 Net transfers into / (out of) level 3 (403) (42 Purchases, sales, issuances and settlements, net 7(720) (67 Net gains 12,759 4,64 Level 3 balance at end of year \$9,4082 \$82,446 Note 12: Income Taxes Note 12: Income Taxes Vinited States 2019 2018 2017 United States \$141,032 \$13,388 \$(33,27) Yon-U.S \$141,032 \$137,338 \$(33,27) Yourent \$141,032 \$137,338 \$(33,27) Yourent \$141,032 \$137,338 \$(33,27) Yourent \$9,122 \$9,652 \$4 State \$3,294 \$1,597 \$2 Won-U.S \$9,122 \$9,652 \$4 State \$3,294 \$1,597 \$2 Won-U.S \$4,784 \$3,980 \$2,955 Won-U.S <td></td> <td></td> <td></td> <td></td> <td></td> <td>Φ.</td> <td></td> <td>(34)</td>						Φ.		(34)
Other Postretirement Benefits 2019 2018 Level 3 balance at beginning of year \$ 82,446 \$ 78,89 Net transfers into / (out of) level 3 (403) (42 Purchases, sales, issuances and settlements, net 720) (67 Net gains 12,759 4,64 Level 3 balance at end of year \$ 94,082 \$ 82,44 Note 12: Income Taxes Time before income taxes and income from equity method investments 2019 2018 2017 United States \$ 31,796 \$ 19,388 \$ (33,27) Non-U.S. \$ 141,032 \$ 137,338 93,87 Total \$ 172,828 \$ 156,726 \$ 60,93 Components of the provision for income tax expense (benefit) 2019 2018 2017 Current: \$ 9,122 \$ 9,652 \$ 44 State \$ 3,294 \$ 9,55 \$ 24 Non-U.S. \$ 47,848 37,980 29,55 A 5,002 \$ 47,848 37,980 29,55 State \$ 432 (50,15)	Level 3 balance at end of year		<u>\$</u>		675	\$		662
Revel 3 balance at beginning of year S 82,446 S 78,89 Net transfers into / (out of) level 3						ance		
Net transfers into / (out of) level 3 (403) (42 Purchases, sales, issuances and settlements, net (720) (67 Net gains 12,759 4,64 Level 3 balance at end of year \$ 94,082 \$ 82,44 Note 12: Income Taxes Income before income taxes and income from equity method investments 2019 2018 2017 United States \$ 31,796 \$ 19,388 \$ (33,27) Non-U.S. 141,032 137,338 93,87 Total \$ 172,828 \$ 156,726 \$ 60,59 Components of the provision for income tax expense (benefit) 2019 2018 2017 Current: U.S. federal \$ 9,122 \$ 9,652 \$ 44 State 3,294 1,597 2 Non-U.S. 47,848 37,980 29,55 60,264 49,229 30,02 Deferred: U.S. federal (432) (50,115) (7,65) State 125 (197) (1,41) Non-U.S. (10,549) (52,273) <td></td> <td></td> <td></td> <td>2019</td> <td></td> <td>Φ.</td> <td></td> <td></td>				2019		Φ.		
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Note 12: Income Taxes S 94,082 S 82,44								(422)
Note 12: Income Taxes Supply Supp								(671)
Note 12: Income Taxes Income before income taxes and income from equity method investments 2019 2018 2017	•					_		
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United States \$ 31,796 \$ 19,388 \$ (33,27) Non-U.S. 141,032 137,338 93,87 Total \$ 172,828 \$ 156,726 \$ 60,59 Components of the provision for income tax expense (benefit) 2019 2018 2017 Current: U.S. federal \$ 9,122 \$ 9,652 \$ 44 State 3,294 1,597 2 Non-U.S. 47,848 37,980 29,55 60,264 49,229 30,02 Deferred: (432) (50,115) (7,65 State 125 (197) (1,41 Non-U.S. (10,549) (5,273) (11,14 (10,856) (55,585) (20,21								
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Components of the provision for income tax expense (benefit) 2019 2018 2017 Current: U.S. federal \$ 9,122 \$ 9,652 \$ 44 State 3,294 1,597 2 Non-U.S. 47,848 37,980 29,55 60,264 49,229 30,02 Deferred: (432) (50,115) (7,65 State 125 (197) (1,41 Non-U.S. (10,549) (5,273) (11,14 (10,856) (55,585) (20,21	Income before income taxes and income from equity method investments	- -		\$		388	\$	2017 (33,273)
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State	Income before income taxes and income from equity method investments United States		31,796 141,032 172,828		19, 137, 156,	338		(33,273) 93,872 60,599
Non-U.S. 47,848 37,980 29,55 60,264 49,229 30,02 Deferred: (432) (50,115) (7,65 State 125 (197) (1,41 Non-U.S. (10,549) (5,273) (11,14 (10,856) (55,585) (20,21	Income before income taxes and income from equity method investments United States		31,796 141,032 172,828	\$	19, 137, 156,	338 726		(33,273) 93,872 60,599
Deferred: (432) (50,115) (7,65) U.S. federal 125 (197) (1,41) Non-U.S. (10,549) (5,273) (11,14) (10,856) (55,585) (20,21)	Income before income taxes and income from equity method investments United States Non-U.S. Total Components of the provision for income tax expense (benefit) Current:	\$	31,796 141,032 172,828 2019 9,122	\$	19, 137, 156, 2018	338 726 652	\$	(33,273) 93,872 60,599
Deferred: U.S. federal (432) (50,115) (7,65 State 125 (197) (1,41 Non-U.S. (10,549) (5,273) (11,14 (10,856) (55,585) (20,21	Income before income taxes and income from equity method investments United States Non-U.S. Total Components of the provision for income tax expense (benefit) Current: U.S. federal State	<u>\$</u>	31,796 141,032 172,828 2019 9,122 3,294	\$	19, 137, 156, 2018 9,	338 726 652 597	\$	(33,273 93,872 60,599 2017 444 21
U.S. federal (432) (50,115) (7,65 State 125 (197) (1,41 Non-U.S. (10,549) (5,273) (11,14 (10,856) (55,585) (20,21	Income before income taxes and income from equity method investments United States Non-U.S. Total Components of the provision for income tax expense (benefit) Current: U.S. federal State	<u>\$</u>	31,796 141,032 172,828 2019 9,122 3,294	\$	19, 137, 156, 2018 9,	338 726 652 597	\$	(33,273 93,872 60,599 2017 444 21 29,557
State	Income before income taxes and income from equity method investments United States Non-U.S. Total Components of the provision for income tax expense (benefit) Current: U.S. federal State Non-U.S.	<u>\$</u>	31,796 141,032 172,828 2019 9,122 3,294 47,848	\$	19, 137, 156, 2018 9, 1, 37,	338 726 652 597 980	\$	(33,273 93,872 60,599 2017 444 21
Non-U.S	Income before income taxes and income from equity method investments United States Non-U.S. Total Components of the provision for income tax expense (benefit) Current: U.S. federal State Non-U.S.	<u>\$</u>	31,796 141,032 172,828 2019 9,122 3,294 47,848 60,264	\$	19, 137, 156, 2018 9, 1, 37, 49,	338 726 652 597 980 229	\$	(33,273 93,872 60,599 2017 444 21 29,557 30,022
(10,856) (55,585) (20,21	Income before income taxes and income from equity method investments United States Non-U.S. Total Components of the provision for income tax expense (benefit) Current: U.S. federal State Non-U.S. Deferred: U.S. federal	<u>\$</u>	31,796 141,032 172,828 2019 9,122 3,294 47,848 60,264	\$	19, 137, 156, 2018 9, 1, 37, 49,	338 726 652 597 980 229	\$	(33,273 93,872 60,599 2017 444 21 29,557 30,022
	Income before income taxes and income from equity method investments United States Non-U.S. Total Components of the provision for income tax expense (benefit) Current: U.S. federal State Non-U.S. Deferred: U.S. federal State U.S. federal State State U.S. federal	<u>\$</u>	31,796 141,032 172,828 2019 9,122 3,294 47,848 60,264 (432) 125	\$	19, 137, 156, 2018 9, 1, 37, 49,	338 726 652 597 980 229 115)	\$	(33,273 93,872 60,599 2017 444 21 29,557 30,022 (7,653) (1,414)
Total	Income before income taxes and income from equity method investments United States Non-U.S. Total Components of the provision for income tax expense (benefit) Current: U.S. federal State	<u>\$</u>	31,796 141,032 172,828 2019 9,122 3,294 47,848 60,264 (432) 125 (10,549)	\$	19, 137, 156, 2018 9, 1,; 37,9 49,; (50, (5,;	338 726 652 597 980 229 115) 197) 273)	\$	(33,273 93,872 60,599 2017 444 21 29,557 30,022

Reconciliation of effective income tax	2019)		2018	2017
Statutory U.S. federal income tax rate	\$ 3	6,294	\$	34,605	\$ 21,210
State income taxes, net of federal benefit		2,785		1,148	(959)
Foreign dividend repatriation		2,854		1,258	276
Foreign operations		8,712		(3,253)	(9,565)
Impact of option valuation		-		330	(1,381)
Interest income not taxable in the U.S		-		-	(626)
Executive compensation over \$1 million		1,661		611	-
Change in valuation allowance		1,097		5,213	(3,694)
Research and development tax credit		(802))	(982)	(647)
Section 199 manufacturing deduction		-		(319)	-
Foreign-derived intangible income	(2,240))	=	-
Cross currency swap		2,677		-	-
Royal Adhesives transaction costs		-		-	2,271
Transition tax		-		42,007	-
Dividends received deduction		-		(8,484)	-
Deferred tax rate change		-		(79,488)	-
Other		3,630		998	 2,925
Total income tax expense (benefit)	\$ 4	9,408	\$	(6,356)	\$ 9,810

Deferred income tax balances at each year-end related to:	2019	2018		
Deferred tax assets:				
Employee benefit costs	\$ 32,621	\$ 19,617		
Foreign tax credit carryforward	2,175	1,809		
Tax loss carryforwards	26,427	27,532		
Other	29,518	20,865		
Gross deferred tax assets	90,741	69,823		
Less: valuation allowance	(14,986)	(14,129)		
Total net deferred tax assets	75,755	55,694		
Deferred tax liability:				
Depreciation and amortization	(224,248)	(242,877)		
Total deferred tax liability	(224,248)	(242,877)		
Net deferred tax liability	\$ (148,493)	\$ (187,183)		

The difference between the change in the deferred tax assets in the balance sheet and the deferred tax provision is primarily due to the defined benefit pension plan adjustment recorded in accumulated other comprehensive income (loss).

Valuation allowances principally relate to foreign net operating loss carryforwards where the future potential benefits do not meet the more-likely-than-not realization test. The increase in the valuation allowance relates primarily to current year net operating losses of which the company does not expect to receive a tax benefit.

Deferred tax assets and liabilities are measured using the currently enacted tax rates that apply to taxable income in effect for the years in which those deferred tax assets and liabilities are expected to be realized or settled. We record a valuation allowance to reduce deferred tax assets to the amount that is believed more-likely-than-not to be realized. We believe it is more-likely-than-not that, reversal of deferred tax liabilities and forecasted income, will be sufficient to fully recover the net deferred tax assets not already offset by a valuation allowance. In the event that all or part of the gross deferred tax assets are determined not to be realizable in the future, an adjustment to the valuation allowance would be charged to earnings in the period such determination is made.

U.S. income taxes have not been provided on approximately \$765,842 of undistributed earnings of non-U.S. subsidiaries. We intend to indefinitely reinvest these undistributed earnings. Cash available in the United States has historically been sufficient and we expect it will continue to be sufficient to fund U.S. cash flow requirements. In the event these earnings are later distributed to the U.S., such distributions would likely result in additional U.S. tax.

While non-U.S. operations have been profitable overall, there are cumulative tax losses of \$94,378 in various countries. These tax losses can be carried forward to offset the income tax liabilities on future income in these countries. Cumulative tax losses of \$52,914 can be carried forward indefinitely, while the remaining \$41,464 of tax losses must be utilized during 2020 to 2037. The company also has \$2,118 of tax effected losses in various states.

The U.S. has a branch foreign tax credit carryforward of \$2,175. A valuation allowance has been recorded against this foreign tax credit carryforward to reflect that this amount is not more-likely-than-not to be realized.

The table below sets forth the changes to our gross unrecognized tax benefit as a result of uncertain tax positions, excluding accrued interest, for the fiscal years ended November 30, 2019, and excluding accrued interest for the fiscal year ended December 1, 2018. We do not anticipate that the total unrecognized tax benefits will change significantly within the next twelve months.

	2019	2018
Balance at beginning of year	\$ 8,420	\$ 8,887
Tax positions related to the current year:		
Additions	684	622
Tax positions related to prior years:		
Additions	3,077	1,625
Reductions	(1,484)	(763)
Settlements	(105)	(15)
Lapses in applicable statutes of limitation	(1,646)	(1,936)
Balance at end of year	\$ 8,946	\$ 8,420

Included in the balance of unrecognized tax benefits as of November 30, 2019, are potential benefits of \$6,755 that, if recognized, would affect the effective tax rate.

We report accrued interest and penalties related to unrecognized tax benefits in income tax expense. For the year ended November 30, 2019, we recognized a net benefit for interest and penalties of \$59 relating to unrecognized tax benefits and had net accumulated accrued interest and penalties of \$1,142 as of November 30, 2019. For the year ended December 1, 2018, we recognized a net benefit for interest and penalties of \$571 relating to unrecognized tax benefits and had net accumulated accrued interest and penalties of \$1,190 as of December 1, 2018.

We are subject to U.S. federal income tax as well as income tax in numerous state and foreign jurisdictions. We are no longer subject to U.S. federal tax examination for years prior to 2013 or Swiss income tax examination for years prior to 2013. During 2015, the U.S. tax authorities opened an audit for the years ended December 1, 2012 and November 30, 2013. These audits have been principally settled but remain open only for matters to be addressed by the U.S., Canada and Mexican authorities in competent authority. During the second quarter of 2016, H.B. Fuller (China) Adhesives, Ltd. was notified of a transfer pricing audit covering the calendar years 2005 through 2014. We are in various stages of examination and appeal in several states and other foreign jurisdictions. Although the final outcomes of these examinations cannot currently be determined, we believe that we have recorded adequate liabilities with respect to these examinations.

Note 13: Financial Instruments

Overview

As a result of being a global enterprise, our earnings, cash flows and financial position are exposed to foreign currency risk from foreign currency denominated receivables and payables.

We use foreign currency forward contracts, cross-currency swaps, and interest rate swaps to manage risks associated with foreign currency exchange rates and interest rates. We do not hold derivative financial instruments of a speculative nature or for trading purposes. We record derivatives as assets and liabilities on the balance sheet at fair value. Changes in fair value are recognized immediately in earnings unless the derivative qualifies and is designated as a hedge. Cash flows from derivatives are classified in the statement of cash flows in the same category as the cash flows from the items subject to designated hedge or undesignated (economic) hedge relationships. The company evaluates hedge effectiveness at inception and on an ongoing basis. If a derivative is no longer expected to be effective, hedge accounting is discontinued. Hedge ineffectiveness, if any, is recorded in earnings.

We are exposed to credit risk in the event of nonperformance of counterparties for foreign currency forward exchange contracts and interest rate swap agreements. We select investment-grade multinational banks and financial institutions as counterparties for derivative transactions and monitor the credit quality of each of these banks on a periodic basis as

warranted. We do not anticipate nonperformance by any of these counterparties, and valuation allowances, if any, are *de minimis*.

Cash Flow Hedges

As of November 30, 2019, we had the following cash flow hedges: 1) six cross-currency swap agreements effective October 20, 2017 to convert a notional amount of \$401,200 of foreign currency denominated intercompany loans into U.S. dollars and maturing in 2021 and 2022 and 2) one cross-currency swap agreement effective February 24, 2017 to convert a notional amount of \$42,600 of foreign currency denominated intercompany loans into U.S. dollars and maturing in 2020.

As of November 30, 2019, the combined fair value of the swaps was an asset of \$26,896 and was included in other assets in the Consolidated Balance Sheets. The swaps were designated as cash-flow hedges for accounting treatment. The lesser amount between the cumulative change in the fair value of the actual swaps and the cumulative change in the fair value of hypothetical swaps is recorded in accumulated other comprehensive income (loss) in the Consolidated Balance Sheets. The differences between the cumulative change in the fair value of the actual swaps and the cumulative change in the fair value of hypothetical swaps are recorded as other income (expense), net in the Consolidated Statements of Income. In a perfectly effective hedge relationship, the two fair value calculations would exactly offset each other. Any difference in the calculation represents hedge ineffectiveness. The amount in accumulated other comprehensive income (loss) related to cross-currency swaps was a gain of \$1,763 as of November 30, 2019. The estimated net amount of the existing gain that is reported in accumulated other comprehensive income (loss) as of November 30, 2019 that is expected to be reclassified into earnings within the next twelve months is \$722. As of November 30, 2019, we do not believe any gains or losses will be reclassified into earnings as a result of the discontinuance of these cash flow hedges because the original forecasted transaction will not occur.

The following table summarizes the cross-currency swaps outstanding as of November 30, 2019:

	Fiscal Year of Expiration	Interest Rate	Notional Value	Fair Value
Pay EUR	2020	1.95 %	42,600	(1,499)
Receive USD		4.3038 %		
Pay EUR	2021	2.75 %	133,340	9,196
Receive USD		4.9330 %		
Pay EUR	2022	3.00 %	267,860	19,199
Receive USD		5.1803 %		
Total		\$	443,800	\$ 26,896

On March 9, 2018, we entered into an interest rate swap agreement to convert \$100,000 of our \$2,150,000 Term Loan B be to a fixed interest rate of 4.490 percent. On February 27, 2018, we entered into an interest rate swap agreement to convert \$200,000 of our \$2,150,000 Term Loan B to a fixed rate of 4.589 percent. On October 20, 2017 we entered into interest rate swap agreements to convert \$1,050,000 of our \$2,150,000 Term Loan B to a fixed interest rate of 4.0275%. See Note 6 for further discussion on the issuance of our Term Loan B. The combined fair value of the interest rate swaps in total was a liability of \$17,637 at November 30, 2019 and was included in other liabilities in the Consolidated Balance Sheets. The swaps were designated for hedge accounting treatment as cash flow hedges. We are applying the hypothetical derivative method to assess hedge effectiveness for these interest rate swaps. Changes in the fair value of a hypothetically perfect swap with terms that match the critical terms of our \$1,350,000 variable rate Term Loan B are compared with the change in the fair value of the swaps.

On April 23, 2018, we amended our Term Loan B Credit Agreement to reduce the interest rate from LIBOR plus 2.25 percent to LIBOR plus 2.00 percent. Fixed interest rates related to swap agreements disclosed have been updated to reflect the amendment.

The amounts of pretax gains (losses) recognized in comprehensive income related to derivative instruments designated as cash flow hedges are as follows:

	November 30, 2019	December 1, 2018	December 2, 2017
Cross-currency swap			
contracts	\$ 14,429	\$ (4,047) \$	(6,538)
Interest rate swap contracts	\$ (46,254)	\$ 25,819 \$	3,060

Fair Value Hedges

On December 16, 2017 and February 24, 2017 interest rate swaps associated with our Senior Notes, Series A and B matured, respectively, as these debt instruments matured. On October 20, 2017, interest rate swaps associated with our Senior Notes, Series C and E were terminated with the repayment of these debt instruments. See Note 6 for further discussion of the repayment of our debt. We recognized a \$168 net gain related to the termination of these interest rate swaps which was recorded in other income (expense), net in our Consolidated Statements of Income for the year ended December 2, 2017.

On February 14, 2017, we entered into interest rate swap agreements to convert \$150,000 of our \$300,000 Public Notes that were issued on February 14, 2017 to a variable interest rate of 1-month LIBOR plus 1.86 percent. See Note 6 for further discussion on the issuance of our Public Notes. The combined fair value of the interest rate swaps in total was an asset of \$5,741 at November 30, 2019 and was included in other assets in the Consolidated Balance Sheets. The swaps were designated for hedge accounting treatment as fair value hedges. We are applying the hypothetical derivative method to assess hedge effectiveness for these interest rate swaps. Changes in the fair value of a hypothetically perfect swap with terms that match the critical terms of our \$150,000 fixed rate Public Notes are compared with the change in the fair value of the swaps.

Derivatives Not Designated As Hedging Instruments

The company uses foreign currency forward contracts to offset its exposure to the change in value of certain foreign currency denominated assets and liabilities held at foreign subsidiaries that are remeasured at the end of each period. Although the contracts are effective economic hedges, they are not designated as accounting hedges. Foreign currency forward contracts are recorded as assets and liabilities on the balance sheet at fair value. Changes in the value of these derivatives are recognized immediately in earnings, thereby offsetting the current earnings effect of the related foreign currency denominated assets and liabilities. See Note 14 for fair value amounts of these derivative instruments.

As of November 30, 2019, we had forward foreign currency contracts maturing between December 2, 2019 and October 20, 2020. The mark-to-market effect associated with these contracts was largely offset by the underlying transaction gains and losses resulting from the foreign currency exposures for which these contracts relate.

The amounts of pretax gains (losses) recognized in other (expense) income, net related to derivative instruments not designated as hedging instruments are as follows:

	ľ	November 30, 2019	December 1, 2018	December 2, 2017
Foreign currency forward				<u>.</u>
contracts	\$	(573)	\$ 2,776	\$ (3,797)

Concentrations of credit risk with respect to trade accounts receivable are limited due to the large number of entities in the customer base and their dispersion across many different industries and countries. As of November 30, 2019, there were no significant concentrations of credit risk.

Note 14: Fair Value Measurements

Overview

Estimates of fair value for financial assets and liabilities are based on the framework established in the accounting guidance for fair value measurements. The framework defines fair value, provides guidance for measuring fair value and requires certain disclosures. The framework discusses valuation techniques, such as the market approach (comparable market prices), the income approach (present value of future income or cash flow) and the cost approach (cost to replace the service capacity of an asset or replacement cost). The framework utilizes a fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value into three broad levels. The following is a brief description of those three levels:

- Level 1: Observable inputs such as quoted prices (unadjusted) in active markets for identical assets or liabilities.
- Level 2: Inputs other than quoted prices that are observable for the asset or liability, either directly or indirectly. These include quoted prices for similar assets or liabilities in active markets and quoted prices for identical or similar assets or liabilities in markets that are not active.
- Level 3: Unobservable inputs that reflect management's assumptions, and include situations where there is little, if any, market activity for the asset or liability.

Balances Measured at Fair Value on a Recurring Basis

The following table presents information about our financial assets and liabilities that are measured at fair value on a recurring basis as of November 30, 2019 and December 1, 2018, and indicates the fair value hierarchy of the valuation techniques utilized to determine such fair value.

			Fair Va	alue	Measurement	s Us	ing:
Description	November 30, 2019		Level 1		Level 2		Level 3
Assets:							
Marketable securities	\$ 19,430	\$	19,430	\$	-	\$	-
Foreign exchange contract assets	1,227		-		1,227		-
Interest rate swaps, fair value hedges	5,741		-		5,741		-
Cross-currency cash flow hedges	26,896		-		26,896		-
Liabilities:							
Foreign exchange contract liabilities	\$ 1,800	\$	-	\$	1,800	\$	-
Interest rate swaps, cash flow hedges	17,637		-		17,637		-

		Fair Value Measurements Using:								
Description	December 1, 2018		Level 1		Level 2	Level 3				
Assets:										
Marketable securities	\$ 11,436	\$	11,436	\$	-	\$	-	-		
Foreign exchange contract assets	4,933		-		4,933		-	-		
Interest rate swaps, cash flow hedges	28,924		-		28,924		-	-		
Cross-currency cash flow hedges	739		-		739		-	-		
Liabilities:										
Foreign exchange contract liabilities	\$ 2,156	\$	-	\$	2,156	\$	-	-		
Interest rate swaps, fair value hedges	8,657		-		8,657		-	-		

See Note 6 for discussion regarding the fair value of debt.

Note 15: Commitments and Contingencies

Leases

The minimum lease payments, related to buildings, equipment and vehicles, that are expected to be made in each of the years indicated based on operating leases in effect at November 30, 2019 are:

							Total
						N	Iinimum
					2024 and		Lease
Fiscal Year	2020	2021	2022	2023	Beyond	P	ayments
Operating Leases	\$ 11,492	\$ 7,984	\$ 5,497	\$ 4,686	\$ 8,217	\$	37,876

Rent expense for all operating leases, which includes minimum lease payments and other charges such as common area maintenance fees, was \$19,618, \$20,620 and \$15,199 in 2019, 2018 and 2017, respectively.

Environmental Matters

From time to time, we become aware of compliance matters relating to, or receive notices from, federal, state or local entities regarding possible or alleged violations of environmental, health or safety laws and regulations. We review the circumstances of each individual site, considering the number of parties involved, the level of potential liability or our contribution relative to the other parties, the nature and magnitude of the hazardous substances involved, the method and extent of remediation, the estimated legal and consulting expense with respect to each site and the time period over which any costs would likely be incurred. Also, from time to time, we are identified as a potentially responsible party ("PRP") under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) and/or similar state laws that impose liability for costs relating to the clean up of contamination resulting from past spills, disposal or other release of hazardous substances. We are also subject to similar laws in some of the countries where current and former facilities are located. Our environmental, health and safety department monitors compliance with applicable laws on a global basis. To the extent we can reasonably estimate the amount of our probable liabilities for environmental matters, we establish an undiscounted financial provision. We recorded liabilities of \$8,535 and \$10,665 as of November 30, 2019 and December 1, 2018, respectively, for probable and reasonably estimable environmental remediation costs. Of the amount reserved, \$4,117 and \$4,784 as of November 30, 2019 and December 1, 2018, respectively, is attributable to a facility we own in Simpsonville, South Carolina as a result of our Royal Adhesives acquisition that is a designated site under CERCLA.

Currently we are involved in various environmental investigations, clean up activities and administrative proceedings and lawsuits. In particular, we are currently deemed a PRP in conjunction with numerous other parties, in a number of government enforcement actions associated with landfills and/or hazardous waste sites. As a PRP, we may be required to pay a share of the costs of investigation and clean up of these sites. In addition, we are engaged in environmental remediation and monitoring efforts at a number of current and former operating facilities. While uncertainties exist with respect to the amounts and timing of the ultimate environmental liabilities, based on currently available information, we have concluded that these matters, individually or in the aggregate, will not have a material adverse effect on our results of operations, financial condition or cash flow.

Other Legal Proceedings

From time to time and in the ordinary course of business, we are a party to, or a target of, lawsuits, claims, investigations and proceedings, including product liability, personal injury, contract, patent and intellectual property, environmental, health and safety, tax and employment matters. While we are unable to predict the outcome of these matters, we have concluded, based upon currently available information, that the ultimate resolution of any pending matter, individually or in the aggregate, including the asbestos litigation described in the following paragraphs, will not have a material adverse effect on our results of operations, financial condition or cash flow.

We have been named as a defendant in lawsuits in which plaintiffs have alleged injury due to products containing asbestos manufactured more than 30 years ago. The plaintiffs generally bring these lawsuits against multiple defendants and seek damages (both actual and punitive) in very large amounts. In many cases, plaintiffs are unable to demonstrate that they have suffered any compensable injuries or that the injuries suffered were the result of exposure to products manufactured by us. We are typically dismissed as a defendant in such cases without payment. If the plaintiff presents evidence indicating that compensable injury occurred as a result of exposure to our products, the case is generally settled for an amount that reflects the seriousness of the injury, the length, intensity and character of exposure to products containing asbestos, the number and solvency of other defendants in the case, and the jurisdiction in which the case has been brought.

A significant portion of the defense costs and settlements in asbestos-related litigation is paid by third parties, including indemnification pursuant to the provisions of a 1976 agreement under which we acquired a business from a third party. Currently, this third party is defending and paying settlement amounts, under a reservation of rights, in most of the asbestos cases tendered to the third party.

In addition to the indemnification arrangements with third parties, we have insurance policies that generally provide coverage for asbestos liabilities, including defense costs. Historically, insurers have paid a significant portion of our defense costs and settlements in asbestos-related litigation. However, certain of our insurers are insolvent. We have entered into cost-sharing agreements with our insurers that provide for the allocation of defense costs and settlements and judgments in asbestos-related lawsuits. These agreements require, among other things, that we fund a share of settlements and judgments allocable to years in which the responsible insurer is insolvent.

A summary of the number of and settlement amounts for asbestos-related lawsuits and claims is as follows:

	Year Ended November 30, 2019	Year Ended December 1, 2018		Year Ended December 2, 2017	
Lawsuits and claims settled	8		7		9
Settlement amounts	\$ 424	\$	390	\$	1,673
Insurance payments received or expected to be received	\$ 291	\$	281	\$	1,365

We do not believe that it would be meaningful to disclose the aggregate number of asbestos-related lawsuits filed against us because relatively few of these lawsuits are known to involve exposure to asbestos-containing products that we manufactured. Rather, we believe it is more meaningful to disclose the number of lawsuits that are settled and result in a payment to the plaintiff. To the extent we can reasonably estimate the amount of our probable liabilities for pending asbestos-related claims, we establish a financial provision and a corresponding receivable for insurance recoveries.

Based on currently available information, we have concluded that the resolution of any pending matter, including asbestos-related litigation, individually or in the aggregate, will not have a material adverse effect on our results of operations, financial condition or cash flow.

During 2018, we retained legal counsel to conduct an internal investigation of the possible resale of our hygiene products into Iran by certain customers of our subsidiaries in Turkey (beginning in 2011) and India (beginning in 2014), in possible violation of the economic sanctions against Iran administered by the U.S. Department of the Treasury's Office of Foreign Assets ("OFAC") and our compliance policy. The sales to these customers represented less than one percent of our net revenue in each of our 2017 and 2018 fiscal years. The sales to the customers who were reselling our products into Iran ceased during fiscal year 2018 and we do not currently conduct any business in Iran. In January 2018, we voluntarily contacted OFAC to advise it of this internal investigation and our intention to cooperate fully with OFAC and, in September 2018, we submitted the results and findings of our investigation to OFAC. We have not yet received a response from OFAC. At this time, we cannot predict the outcome or effect of the investigation, however, based on the results of our investigation to date, we believe we could incur penalties ranging from zero to \$10,000.

Note 16: Operating Segments

We are required to report segment information in the same way that we internally organize our business for assessing performance and making decisions regarding allocation of resources. For segment evaluation by the chief operating decision maker, segment operating income is identified as gross profit less SG&A expenses. Corporate expenses are fully allocated to each operating segment. Corporate assets are not allocated to the operating segments. Inter-segment revenues are recorded at cost plus a markup for administrative costs. Operating results of each of these segments are regularly reviewed by our chief operating decision maker to make decisions about resources to be allocated to the segments and assess their performance.

We have five reportable segments: Americas Adhesives, EIMEA, Asia Pacific, Construction Adhesives and Engineering Adhesives. As of the beginning of fiscal 2019, we realigned certain customers across operating segments. Prior period segment information has been recast retrospectively to reflect the realignment.

The business components within each operating segment are managed to maximize the results of the overall operating segment rather than the results of any individual business component of the operating segment. Results of individual components of each operating segment are subject to numerous allocations of segment-wide costs that may or may not have been focused on that particular component for a particular reporting period. The costs for these allocated resources are not tracked on a "where-used" basis as financial performance is assessed at the total operating segment level.

Reportable operating segment financial information for all periods presented is as follows:

		2019		2018	2017		
Net revenue							
Americas Adhesives	\$	1,022,775	\$	1,051,365	\$	902,777	
EIMEA		640,913		697,448		564,439	
Asia Pacific		271,585		278,162		264,696	
Construction Adhesives		394,912		452,046		260,466	
Engineering Adhesives		566,815		561,981		313,665	
Total	\$	2,897,000	\$	3,041,002	\$	2,306,043	
Inter-segment sales							
Americas Adhesives	\$	17,747	\$	18,717	\$	15,943	
EIMEA	Ψ	35,005	Ψ	19,765	Ψ	19,153	
Asia Pacific		4,675		6,952		6,498	
7 1014 7 401110		1,076		0,552		0,100	
Segment operating income							
Americas Adhesives	\$	92,195	\$	98,966	\$	84,847	
EIMEA		22,256	,	29,589	•	17,173	
Asia Pacific		22,165		17,742		14,910	
Construction Adhesives		11,971		30,418		(15,255)	
Engineering Adhesives		77,407		61,176		17,852	
Total	\$	225,994	\$	237,891	\$	119,527	
1041	Ψ	220,551	Ψ	237,031	Ψ	117,527	
Depreciation and amortization							
Americas Adhesives	\$	34,570	\$	35,434	\$	22,208	
EIMEA	Ψ	26,828	Ψ	28,259	Ψ	20,269	
Asia Pacific		8,338		8,447		8,163	
Construction Adhesives		36,339		37,699		19,044	
Engineering Adhesives		35,131		35,286		17,631	
Total		141,206	\$	145,125	\$	87,315	
1041	Ф	141,200	Ψ	143,123	Ψ	67,313	
Total assets ¹							
Americas Adhesives	\$	927,024	\$	1,003,926			
EIMEA	4	692,225	Ψ	724,633			
Asia Pacific		236,653		272,923			
Construction Adhesives		816,821		876,448			
Engineering Adhesives		991,811		970,357			
Corporate		321,200		328,027			
Total	\$	3,985,734	\$	4,176,314			
1041	Ψ	3,703,734	Ψ	4,170,314			
Capital expenditures							
Americas Adhesives	\$	25,967	\$	28,983			
FIMEA	Ψ	13,110	Ψ	16,407			
Asia Pacific		5,506		5,005			
Construction Adhesives		6,421		4,876			
Engineering Adhesives		5,896		2,534			
Corporate		6,654		10,458			
Total	2	63,554	\$	68,263			
10141	Ψ	03,334	Ψ	00,203			

Segment assets include primarily inventory, accounts receivable, property, plant and equipment, goodwill, intangible assets and other miscellaneous assets. Corporate assets include primarily corporate property, plant and equipment, deferred tax assets, certain investments and other assets.

Reconciliation of segment operating income to income before income taxes and income from equity method investments:

	2019	2018	2017
Segment operating income	\$ 225,994	\$ 237,891	\$ 119,527
Other income (expense), net	37,943	18,055	(19,154)
Interest expense	(103,287)	(110,994)	(43,701)
Interest income	12,178	11,774	3,927
Income before income taxes and income from equity method		 _	
investments	\$ 172,828	\$ 156,726	\$ 60,599

Financial information about geographic areas

	Net Revenue						
	2019			2018		2017	
United States	\$	1,309,056	\$	1,374,147	\$	969,346	
China		347,304		343,960		302,009	
Countries with more than 10 percent of total		1,656,360		1,718,107		1,271,355	
All other countries with less than 10 percent of total		1,240,640		1,322,895		1,034,688	
Total	\$	2,897,000	\$	3,041,002	\$	2,306,043	

	Property, Plant and Equipment, net						
		2019		2018		2017	
United States	\$	287,372	\$	286,639	\$	212,078	
Germany		127,497		137,677		149,269	
China		80,606		77,861		83,808	
All other countries with less than 10 percent of total		134,338		134,372		225,039	
Total	\$	629,813	\$	636,549	\$	670,194	

Note 17: Quarterly Data (unaudited)

		20	19		
(In thousands, except per share amounts)	Q1	Q2		Q3	Q4
Net revenue	\$ 672,935	\$ 759,583	\$	725,376	\$ 739,106
Gross profit	179,925	218,459		207,321	201,217
Selling, general and administrative expenses	(145,713)	(146,079)		(140,615)	(148,521)
Net income including non-controlling interests	\$ 12,248	\$ 36,641	\$	49,730	\$ 32,225
Basic Income per share	\$ 0.24	\$ 0.72	\$	0.98	\$ 0.63
Diluted Income per share	\$ 0.24	\$ 0.70	\$	0.97	\$ 0.61
Weighted-average common shares outstanding ¹					
Basic	50,752	50,902		50,939	51,089
Diluted	51,901	52,105		51,502	52,423

	2018 ²							
(In thousands, except per share amounts)		Q1		Q2		Q3		Q4
Net revenue	\$	713,079	\$	789,387	\$	770,107	\$	768,429
Gross profit		185,513		220,186		215,030		207,429
Selling, general and administrative expenses		(152,707)		(146,889)		(147,739)		(142,932)
Net income including non-controlling interests	\$	47,667	\$	44,464	\$	37,736	\$	41,365
Basic Income per share	\$	0.94	\$	0.88	\$	0.75	\$	0.82
Diluted Income per share	\$	0.92	\$	0.86	\$	0.72	\$	0.80
		0		0		0		0
Weighted-average common shares outstanding ¹		0		0		0		0
Basic		50,471		50,551		50,632		50,712
Diluted		51,898		51,846		52,138		52,017

¹ Quarterly income per share amounts may not equal full year amounts due to rounding.

Note 18: Subsequent Event

On January 13, 2020, we entered into a purchase agreement to acquire substantially all of the assets of D.H.M Adhesives, Inc. for approximately \$9,500 which will be funded by our existing cash. In addition, the agreement requires us to pay contingent consideration of up to approximately \$8,100 based upon a formula related to revenue during the fiscal years ended November 27, 2021 and December 3, 2022. D.H.M. Adhesives, Inc., headquartered in Calhoun, Georgia, is a provider of hotmelt adhesives. The acquisition is expected to close in the first quarter of the fiscal year ended November 28, 2020.

² Amounts have been adjusted retrospectively for the change in accounting principle as discussed in Note 1.

Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure

Not applicable.

Item 9A. Controls and Procedures

Disclosure Controls and Procedures

As of the end of the period covered by this report, management conducted an evaluation, under the supervision and with the participation of our President and Chief Executive Officer and Executive Vice President, Chief Financial Officer, of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934 ("Exchange Act")). Based on its evaluation, our management concluded that, as of November 30, 2019, our disclosure controls and procedures were effective (1) 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 SEC's rules and forms and (2) to ensure that information require to be disclosed by us in the reports that we file or submit under the Exchange Act is accumulated and communicated to us, including our principal executive and principal financial officers, as appropriate to allow timely decisions regarding required disclosure.

Management has concluded that the Consolidated Financial Statements included in this Form 10-K present fairly, in all material respects, the financial position of the Company at November 30, 2019 and December 1, 2018 and the consolidated results of operations and cash flows for each of the three fiscal years in the period ended November 30, 2019 in conformity with U.S. generally accepted accounting principles.

Management's Report on Internal Control over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting. Our 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 accounting principles generally accepted in the United States. 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.

Our management assessed the effectiveness of our internal control over financial reporting as of November 30, 2019. In making this assessment, we used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in *Internal Control – Integrated Framework (2013 Framework)*. Based on its assessment, management concluded that, as of November 30, 2019, the Company's internal control over financial reporting was effective. KPMG LLP, an independent registered public accounting firm, has issued an auditors' report on our internal control over financial reporting as of November 30, 2019, which is included elsewhere in this Form 10-K.

Changes in Internal Control over Financial Reporting

There were no changes in our internal control over financial reporting (as defined in Rule 13a-15(f) under the Exchange Act) during our most recently completed fiscal quarter that have materially affected or are reasonably likely to materially affect our internal control over financial reporting.

Item 9B. Other Information

None.

PART III

Item 10. Directors, Executive Officers and Corporate Governance

The information under the headings "Proposal 1 - Election of Directors" and "Corporate Governance - Audit Committee" contained in the company's Proxy Statement for the Annual Meeting of Shareholders to be held on April 2, 2020 (the "2020 Proxy Statement") is incorporated herein by reference.

The information contained at the end of Item 1. hereof under the heading "Information About Our Executive Officers" is incorporated herein by reference.

Since the date of our 2019 Proxy Statement, there have been no material changes to the procedures by which shareholders may recommend nominees to our Board of Directors.

The company has a code of business conduct applicable to all of its directors and employees, including its principal executive officer, principal financial officer, principal accounting officer, controller and other employees performing similar functions. A copy of the code of business conduct is available under the Investor Relations section of the company's website at www.hbfuller.com. The company intends to disclose on its website information with respect to any amendment to or waiver from a provision of its code of business conduct that applies to its principal executive officer, principal financial officer, principal accounting officer, controller and other employees performing similar functions within four business days following the date of such amendment or waiver.

Item 11. Executive Compensation

The information under the headings "Executive Compensation," "Director Compensation" and "CEO Pay Ratio Disclosure" contained in the 2020 Proxy Statement is incorporated herein by reference.

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters

The information under the heading "Security Ownership of Certain Beneficial Owners and Management" and "Equity Compensation Plan Information" contained in the 2020 Proxy Statement is incorporated herein by reference.

Item 13. Certain Relationships and Related Transactions and Director Independence

The information under the headings "Certain Relationships and Related Transactions" and "Corporate Governance - Director Independence" contained in the 2020 Proxy Statement is incorporated herein by reference.

Item 14. Principal Accountant Fees and Services

The information under the heading "Fees Paid to Independent Registered Public Accounting Firm" contained in the 2020 Proxy Statement is incorporated herein by reference.

PART IV

Item 15. Exhibits and Financial Statement Schedules

(a) Documents filed as part of this report:

1. Consolidated Financial Statements

Consolidated Statements of Income for the fiscal years ended November 30, 2019, December 1, 2018 and December 2, 2017.

Consolidated Statements of Comprehensive Income for the fiscal years ended November 30, 2019, December 1, 2018 and December 2, 2017.

Consolidated Balance Sheets as of November 30, 2019 and December 1, 2018.

Consolidated Statements of Total Equity for the fiscal years ended November 30, 2019, December 1, 2018 and December 2, 2017.

Consolidated Statements of Cash Flows for the fiscal years ended November 30, 2019, December 1, 2018 and December 2, 2017.

Notes to Consolidated Financial Statements

Report of Independent Registered Public Accounting Firm

2. Financial Statement Schedules

All financial statement schedules are omitted as the required information is inapplicable or the information is presented in the consolidated financial statements or related notes.

3. Exhibits

	Item	Incorporation by Reference
1.1	Underwriting Agreement, dated February 9, 2017, among H.B. Fuller Company and Citigroup Global Markets Inc., J.P. Morgan Securities LLC and Merrill Lynch, Pierce, Fenner & Smith Incorporated, as representatives of the several Underwriters set forth in Schedule A thereto	Exhibit 1.1 to the Current Report on Form 8-K dated February 9, 2017.
3.1	Restated Articles of Incorporation of H.B. Fuller Company, as amended	Exhibit 3.1 to the Quarterly Report on Form 10-Q for the quarter ended September 2, 2006 and Exhibit 3.1 to the Current Report on Form 8-K dated October 12, 2016.
3.2	By-Laws of H.B. Fuller Company	Exhibit 3.1 to the Current Report on Form 8-K dated December 2, 2015.
4.1	Form of Certificate for common stock, par value \$1.00 per share	Exhibit 4.1 to the Annual Report on Form 10-K, as amended, for the year ended November 28, 2009.
4.2	Note Purchase Agreement, dated December 16, 2009, among H.B. Fuller Company, as borrower, and various financial institutions, as amended	Exhibit 4.1 to the Current Report on Form 8-K dated December 16, 2009, and Exhibit 1.2 to the Current Report on Form 8-K dated March 5, 2012 and Exhibit 1.3 to the Current Report on Form 8-K dated October 31, 2014.
4.3	Note Purchase Agreement, dated March 5, 2012, by and among H.B. Fuller Company and the purchasers party thereto, as amended	Exhibit 1.1 to the Current Report on Form 8-K dated March 5, 2012 and Exhibit 1.2 to the Current Report on Form 8-K dated October 31, 2014.
4.4	Indenture, dated February 14, 2017, between H.B. Fuller Company and U.S. Bank National Association, as Trustee	Exhibit 4.1 to the Current Report on Form 8-K dated February 9, 2017.
4.5	First Supplemental Indenture, dated February 14, 2017, between H.B. Fuller Company and U.S. Bank National Association, as Trustee, relating to the 4.0000% Notes due 2027	Exhibit 4.2 to the Current Report on Form 8-K dated February 9, 2017.
4.6	Amendment No. 1 to First Supplemental Indenture, dated February 14, 2017 between H.B. Fuller Company and U.S. Bank National Association, as Trustee, relating to the 4.0000% Notes due 2027	Exhibit 4.6 to the Current Report on Form 10-K dated January 31, 2018.
4.7	Form of Global Note representing the 4.000% Notes due 2027 (included in Exhibit 4.5)	Exhibit 4.2 to the Current Report on Form 8-K dated February 9, 2017.
4.8	Description of Securities	

10.1 Credit Agreement, dated October 31, 2014, by and among JP Morgan Chase Bank, N.A., as administrative agent, U.S. Bank National Association, Citibank, N.A. and Morgan Stanley MUFG Loan Partners, LLC, as cosyndication agents, and various financial institutions

Exhibit 1.1 to the Current Report on Form 8-K dated October 31, 2014.

10.2 Credit Agreement dated as of April 12, 2017 among (i) H.B. Fuller Company, a Minnesota corporation, as Borrower, (ii) certain of its subsidiaries party thereto as Foreign Subsidiary Borrowers, (iii) JPMorgan Chase Bank, N.A., as Administrative Agent, (iv) U.S. Bank National Association, Citibank, N.A., and Morgan Stanley MUFG Loan Partners, LLC, as Co-Syndication Agents, (v) Bank of America, N.A., HSBC Bank USA, National Association, and PNC Bank, National Association, as Co-Documentation Agents, and (vi) various other financial institutions party thereto as Lenders, as amended

Exhibit 10.1 to the Current Report on Form 8-K dated April 12, 2017, Exhibit 10.1 to the Current Report on Form 8-K dated September 29, 2017, and Exhibit 10.1 to the Current Report on Form 8-K dated November 17, 2017.

10.3 Guaranty made as of April 12, 2017 by H.B. Fuller
Construction Products Inc., a Minnesota corporation as
Initial Guarantor, in favor of J.P. Morgan Chase Bank,
N.A., as Administrative Agent

Exhibit 10.2 to the Current Report on Form 8-K dated April 12, 2017.

10.4 Term Loan Credit Agreement, dated as of October 20, 2017, by and among H.B. Fuller Company, Morgan Stanley Senior Funding, Inc., as administrative agent, and various other financial institutions party thereto as lenders, as amended Exhibit 10.1 to the Current Report on Form 8-K dated October 20, 2017 and Exhibit 10.1 to the Current Report on Form 10-Q dated September 28, 2018.

10.5 Commitment Letter, dated as of September 2, 2017, by and among H.B. Fuller Company and Morgan Stanley Senior Funding, Inc.

Exhibit 10.1 to the Current Report on Form 8-K dated September 2, 2017.

*10.6 Amended and Restated H.B. Fuller Company Year 2000 Stock Incentive Plan

Exhibit 10.1 to the Current Report on Form 8-K dated April 5, 2006.

*10.7 H.B. Fuller Company Supplemental Executive Retirement Plan II – 2008, as amended

Exhibit 10.2 to the Current Report on Form 8-K dated December 19, 2007, Exhibit 10.5 to the Annual Report on Form 10-K for the year ended November 29, 2008 and Exhibit 10.1 to the Quarterly Report on Form 10-Q for the quarter ended May 28, 2011.

*10.8 H.B. Fuller Company Executive Benefit Trust dated October 25, 1993 between H.B. Fuller Company and U.S. Bank, National Association, as Trustee, as amended, relating to the H.B. Fuller Company Supplemental Executive Retirement Plan

Exhibit 10(k) to the Annual Report on Form 10-K for the year ended November 29, 1997, Exhibit 10(k) to the Annual Report on Form 10-K405 for the year ended November 28, 1998, Exhibit 10.3 to the Current Report on Form 8-K dated December 19, 2007 and Exhibit 10.1 to the Quarterly Report on Form 10-Q for the quarter ended May 30, 2009.

*10.9	H.B. Fuller Company Key Employee Deferred Compensation Plan (2005 Amendment and Restatement), as amended	Exhibit 10.1 to the Current Report on Form 8-K dated October 23, 2006, Exhibit 10.11 to the Annual Report on Form 10-K for the year ended December 1, 2007 and Exhibit 10.8 to the Annual Report on Form 10-K for the year ended November 29, 2008.
*10.10	Form of Change in Control Agreement between H.B. Fuller Company and each of its executive officers	Exhibit 10.11 to the Annual Report on Form 10-K for the year ended November 29, 2008.
*10.11	Form of Change-in-Control Agreement between H.B. Fuller Company and each of its executive officers for agreements entered into after January 24, 2019	Exhibit 10.9 to the Current Report on Form 8-K dated January 24, 2019.
*10.12	Form of Severance Agreement between H.B. Fuller Company and each of its executive officers	Exhibit 10.2 to the Quarterly Report on Form 10-Q for the quarter ended May 31, 2008.
*10.13	Form of Non-Qualified Stock Option Agreement under the Amended and Restated H.B. Fuller Company Year 2000 Stock Incentive Plan for awards made on or after December 3, 2009	Exhibit 10.1 to the Current Report on Form 8-K dated December 3, 2009.
*10.14	Form of Non-Qualified Stock Option Agreement under the Amended and Restated H.B. Fuller Company Year 2000 Stock Incentive Plan for awards made on or after January 20, 2011	Exhibit 10.1 to the Current Report on Form 8-K dated January 20, 2011.
*10.15	Form of Non-Qualified Stock Option Agreement under the Amended and Restated H.B. Fuller Company Year 2000 Stock Incentive Plan for awards made on or after January 26, 2012	Exhibit 10.1 to the Current Report on Form 8-K dated January 26, 2012
*10.16	Form of Non-Qualified Stock Option Agreement under the Amended and Restated H.B. Fuller Company Year 2000 Stock Incentive Plan for awards made on or after January 24, 2013	Exhibit 10.1 to the Current Report on Form 8-K dated January 24, 2013.
*10.17	Form of Non-Qualified Stock Option Agreement under the H.B. Fuller Company 2013 Master Incentive Plan for awards made on or after January 23, 2014	Exhibit 10.2 to the Current Report on Form 8-K dated January 23, 2014.
*10.18	Form of Performance Share Award Agreement under the H.B. Fuller Company 2013 Master Incentive Plan for awards made on or after January 19, 2016	Exhibit 10.3 to the Current Report on Form 8-K dated January 19, 2016.
*10.19	Form of Non-Qualified Stock Option Agreement under the H.B. Fuller Company 2016 Master Incentive Plan for awards made on or after April 7, 2016	Exhibit 10.1 to the Current Report on Form 8-K dated April 6, 2016.
*10.20	Form of Restricted Stock Unit Award Agreement under the H.B. Fuller Company 2016 Master Incentive Plan for awards made on or after April 7, 2016	Exhibit 10.2 to the Current Report on Form 8-K dated April 6, 2016.

*10.21	Form of Restricted Stock Unit Award Agreement for the CEO under the H.B. Fuller Company 2016 Master Incentive Plan for awards made on or after April 7, 2016	Exhibit 10.3 to the Current Report on Form 8-K dated April 6, 2016.
*10.22	Form of Performance Share Award Agreement under the H.B. Fuller Company 2016 Master Incentive Plan for awards made on or after April 7, 2016	Exhibit 10.4 to the Current Report on Form 8-K dated April 6, 2016.
*10.23	Form of Restricted Stock Unit Award Agreement for Non-Employee Directors under the H.B. Fuller Company 2016 Master Incentive Plan for awards made on or after April 7, 2016	Exhibit 10.5 to the Current Report on Form 8-K dated April 6, 2016.
*10.24	Form of Non-Qualified Stock Option Agreement under the H.B. Fuller Company 2016 Master Incentive Plan for awards made on or after October 20, 2017	Exhibit 10.2 to the Current Report on Form 8-K dated October 20, 2017.
*10.25	Form of Non-Qualified Stock Option Agreement under the H.B. Fuller Company 2018 Master Incentive Plan for awards made on or after April 12, 2018	Exhibit 10.1 to the Current Report on Form 8-K dated April 18, 2018.
*10.26	Form of Restricted Stock Unit Agreement under the H.B. Fuller Company 2018 Master Incentive Plan for awards made on or after April 12, 2018	Exhibit 10.2 to the Current Report on Form 8-K dated April 18, 2018.
*10.27	Form of Restricted Stock Unit Award Agreement for the CEO under the H.B. Fuller Company 2018 Master Incentive Plan for awards made on or after April 12, 2018	Exhibit 10.3 to the Current Report on Form 8-K dated April 18, 2018.
*10.28	Form of Performance Share Award Agreement under the H.B. Fuller Company 2018 Master Incentive Plan for awards made on or after April 12, 2018	Exhibit 10.4 to the Current Report on Form 8-K dated April 18, 2018.
*10.29	Form of Restricted Stock Unit Award Agreement for Non-Employee Directors under the H.B. Fuller Company 2018 Master Incentive Plan for awards made on or after April 12, 2018	Exhibit 10.5 to the Current Report on Form 8-K dated April 18, 2018.
*10.30	Form of Non-Qualified Stock Option Agreement under the H.B. Fuller Company 2018 Master Incentive Plan for awards made on or after January 24, 2019	Exhibit 10.1 to the Current Report on Form 8-K dated January 24, 2019.
*10.31	Form of Performance-Based Non-Qualified Stock Option Agreement under the H.B. Fuller Company 2018 Master Incentive Plan for awards made on or after January 24, 2019	Exhibit 10.2 to the Current Report on Form 8-K dated January 24, 2019.
*10.32	Form of Restricted Stock Unit Agreement under the H.B. Fuller Company 2018 Master Incentive Plan for awards made on or after January 24, 2019	Exhibit 10.3 to the Current Report on Form 8-K dated January 24, 2019.
*10.33	Form of Restricted Stock Unit Agreement for the CEO under the H.B. Fuller Company 2018 Master Incentive Plan for awards made on or after January 24, 2019	Exhibit 10.4 to the Current Report on Form 8-K dated January 24, 2019.
*10.34	Form of Performance Share Award Agreement under the H.B. Fuller Company 2018 Master Incentive Plan for awards made on or after January 24, 2019	Exhibit 10.5 to the Current Report on Form 8-K dated January 24, 2019.

Form of Restricted Stock Unit Award Agreement for Non-Employee Directors under the H.B. Fuller Company 2018 Master Incentive Plan for awards made on or after January 24, 2019	Exhibit 10.6 to the Current Report on Form 8-K dated January 24, 2019.
Form of Performance-Based Non-Qualified Stock Option Agreement under the H.B. Fuller Company 2016 Master Incentive Plan, as amended	Exhibit 10.2 to the Current Report on Form 8-K dated July 2, 2019 and Exhibit 10.1 to the Current Report on Form 10-K dated July 2, 2019.
H.B. Fuller Company Defined Contribution Restoration Plan (As Amended and Restated Effective January 1, 2008), as amended	Exhibit 10.4 to the Current Report on Form 8-K dated December 19, 2007 and Exhibit 10.1 to the Quarterly Report on Form 10-Q for the quarter ended May 31, 2008, Exhibit 10.1 to the Quarterly Report on Form 10-Q for the quarter ended March 2, 2019, and Exhibit 10.1 to the Quarterly Report on Form 10-Q for the quarter ended June 1, 2019.
H.B. Fuller Company Directors' Deferred Compensation Plan (2008 Amendment and Restatement), as amended	Exhibit 10.22 to the Annual Report on Form 10-K for the year ended November 29, 2008 and Exhibit 10.23 to the Annual Report on Form 10-K for the year ended November 29, 2008.
H.B. Fuller Company 2009 Director Stock Incentive Plan	Exhibit 10.2 to the Quarterly Report on Form 10-Q for the quarter ended May 30, 2009.
H.B. Fuller Company Management Short-Term Incentive Plan for Executive Officers	Exhibit 10.7 to the Current Report on Form 8-K dated January 24, 2019.
H.B. Fuller Company Management Short-Term Incentive Plan for Executive Officers	Exhibit 10.1 to the Current Report on Form 8-K dated January 15, 2020.
H.B. Fuller Company Management Long-Term Incentive Plan	Exhibit 10.2 to the Current Report on Form 8-K dated January 19, 2016.
H.B. Fuller Company Management Long-Term Incentive Plan	Exhibit 10.8 to the Current Report on Form 8-K dated January 24, 2019.
Amended and Restated H.B. Fuller Company Annual and Long-Term Incentive Plan	Exhibit 10.1 to the Current Report on Form 8-K dated April 3, 2008
H.B. Fuller Company 2013 Master Incentive Plan	Annex B to the H.B. Fuller Company Proxy Statement on Schedule 14A filed with the Securities and Exchange Commission on February 27, 2013.
H.B. Fuller Company 2016 Master Incentive Plan	Annex B to the H.B. Fuller Company Proxy Statement on Schedule 14A filed with the Securities and Exchange Commission on February 24, 2016.
H.B. Fuller Company 2018 Master Incentive Plan	Annex B to the H.B. Fuller Company Proxy Statement on Schedule 14A filed with the Securities and Exchange Commission on February 28, 2018.
	Company 2018 Master Incentive Plan for awards made on or after January 24, 2019 Form of Performance-Based Non-Qualified Stock Option Agreement under the H.B. Fuller Company 2016 Master Incentive Plan, as amended H.B. Fuller Company Defined Contribution Restoration Plan (As Amended and Restated Effective January 1, 2008), as amended H.B. Fuller Company Directors' Deferred Compensation Plan (2008 Amendment and Restatement), as amended H.B. Fuller Company 2009 Director Stock Incentive Plan H.B. Fuller Company Management Short-Term Incentive Plan for Executive Officers H.B. Fuller Company Management Short-Term Incentive Plan for Executive Officers H.B. Fuller Company Management Long-Term Incentive Plan H.B. Fuller Company Management Long-Term Incentive Plan

16 Letter from KPMG

Exhibit 16.1 to the Current Report on Form 8-K dated April 24, 2019

- 21 List of Subsidiaries
- 23 Consent of KPMG LLP
- 24 Power of Attorney
- 31.1 302 Certification James J. Owens
- 31.2 302 Certification John J. Corkrean
- 32.1 906 Certification James J. Owens
- 32.2 906 Certification John J. Corkrean
- 101 The following materials from the H.B. Fuller Company Annual Report on Form 10-K for the fiscal year ended November 30, 2019 formatted in inline Extensible Business Reporting Language (XBRL): (i) the Consolidated Statements of Income, (ii) the Consolidated Statements of Comprehensive Income, (iii) the Consolidated Balance Sheets, (iv) the Consolidated Statements of Total Equity, (v) the Consolidated Statements of Cash Flows and (vi) the Notes to Consolidated Financial Statements.
- 104 Cover Page Interactive Data File (formatted in Inline XBRL and contained in Exhibit 101)

(b) See Exhibit Index and Exhibits attached to this Form 10-K.

Item 16. Form 10-K Summary

None

^{*} Asterisked items are management contracts or compensatory plans or arrangements required to be filed.

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.

H.B. FULLER COMPANY

/s/ James J. Owens JAMES J. OWENS President and Chief Executive Officer

Dated: January 24, 2020

Dated: January 24, 2020

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated:

Signature	<u>Title</u>
/s/ James J. Owens JAMES J. OWENS	President and Chief Executive Officer and Director (Principal Executive Officer)
/s/ John J. Corkrean JOHN J. CORKREAN	Executive Vice President, Chief Financial Officer (Principal Financial Officer)
/s/ Robert J. Martsching ROBERT J. MARTSCHING	Vice President, Controller (Principal Accounting Officer)
* DANIEL L. FLORNESS	Director
* DANIEL L. FLORNESS	Director
* THOMAS W. HANDLEY	Director
* MARIA TERESA HILADO	Director
* RUTH S. KIMMELSHUE	Director
J. MICHAEL LOSH	Director
* LEE R. MITAU	Director
* DANTE C. PARRINI	Director
* JOHN C. VAN RODEN, JR.	Director
* R. WILLIAM VAN SANT	Director
* by /s/ Timothy J. Keenan TIMOTHY J. KEENAN, Attorney in Fact	



H.B. Fuller Company

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