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

FORM 10-K

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the fiscal year ended December 31, 2019
Commission File Number: 1-1927

THE GOODYEAR TIRE & RUBBER COMPANY
(Exact name of registrant as specified in its charter)

Ohio	**34-0253240**
(State or Other Jurisdiction of Incorporation or Organization)	**(I.R.S. Employer Identification No.)**
200 Innovation Way, Akron, Ohio	**44316-0001**
(Address of Principal Executive Offices)	**(Zip Code)**

Registrant's telephone number, including area code: (330) 796-2121

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

Title of Each Class	Trading Symbol(s)	Name of Each Exchange on Which Registered
Common Stock, Without Par Value	GT	The Nasdaq Stock Market LLC

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

None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act.

Yes ☑ No ☐

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act.

Yes ☐ No ☑

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.

Yes ☑ No ☐

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit such files).

Yes ☑ No ☐

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

Large Accelerated Filer ☑ Accelerated Filer ☐ Non-accelerated Filer ☐ Smaller Reporting Company ☐ Emerging Growth Company ☐

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

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 held by nonaffiliates of the registrant, computed by reference to the last sales price of such common stock as of the closing of trading on June 28, 2019, was approximately $3.5 billion.

Shares of Common Stock, Without Par Value, outstanding at January 31, 2020:

232,664,275

DOCUMENTS INCORPORATED BY REFERENCE:

Portions of the Company’s Proxy Statement for the Annual Meeting of Shareholders to be held on April 6, 2020 are incorporated by reference in Part III.

THE GOODYEAR TIRE & RUBBER COMPANY

Annual Report on Form 10-K

For the Fiscal Year Ended December 31, 2019

Table of Contents

PART I.

ITEM 1. BUSINESS.

BUSINESS OF GOODYEAR

The Goodyear Tire & Rubber Company (the “Company”) is an Ohio corporation organized in 1898. Its principal offices are located at 200 Innovation Way, Akron, Ohio 44316-0001. Its telephone number is (330) 796-2121. The terms “Goodyear,” “Company” and “we,” “us” or “our” wherever used herein refer to the Company together with all of its consolidated U.S. and foreign subsidiary companies, unless the context indicates to the contrary.

We are one of the world’s leading manufacturers of tires, engaging in operations in most regions of the world. In 2019, our net sales were $14,745 million and Goodyear’s net loss was $311 million. We develop, manufacture, market and distribute tires for most applications. We also manufacture and market rubber-related chemicals for various applications. We are one of the world’s largest operators of commercial truck service and tire retreading centers. In addition, we operate approximately 1,000 retail outlets where we offer our products for sale to consumer and commercial customers and provide repair and other services. We manufacture our products in 47 manufacturing facilities in 21 countries, including the United States, and we have marketing operations in almost every country around the world. We employ approximately 63,000 full-time and temporary associates worldwide.

AVAILABLE INFORMATION

We make available free of charge on our website, http://www.goodyear.com, our annual report on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and amendments to those reports as soon as reasonably practicable after we file or furnish such reports to the Securities and Exchange Commission (the “SEC”). The information on our website is not incorporated by reference in or considered to be a part of this Annual Report on Form 10-K.

DESCRIPTION OF GOODYEAR’S BUSINESS

General Information Regarding Our Segments

For the year ended December 31, 2019, we operated our business through three operating segments representing our regional tire businesses: Americas; Europe, Middle East and Africa (“EMEA”); and Asia Pacific.

Our principal business is the development, manufacture, distribution and sale of tires and related products and services worldwide. We manufacture and market numerous lines of rubber tires for:

- automobiles
- trucks
- buses
- aircraft
- motorcycles
- earthmoving and mining equipment
- farm implements
- industrial equipment, and
- various other applications.

In each case, our tires are offered for sale to vehicle manufacturers for mounting as original equipment (“OE”) and for replacement worldwide. We manufacture and sell tires under the Goodyear, Dunlop, Kelly, Debica, Sava and Fulda brands and various other Goodyear owned “house” brands, and the private-label brands of certain customers. In certain geographic areas we also:

- retread truck, aviation and off-the-road ("OTR") tires,
- manufacture and sell tread rubber and other tire retreading materials,
- sell chemical products, and/or
- provide automotive and commercial repair services and miscellaneous other products and services.

Our principal products are new tires for most applications. Approximately 85% of our sales in 2019, 84% in 2018 and 87% in 2017 were for tire units. Sales of chemical products and natural rubber to unaffiliated customers were 3% in 2019, 4% in 2018 and 3% in 2017 of our consolidated sales (5%, 7% and 6% of Americas total sales in 2019, 2018 and 2017, respectively). The percentages of each segment’s sales attributable to tire units during the periods indicated were:

	Year Ended December 31,		
Tire Unit Sales	2019	2018	2017
Americas	80%	78%	81%
Europe, Middle East and Africa	91	92	94
Asia Pacific	91	91	90

Each segment exports tires to other segments. The financial results of each segment exclude sales of tires exported to other segments, but include operating income derived from such transactions.

Goodyear does not include motorcycle, aviation, race or all-terrain vehicle tires in reported tire unit sales.

Tire unit sales for each segment during the periods indicated were:

GOODYEAR'S ANNUAL TIRE UNIT SALES — SEGMENT

	Year Ended December 31,		
(In millions of tires)	**2019**	**2018**	**2017**
Americas	70.4	70.9	70.9
Europe, Middle East and Africa	55.1	57.8	57.1
Asia Pacific	29.8	30.5	31.2
Goodyear worldwide tire units	**155.3**	**159.2**	**159.2**

Our replacement and OE tire unit sales during the periods indicated were:

GOODYEAR'S ANNUAL TIRE UNIT SALES — REPLACEMENT AND OE

	Year Ended December 31,		
(In millions of tires)	**2019**	**2018**	**2017**
Replacement tire units	115.0	115.1	113.5
OE tire units	40.3	44.1	45.7
Goodyear worldwide tire units	**155.3**	**159.2**	**159.2**

New tires are sold under highly competitive conditions throughout the world. On a worldwide basis, we have two major competitors: Bridgestone (based in Japan) and Michelin (based in France). Other significant competitors include Continental, Cooper, Hankook, Kumho, Nexen, Pirelli, Sumitomo, Toyo, Yokohama and various regional tire manufacturers.

We compete with other tire manufacturers on the basis of product design, performance, price and terms, reputation, warranty terms, customer service and consumer convenience. Goodyear and Dunlop branded tires enjoy a high recognition factor and have a reputation for performance and product design. The Kelly, Debica, Sava and Fulda brands and various house brand tire lines offered by us, and tires manufactured and sold by us to private brand customers, compete primarily on the basis of value and price.

We do not consider our tire businesses to be seasonal to any significant degree.

AMERICAS

Americas, our largest segment in terms of revenue, develops, manufactures, distributes and sells tires and related products and services in North, Central and South America, and sells tires to various export markets, primarily through intersegment sales. Americas manufactures tires in six plants in the United States, two plants in Canada and five plants in Brazil, Chile, Colombia, Mexico and Peru.

Americas manufactures and sells tires for automobiles, trucks, buses, earthmoving, mining and industrial equipment, aircraft, and various other applications.

Goodyear brand radial passenger tire lines sold throughout Americas include the Assurance family of product lines for the premium and mid-tier passenger and cross-over utility segments; the Direction family of product lines for the mid-tier consumer segment; the Eagle family of product lines for the high-performance segment; the Wrangler family of product lines for the sport utility vehicle and light truck segments; and the Ultra Grip and WinterCommand family of winter tires. Additionally, we offer Dunlop brand radial tire lines including Signature HP and SP Sport for the passenger and performance segments; Grandtrek tire lines for the cross-over, sport utility vehicle and light truck segments; and SP Winter, Winter Maxx and Grandtrek tire lines for the winter tire segment. Americas also manufactures and sells several lines of Kelly brand radial tires for passenger cars and light trucks including the Kelly Edge A/S, Edge HP and Edge AT. Our Americas commercial business provides commercial truck tires, retreads, services, tools and business solutions to trucking fleets. Americas also:

- manufactures tread rubber and other tire retreading materials for trucks, heavy equipment and aviation,
- retreads truck, aviation and OTR tires, primarily as a service to its commercial customers,
- sells products and installation services online through our websites, www.goodyear.com for consumer tires and www.goodyeartrucktires.com for commercial tires,
- provides automotive maintenance and repair services at approximately 570 Company-owned retail outlets primarily under the Goodyear or Just Tires names,
- provides trucking fleets with new tires, retreads, mechanical service, preventative maintenance and roadside assistance from approximately 210 Company-owned locations, primarily Goodyear Commercial Tire & Service Centers,

- sells automotive repair and maintenance items, automotive equipment and accessories and other items to dealers and consumers,
- sells chemical products and natural rubber to Goodyear’s other business segments and to unaffiliated customers, and
- provides miscellaneous other products and services.

In 2019, Americas launched several new consumer tires under the Goodyear brand, including the Goodyear Eagle Exhilarate, the Goodyear WinterCommand and the Goodyear Fortitude HT. Americas commercial business launched two new tires under the Goodyear UltraGrip and Goodyear Marathon lines to service our long haul, regional, mixed service and city service customers.

In 2018, we formed a 50/50 joint venture with Bridgestone Americas, Inc. (“Bridgestone”) that combined our Company-owned wholesale distribution business and Bridgestone’s tire wholesale warehouse business to create TireHub, LLC (“TireHub”), a national tire distributor in the United States.

Markets and Other Information

Tire unit sales to replacement and OE customers served by Americas during the periods indicated were:

AMERICAS UNIT SALES — REPLACEMENT AND OE

	Year Ended December 31,		
(In millions of tires)	**2019**	**2018**	**2017**
Replacement tire units	55.1	53.8	53.5
OE tire units	15.3	17.1	17.4
Total tire units	**70.4**	**70.9**	**70.9**

Americas is a major supplier of tires to most manufacturers of automobiles, trucks, buses, aircraft, and earthmoving, mining and industrial equipment that have production facilities located in the Americas.

Americas' primary competitors are Bridgestone and Michelin. Other significant competitors include Continental, Cooper, Nexen, Pirelli, and imports from other regions, primarily Asia.

The principal channel for the sale of Goodyear brand tires in Americas is a large network of independent dealers. Goodyear, Dunlop and Kelly brand tires are also sold to numerous national and regional retailers, in Goodyear Company-owned stores in the United States, and through the wholesale channel, including through TireHub, our sole national wholesale tire distributor in the United States, and a network of aligned U.S. regional wholesale tire distributors.

We are subject to regulation by the National Highway Traffic Safety Administration (“NHTSA”), which has established various standards and regulations applicable to tires sold in the United States. NHTSA has the authority to order the recall of automotive products, including tires, having a defect related to motor vehicle safety or that do not comply with a motor vehicle safety standard. In addition, the Transportation Recall Enhancement, Accountability, and Documentation Act (the “TREAD Act”) imposes numerous reporting requirements with respect to tires. The TREAD Act also requires tire manufacturers to comply with rigorous tire testing standards.

EUROPE, MIDDLE EAST AND AFRICA

Europe, Middle East and Africa, our second largest segment in terms of revenue, develops, manufactures, distributes and sells tires for automobiles, trucks, buses, aircraft, motorcycles, and earthmoving, mining and industrial equipment throughout Europe, the Middle East and Africa under the Goodyear, Dunlop, Debica, Sava and Fulda brands and other house brands, and sells tires to various export markets, primarily through intersegment sales. EMEA manufactures tires in thirteen plants in France, Germany, Luxembourg, Poland, Slovenia, South Africa and Turkey. EMEA also:

- sells aviation tires and manufactures and sells retreaded aviation tires,
- provides various retreading and related services for truck and OTR tires, primarily for its commercial truck tire customers,
- offers automotive repair services at Company-owned retail outlets, and
- provides miscellaneous other products and services.

In 2019, EMEA launched a number of new consumer tires under the Goodyear, Dunlop, Debica, Sava and Fulda brands, including the Goodyear Eagle F1 Asymmetric 5 for the ultra high performance segment, the Goodyear UltraGrip 9 and UltraGrip Performance tires for the winter segment, and the Goodyear Eagle F1 SuperSport range for the ultra-ultra high performance segment. EMEA also introduced a number of commercial truck tires, including the KMax Gen-2 and Fuel Max Gen-2.

Markets and Other Information

Tire unit sales to replacement and OE customers served by EMEA during the periods indicated were:

EUROPE, MIDDLE EAST AND AFRICA UNIT SALES — REPLACEMENT AND OE

	Year Ended December 31,		
(In millions of tires)	2019	2018	2017
Replacement tire units	41.5	42.9	41.4
OE tire units	13.6	14.9	15.7
Total tire units	**55.1**	**57.8**	**57.1**

EMEA is a significant supplier of tires to most vehicle manufacturers across the region.

EMEA's primary competitors are Michelin, Bridgestone, Continental, Pirelli, several regional and local tire producers, and imports from other regions, primarily Asia.

Goodyear and Dunlop brand tires are sold for replacement in EMEA through various channels of distribution, principally independent multi-brand tire dealers. In some areas, Goodyear brand tires, as well as Dunlop, Debica, Sava and Fulda brand tires, are distributed through independent dealers, regional distributors and retail outlets, of which approximately 60 are owned by Goodyear.

Our European operations are subject to regulation by the European Union. The Tire Labeling Regulation applies to all passenger car, light truck and commercial truck tires and requires that consumers be informed about the tire's fuel efficiency, wet grip and noise characteristics.

Asia Pacific

Our Asia Pacific segment develops, manufactures, distributes and sells tires for automobiles, trucks, buses, aircraft, farm, and earthmoving, mining and industrial equipment throughout the Asia Pacific region, and sells tires to various export markets, primarily through intersegment sales. Asia Pacific manufactures tires in seven plants in China, India, Indonesia, Japan, Malaysia and Thailand. Asia Pacific also:

- retreads truck tires and aviation tires,
- manufactures tread rubber and other tire retreading materials for aviation tires,
- provides automotive maintenance and repair services at Company-owned retail outlets, and
- provides miscellaneous other products and services.

In 2019, Asia Pacific released new consumer tires under the Goodyear brand, including the Goodyear Assurance DuraPlus 2 and the Goodyear Wrangler AT SilentTrac for all markets, and introduced new sizes of the Goodyear Optilife 2 for the Australian market. In addition, Asia Pacific began importing the Goodyear Eagle F1 Asymmetric 5 and Goodyear Eagle F1 SuperSport. Asia Pacific also launched two new commercial tires, the Goodyear premium drive tire, KMax G667+, for logistics fleets and a low rolling resistance tire, the Goodyear S206 FuelMaxII.

Markets and Other Information

Tire unit sales to replacement and OE customers served by Asia Pacific during the periods indicated were:

ASIA PACIFIC UNIT SALES — REPLACEMENT AND OE

	Year Ended December 31,		
(In millions of tires)	2019	2018	2017
Replacement tire units	18.4	18.4	18.6
OE tire units	11.4	12.1	12.6
Total tire units	**29.8**	**30.5**	**31.2**

Asia Pacific's major competitors are Bridgestone and Michelin along with many other global brands present in different parts of the region, including Continental, Dunlop, Hankook and a large number of regional and local tire producers.

Asia Pacific sells primarily Goodyear brand tires throughout the region and also sells the Dunlop brand in Australia and New Zealand. Other brands of tires, such as Blue Streak, Remington, Kelly and Diamondback, are sold in smaller quantities. Tires are sold through a network of licensed and franchised retail stores and multi-brand retailers through a network of wholesale dealers. In Australia, we also operate a network of approximately 200 retail stores under the Beaurepaires brand.

GENERAL BUSINESS INFORMATION

Sources and Availability of Raw Materials

The principal raw materials used by Goodyear are synthetic and natural rubber. Synthetic rubber accounts for approximately 55% of all rubber consumed by us on an annual basis. Our plants located in Beaumont and Houston, Texas supply a major portion of our global synthetic rubber requirements. We purchase all of our requirements for natural rubber in the world market.

Other important raw materials and components we use are carbon black, steel cord, fabrics and petrochemical-based commodities. Substantially all of these raw materials and components are purchased from independent suppliers, except for certain chemicals we manufacture. We purchase most raw materials and components in significant quantities from several suppliers, except in those instances where only one or a few qualified sources are available. We anticipate the continued availability of all raw materials and components we will require during 2020, subject to spot shortages and unexpected disruptions caused by natural disasters, such as hurricanes, and other events.

Substantial quantities of fuel and other petrochemical-based commodities are used in the production of tires, synthetic rubber and other products. Supplies of such fuels and commodities have been and are expected to continue to be available to us in quantities sufficient to satisfy our anticipated requirements, subject to spot shortages.

Patents and Trademarks

We own approximately 1,800 product, process and equipment patents issued by the United States Patent Office and approximately 3,400 patents issued or granted in other countries around the world. We have approximately 400 applications for United States patents pending and approximately 1,000 patent applications on file in other countries around the world. While such patents and patent applications as a group are important, we do not consider any patent or patent application to be of such importance that the loss or expiration thereof would materially affect Goodyear or any business segment.

We own, control or use approximately 1,500 different trademarks, including several using the word “Goodyear” or the word “Dunlop.” Approximately 8,300 registrations and 400 pending applications worldwide protect these trademarks. While such trademarks as a group are important, the only trademarks we consider material to our business, or to the business of any of our segments, are those using the word “Goodyear,” and with respect to certain of our international business segments, those using the word “Dunlop.” We believe our trademarks are valid and most are of unlimited duration as long as they are adequately protected and appropriately used.

Backlog

Our backlog of orders is not considered material to, or a significant factor in, evaluating and understanding any of our business segments or our businesses considered as a whole.

Employees

At December 31, 2019, we employed approximately 63,000 full-time and temporary people throughout the world, including approximately 37,000 people covered under collective bargaining agreements. Approximately 6,000 of our employees in the United States are covered by a master collective bargaining agreement with the United Steelworkers ("USW"), which expires in July 2022. In addition, approximately 1,000 of our employees in the United States are covered by other contracts with the USW and various other unions. Approximately 18,000 of our employees outside of the United States are covered by union contracts that currently have expired or that will expire in 2020, primarily in Germany, Poland, China, Slovenia, Turkey and Mexico. Unions represent a major portion of our employees in the United States and Europe.

Compliance with Environmental Regulations

We are subject to extensive regulation under environmental and occupational health and safety laws and regulations. These laws and regulations relate to, among other things, air emissions, discharges to surface and underground waters and the generation, handling, storage, transportation and disposal of waste materials and hazardous substances. We have several continuing programs designed to ensure compliance with federal, state and local environmental and occupational safety and health laws and regulations. We expect capital expenditures for pollution control facilities and occupational safety and health projects to be approximately $50 million and $55 million in 2020 and 2021, respectively.

We also incur ongoing expenses to maintain and operate our pollution control facilities and conduct our other environmental activities, including the control and disposal of hazardous substances. These expenditures are expected to be sufficient to comply with existing environmental laws and regulations and are not expected to have a material adverse effect on our competitive position.

In the future, we may incur increased costs and additional charges associated with environmental compliance and cleanup projects necessitated by the identification of new waste sites, the impact of new environmental laws and regulatory standards, or the availability of new technologies. Compliance with federal, state and local environmental laws and regulations in the future may require a material increase in our capital expenditures and could adversely affect our earnings and competitive position.

Table of Contents

INFORMATION ABOUT OUR EXECUTIVE OFFICERS

Set forth below are: (1) the names and ages of all executive officers of the Company at February 11, 2020, (2) all positions with the Company presently held by each such person, and (3) the positions held by, and principal areas of responsibility of, each such person during the last five years.

Name	Position(s) Held	Age
Richard J. Kramer	**Chairman of the Board, Chief Executive Officer and President**	**56**

Mr. Kramer was elected Chief Executive Officer and President in April 2010 and Chairman in October 2010. He is the principal executive officer of the Company. Mr. Kramer joined Goodyear in 2000 and has served as Executive Vice President and Chief Financial Officer (June 2004 to August 2007), President, North America (March 2007 to February 2010) and Chief Operating Officer (June 2009 to April 2010).

Darren R. Wells	**Executive Vice President and Chief Financial Officer**	**54**

Mr. Wells was named Executive Vice President and Chief Financial Officer in September 2018. He is Goodyear's principal financial officer. Mr. Wells previously served as Goodyear's Executive Vice President and Chief Financial Officer from October 2008 to November 2013. He first joined Goodyear in 2002 and has also served as President, Europe, Middle East and Africa (December 2013 to December 2015). Prior to rejoining Goodyear, Mr. Wells was an Executive in Residence and MBA Coach at the University of South Florida's Muma College of Business from January 2018 to September 2018.

Stephen R. McClellan	**President, Americas**	**54**

Mr. McClellan was named President, Americas in January 2016. He is the executive officer responsible for Goodyear's operations in North, Central and South America. Mr. McClellan joined Goodyear in 1988 and has served as President, North America (August 2011 to December 2015).

Christopher R. Delaney	**President, Europe, Middle East and Africa**	**58**

Mr. Delaney was named President, Europe, Middle East and Africa in September 2017. He is the executive officer responsible for Goodyear's operations in Europe, the Middle East and Africa. Mr. Delaney joined Goodyear as President-Elect, Asia Pacific in August 2015, and has served as President, Asia Pacific (January 2016 to September 2017). Prior to joining Goodyear, Mr. Delaney was Chief Executive Officer and Managing Director of Goodman Fielder Ltd., a food products company in Australia, New Zealand and the Asia Pacific region, from July 2011 until March 2015.

Ryan G. Patterson	**President, Asia Pacific**	**46**

Mr. Patterson was named President, Asia Pacific in September 2017. He is the executive officer responsible for Goodyear's operations in Asia, Australia, New Zealand and the Western Pacific. Mr. Patterson joined Goodyear in 2002 and has served as President, North America Consumer (September 2014 to September 2017).

Jonathan Bellissimo	**Senior Vice President, Global Operations and Technology**	**64**

Mr. Bellissimo was named Senior Vice President, Global Operations and Technology effective January 1, 2019. He is the executive officer responsible for Goodyear's global manufacturing, supply chain, sales and operations planning, engineering and product quality activities. Mr. Bellissimo joined Goodyear in 1977 and has served as General Director of the Goodyear Innovation Center in Akron, Ohio (January 2010 to August 2016) and Vice President, Americas Product Development & Chemical (September 2016 to December 31, 2018).

Laura P. Duda	**Senior Vice President, Global Communications**	**50**

Ms. Duda was named Senior Vice President, Global Communications effective January 1, 2019. She is the executive officer responsible for Goodyear's communications activities worldwide. Ms. Duda joined Goodyear as Vice President, Corporate Communications in February 2016, and has served as Vice President, Communications, Americas (July 2016 to December 31, 2018). Prior to joining Goodyear, Ms. Duda was Vice President, Communications at Exelon Corporation, a utility services holding company, from November 2008 to January 2016.

Christopher P. Helsel	**Senior Vice President and Chief Technology Officer**	**54**

Mr. Helsel was named Vice President and Chief Technology Officer in September 2017 and became a Senior Vice President in February 2019. He is the executive officer responsible for Goodyear's global research and development activities. Mr. Helsel joined Goodyear in 1996 and has served as Director, Retread (January 2013 to February 2017) and Director, North America Commercial and Global Off-Highway Technology (March 2017 to August 2017).

Name	Position(s) Held	Age
David E. Phillips	**Senior Vice President and General Counsel**	**44**

Mr. Phillips was named Senior Vice President and General Counsel effective on June 4, 2019. He is Goodyear's chief legal officer. Mr. Phillips joined Goodyear in 2011 and has served as Senior Legal Counsel (2011 to April 2016), Associate General Counsel, North America (May 2016 to August 2016) and Associate General Counsel, Americas (September 2016 to June 3, 2019).

Gary S. VanderLind	**Senior Vice President, Global Human Resources**	**57**

Mr. VanderLind was named Senior Vice President, Global Human Resources effective February 1, 2019. He is Goodyear’s chief human resources officer. Mr. VanderLind joined Goodyear in 1985 and has served as Vice President, Human Resources - North America (September 2007 to August 2016) and Vice President, Human Resources - Americas (September 2016 to January 31, 2019).

Evan M. Scocos	**Vice President and Controller**	**48**

Mr. Scocos was named Vice President and Controller in June 2016. He is Goodyear's principal accounting officer. Mr. Scocos joined Goodyear in 2004 and has served as Vice President and General Auditor (March 2014 to May 2016).

No family relationship exists between any of the above executive officers or between the executive officers and any director of the Company.

Each executive officer is elected by the Board of Directors of the Company at its annual meeting to a term of one year or until his or her successor is duly elected. In those instances where the person is elected at other than an annual meeting, such person’s term will expire at the next annual meeting.

ITEM 1A. RISK FACTORS.

You should carefully consider the risks described below and other information contained in this Annual Report on Form 10-K when considering an investment decision with respect to our securities. Additional risks and uncertainties not presently known to us, or that we currently deem immaterial, may also impair our business operations. Any of the events discussed in the risk factors below may occur. If they do, our business, results of operations, financial condition or liquidity could be materially adversely affected. In such an instance, the trading price of our securities could decline, and you might lose all or part of your investment.

If we do not successfully implement our strategic initiatives, our operating results, financial condition and liquidity may be materially adversely affected.

We continued to experience challenging global industry conditions in 2019, and our business was impacted by trends that negatively affected the tire industry in general. These negative trends include higher raw material costs, foreign currency headwinds due to a strong U.S. dollar, lower OE industry volumes, softening demand in Europe, weak market conditions in China, and economic volatility in Latin America, particularly in Brazil. Global tire industry demand continues to be difficult to predict. If these overall trends continue or worsen, then our operational and financial condition could be adversely affected.

In order to reduce the impact of these trends, we are pursuing important strategic initiatives, such as our operational excellence, sales and marketing excellence and innovation excellence initiatives. For example, in 2018, we formed TireHub, a new national tire distributor in the United States, which is expected to provide a superior, fully integrated distribution, warehousing, sales and delivery solution for our dealers.

Our operational excellence initiatives are aimed at improving our manufacturing efficiency and creating an advantaged supply chain focused on reducing our total delivered costs, optimizing working capital levels and delivering best in industry customer service. Our sales and marketing excellence initiatives are intended to build the value of our brand, help our customers win in their markets, and become consumers' preferred choice. Our innovation excellence initiatives are designed to develop great products and services that anticipate and respond to the needs of consumers. If we fail to execute these initiatives successfully, we may fail to achieve our financial goals.

We believe that our manufacturing footprint is less cost-competitive than that of our principal competitors. To begin to address this competitive disadvantage, we are curtailing production of tires for declining, less profitable segments of the tire market and undertaking significant capital investments in building, expanding and modernizing manufacturing facilities around the world to strengthen the competitiveness of our manufacturing footprint and increase production of premium, large-rim diameter consumer tires. The failure to implement successfully this or our other important strategic initiatives may materially adversely affect our operating results, financial condition and liquidity.

We are also facing distribution challenges in Europe which have adversely impacted our consumer replacement tire business in that region. We plan to address these challenges by taking actions to better align our European distribution network in order to capture the full value of our products and brands in the marketplace. The changes we expect to pursue to our distribution network in Europe could lead to a disruption in our consumer replacement sales in 2020. However, if we fail to address the distribution challenges that we face, or our plans to align our distribution network in Europe do not achieve the desired result, our competitive position may deteriorate and our operating results, financial condition and liquidity could be adversely affected.

Our performance is also dependent on our ability to improve the volume and mix of higher margin tires we sell in our targeted market segments. In order to do so, we must be successful in developing, producing, marketing and selling products that consumers desire and that offer higher margins to us. Shifts in consumer demand away from higher margin tires could materially adversely affect our business. We have been capacity constrained from time to time with respect to the production of certain higher margin tires, particularly in the United States. When faced with these constraints, we try to alleviate them by utilizing our global manufacturing footprint to meet the demand for our tires and by adding manufacturing capacity. However, in spite of these initiatives, we may not be able to meet all of the demand for certain of our higher margin tires, which could harm our competitive position and limit our growth.

We cannot assure you that our strategic initiatives will be successful. If not, we may not be able to achieve or sustain future profitability, which would impair our ability to meet our debt and other obligations and would otherwise negatively affect our operating results, financial condition and liquidity.

We face significant global competition and our market share could decline.

New tires are sold under highly competitive conditions throughout the world. We compete with other tire manufacturers on the basis of product design, performance, price and terms, reputation, warranty terms, customer service and consumer convenience. On a worldwide basis, we have two major competitors, Bridgestone (based in Japan) and Michelin (based in France), that have large shares of the markets of the countries in which they are based and are aggressively seeking to maintain or improve their worldwide market share. Other significant competitors include Continental, Cooper, Hankook, Kumho, Nexen, Pirelli, Sumitomo, Toyo, Yokohama and various regional tire manufacturers. Our competitors produce significant numbers of tires in low-cost countries, and have announced plans to further increase their production capacity in those countries as well as the United States. These increases in production capacity may result in even greater competition in the United States and elsewhere.

Our ability to compete successfully will depend, in significant part, on our ability to continue to innovate and manufacture the types of tires demanded by consumers, and to reduce costs by such means as reducing excess and high-cost capacity, leveraging global purchasing, improving productivity, eliminating redundancies and increasing production at low-cost supply sources. If we are unable to compete successfully, our market share may decline, materially adversely affecting our results of operations and financial condition.

In addition, the automotive industry may experience significant changes due to the introduction of new technologies, such as electric and autonomous vehicles, or new services, business models or methods of travel, such as ride sharing. As the automotive industry evolves, we may need to provide a wider range of products and services to remain competitive, including products that we do not currently have the capability to manufacture or services that we do not currently offer. The demand for our products may also decline if automotive production declines and/or total vehicle miles traveled declines. If we do not accurately predict, prepare for and respond to market developments, technological innovations and changing customer and consumer needs and preferences, our results of operations and financial condition could be materially adversely affected.

Raw material and energy costs may materially adversely affect our operating results and financial condition.

Raw material costs have historically been volatile, and we may experience increases in the prices of natural and synthetic rubber, carbon black and petrochemical-based commodities. Market conditions, including actions by competitors, or contractual obligations may prevent us from passing any such increased costs on to our customers through timely price increases. Additionally, higher raw material and energy costs around the world may offset our efforts to reduce our cost structure. As a result, higher raw material and energy costs could result in declining margins and operating results and adversely affect our financial condition. The volatility of raw material costs may cause our margins, operating results and liquidity to fluctuate. In addition, lower raw material costs may put downward pressure on the price of tires, which could ultimately reduce our margins and adversely affect our results of operations.

If we fail to extend or renegotiate significant collective bargaining contracts with our labor unions as they expire from time to time, or if our unionized employees were to engage in a strike or other work stoppage or interruption, our business, results of operations, financial condition and liquidity could be materially adversely affected.

We are a party to collective bargaining contracts with our labor unions, which represent a significant number of our employees. Our master collective bargaining agreement with the USW covers approximately 6,000 employees in the United States at December 31, 2019, and expires in July 2022. In addition, approximately 18,000 of our employees outside of the United States are covered by union contracts that have expired or are expiring in 2020, primarily in Germany, Poland, China, Slovenia, Turkey and Mexico. Although we believe that our relations with our employees are satisfactory, no assurance can be given that we will be able to successfully extend or renegotiate our collective bargaining agreements as they expire from time to time. If we fail to extend or renegotiate our collective bargaining agreements, if disputes with our unions arise, or if our unionized workers engage in a strike or other work stoppage or interruption, we could experience a significant disruption of, or inefficiencies in, our operations or incur higher labor costs, which could have a material adverse effect on our business, results of operations, financial condition and liquidity.

We could be negatively impacted by the imposition of tariffs on imported tires and other goods.

The imposition of tariffs on certain tires imported from China or other countries may reduce our flexibility to utilize our global manufacturing footprint to meet demand for our tires around the world. In addition, the imposition of tariffs in the United States may result in the tires subject to such tariffs being diverted to other regions of the world, such as Europe, Latin America or Asia, or in retaliatory tariffs or other actions by affected countries. Broad-based tariffs and other trade restrictions could also increase costs for our suppliers who may increase prices to us. Finally, tariffs and other trade restrictions may weaken the economies of key markets for us, such as China, resulting in lower economic growth rates and weakened demand for our products and services. These factors, individually or together, could materially adversely affect our results of operations, financial condition and liquidity.

Our international operations have certain risks that may materially adversely affect our operating results, financial condition and liquidity.

We have manufacturing and distribution facilities throughout the world. Our international operations are subject to certain inherent risks, including:

- exposure to local economic conditions;
- adverse foreign currency fluctuations;
- adverse currency exchange controls;
- withholding taxes and restrictions on the withdrawal of foreign investment and earnings;

- tax policies and regulations;
- labor regulations;
- tariffs;
- government price and profit margin controls;
- expropriations of property;
- adverse changes in the diplomatic relations of foreign countries with the United States;
- the potential instability of foreign governments;
- hostility from local populations and insurrections;
- risks of renegotiation or modification of existing agreements with governmental authorities;
- export and import restrictions; and
- other changes in laws or government policies.

The likelihood of such occurrences and their potential effect on us vary from country to country and are unpredictable. Certain regions, including Latin America, Asia, Eastern Europe, the Middle East and Africa, are inherently more economically and politically volatile and, as a result, our business units that operate in these regions could be subject to significant fluctuations in sales and operating income from quarter to quarter. Because a significant percentage of our operating income in recent years has come from these regions, adverse fluctuations in the operating results in these regions could have a significant impact on our results of operations in future periods.

In addition, compliance with complex foreign and U.S. laws and regulations that apply to our international operations increases our cost of doing business in international jurisdictions. These numerous and sometimes conflicting laws and regulations include import and export laws, anti-competition laws, anti-corruption laws, such as the U.S. Foreign Corrupt Practices Act and the U.K. Bribery Act, and other local laws prohibiting corrupt payments to governmental officials, data privacy laws such as the European Union's General Data Protection Regulation, tax laws, and accounting, internal control and disclosure requirements. Violations of these laws and regulations could result in civil and criminal fines, penalties and sanctions against us, our officers or our employees, prohibitions on the conduct of our business and on our ability to offer our products and services in one or more countries, and could also materially affect our reputation, business and results of operations. In certain foreign jurisdictions, there is a higher risk of fraud or corruption and greater difficulty in maintaining effective internal controls and compliance programs. Although we have implemented policies and procedures designed to promote compliance with applicable laws and regulations, there can be no assurance that our employees, contractors or agents will not violate our policies or applicable laws and regulations.

We have foreign currency translation and transaction risks that may materially adversely affect our operating results, financial condition and liquidity.

The financial position and results of operations of many of our international subsidiaries are initially recorded in various foreign currencies and then translated into U.S. dollars at the applicable exchange rate for inclusion in our financial statements. The strengthening of the U.S. dollar against these foreign currencies ordinarily has a negative impact on our reported sales and operating margin (and conversely, the weakening of the U.S. dollar against these foreign currencies has a positive impact). For the year ended December 31, 2019, foreign currency translation unfavorably affected sales by $451 million and unfavorably affected segment operating income by $38 million compared to the year ended December 31, 2018. The volatility of currency exchange rates may materially adversely affect our operating results.

Our long term ability to meet our obligations, to repay maturing indebtedness or to implement strategic initiatives may be dependent on our ability to access capital markets in the future and to improve our operating results.

The adequacy of our liquidity depends on our ability to achieve an appropriate combination of operating improvements, financing from third parties and access to capital markets. We may need to undertake additional financing actions in the capital markets in order to ensure that our future liquidity requirements are addressed or to implement strategic initiatives. These actions may include the issuance of additional debt or equity, or the factoring of our accounts receivable.

Our access to the capital markets cannot be assured and is dependent on, among other things, the ability and willingness of financial institutions to extend credit on terms that are acceptable to us or our suppliers, or to honor future draws on our existing lines of credit, and the degree of success we have in implementing our strategic initiatives. We have continued our use of supplier financing programs and the factoring of our accounts receivable in order to improve our working capital efficiency and reduce our costs. If these programs become unavailable or less attractive to us or our suppliers, our liquidity could be adversely affected.

Future liquidity requirements, or our inability to access cash deposits or make draws on our lines of credit, also may make it necessary for us to incur additional debt. A substantial portion of our assets is subject to liens securing our indebtedness. As a result, we are limited in our ability to pledge our remaining assets as security for additional secured indebtedness.

Our inability to access the capital markets or incur additional debt in the future could have a material adverse effect on our liquidity and operations, and could require us to consider further measures, including deferring planned capital expenditures, reducing discretionary spending, selling additional assets and restructuring existing debt.

Financial difficulties, work stoppages, supply disruptions or economic conditions affecting our major customers, dealers or suppliers could harm our business.

We experienced challenging global industry conditions in 2019, particularly in EMEA and Asia Pacific. As a result of these industry conditions, automotive vehicle production and global tire industry demand continues to be difficult to predict.

Although sales to our OE customers accounted for approximately 20% of our net sales in 2019, demand for our products by OE customers and production levels at our facilities are impacted by automotive vehicle production. We may experience future declines in sales volume due to declines in new vehicle sales, the performance, discontinuation or sale of certain OE brands, platforms or programs, increased competition, or weakness in the demand for replacement tires, which could result in us incurring under-absorbed fixed costs at our production facilities or slowing the rate at which we are able to recover those costs.

Automotive production can also be affected by labor relation issues, financial difficulties or supply disruptions. Our OE customers could experience production disruptions resulting from their own or supplier labor, financial or supply difficulties. Such events may cause an OE customer to reduce or suspend vehicle production. As a result, an OE customer could halt or significantly reduce purchases of our products, which would harm our results of operations, financial condition and liquidity.

Our suppliers could also experience production disruptions due to labor, financial or supply difficulties, or new environmental laws or stricter enforcement of existing environmental laws. Any such production disruptions may result in the unexpected closure of our suppliers' facilities or increases in the cost of our raw materials, which would adversely affect our results of operations and financial condition.

In addition, the bankruptcy, restructuring or consolidation of one or more of our major customers, dealers or suppliers could result in the write-off of accounts receivable, a reduction in purchases of our products or a supply disruption to our facilities, which could negatively affect our results of operations, financial condition and liquidity.

Our capital expenditures may not be adequate to maintain our competitive position and may not be implemented in a timely or cost-effective manner.

Our capital expenditures are limited by our liquidity and capital resources and the amount we have available for capital spending is limited by the need to pay our other expenses and to maintain adequate cash reserves and borrowing capacity to meet unexpected demands that may arise. We believe that our ratio of capital expenditures to sales is lower than the comparable ratio for our principal competitors.

Productivity improvements and manufacturing cost improvements may be required to offset potential increases in labor and raw material costs and competitive price pressures. In addition, as part of our strategy to reduce high-cost and excess manufacturing capacity and to increase our capacity to produce higher margin tires, we may need to modernize or expand our facilities. We are currently undertaking significant construction, expansion and modernization projects in the United States, Germany, Luxembourg, Slovenia and Thailand.

We may not have sufficient resources to implement planned capital expenditures with minimal disruption to our existing manufacturing operations, or within desired time frames and budgets. Any disruption to our operations, delay in implementing capital improvements or unexpected costs may materially adversely affect our business and results of operations.

If we are unable to make sufficient capital expenditures, or to maximize the efficiency of the capital expenditures we do make, we may be unable to achieve productivity improvements, which may harm our competitive position, or to manufacture the products necessary to compete successfully in our targeted market segments. In addition, plant construction and modernization may temporarily disrupt our manufacturing operations and lead to temporary increases in our costs.

We have a substantial amount of debt, which could restrict our growth, place us at a competitive disadvantage or otherwise materially adversely affect our financial health.

We have a substantial amount of debt. As of December 31, 2019, our debt (including finance leases) on a consolidated basis was approximately $5.7 billion. Our substantial amount of debt and other obligations could have important consequences. For example, it could:

- make it more difficult for us to satisfy our obligations;
- impair our ability to obtain financing in the future for working capital, capital expenditures, research and development, acquisitions or general corporate requirements;
- increase our vulnerability to adverse economic and industry conditions;
- limit our ability to use cash flows from operating activities in other areas of our business or to return cash to shareholders because we would need to dedicate a substantial portion of these funds for payments on our indebtedness;
- limit our flexibility in planning for, or reacting to, changes in our business and the industry in which we operate; and
- place us at a competitive disadvantage compared to our competitors.

The agreements governing our debt, including our credit agreements, limit, but do not prohibit, us from incurring additional debt and we may incur a significant amount of additional debt in the future, including additional secured debt. If new debt is added to our current debt levels, our ability to satisfy our debt obligations may become more limited.

Our ability to make scheduled payments on, or to refinance, our debt and other obligations will depend on our financial and operating performance, which, in turn, is subject to our ability to implement our strategic initiatives, prevailing economic conditions and certain financial, business and other factors beyond our control. If our cash flow and capital resources are insufficient to fund our debt service and other obligations, we may be forced to reduce or eliminate the dividend on our common stock, reduce or delay expansion plans and capital expenditures, sell material assets or operations, obtain additional capital or restructure our debt. We cannot assure you that our operating performance, cash flow and capital resources will be sufficient to pay our debt obligations when they become due. We cannot assure you that we would be able to dispose of material assets or operations, obtain additional capital or restructure our debt or other obligations if necessary or, even if we were able to take such actions, that we could do so on terms that are acceptable to us.

Any failure to be in compliance with any material provision or covenant of our debt instruments, or a material reduction in the borrowing base under our revolving credit facility, could have a material adverse effect on our liquidity and operations.

The agreements governing our secured credit facilities, senior unsecured notes and our other outstanding indebtedness impose significant operating and financial restrictions on us. These restrictions may affect our ability to operate our business and may limit our ability to take advantage of potential business opportunities as they arise. These restrictions limit our ability to, among other things:

- incur additional debt or issue redeemable preferred stock;
- pay dividends, repurchase shares or make certain other restricted payments or investments;
- incur liens;
- sell assets;
- incur restrictions on the ability of our subsidiaries to pay dividends or to make other payments to us;
- enter into affiliate transactions;
- engage in sale/leaseback transactions; and
- engage in certain mergers or consolidations or transfers of substantially all of our assets.

Availability under our first lien revolving credit facility is subject to a borrowing base, which is based on eligible accounts receivable and inventory, the value of our principal trademarks, and certain cash in an amount not to exceed $200 million. To the extent that our eligible accounts receivable and inventory and other components of the borrowing base decline in value, our borrowing base will decrease and the availability under that facility may decrease below its stated amount. In addition, if at any time the amount of outstanding borrowings and letters of credit under that facility exceeds the borrowing base, we are required to prepay borrowings and/or cash collateralize letters of credit sufficient to eliminate the excess.

Our ability to comply with these covenants or to maintain our borrowing base may be affected by events beyond our control, including deteriorating economic conditions, and these events could require us to seek waivers or amendments of covenants or alternative sources of financing or to reduce expenditures. We cannot assure you that such waivers, amendments or alternative financing could be obtained, or if obtained, would be on terms acceptable to us.

A breach of any of the covenants or restrictions contained in any of our existing or future financing agreements, including the financial covenants in our secured credit facilities, could result in an event of default under those agreements. Such a default could allow the lenders under our financing agreements, if the agreements so provide, to discontinue lending, to accelerate the related debt as well as any other debt to which a cross-acceleration or cross-default provision applies, and/or to declare all borrowings outstanding thereunder to be due and payable. In addition, the lenders could terminate any commitments they have to provide us with further funds. If any of these events occur, we cannot assure you that we will have sufficient funds available to pay in full the total amount of obligations that become due as a result of any such acceleration, or that we will be able to find additional or alternative financing to refinance any such accelerated obligations. Even if we obtain additional or alternative financing, we cannot assure you that it would be on terms that would be acceptable to us.

We cannot assure you that we will be able to remain in compliance with the covenants to which we are subject in the future and, if we fail to do so, that we will be able to obtain waivers from our lenders or amend the covenants.

Our variable rate indebtedness subjects us to interest rate risk, which could cause our debt service obligations to increase significantly.

Certain of our borrowings are at variable rates of interest and expose us to interest rate risk. If interest rates increase, our debt service obligations on the variable rate indebtedness would increase even though the amount borrowed remained the same, which would require us to use more of our available cash to service our indebtedness. There can also be no assurance that we will be able to enter into swap agreements or other hedging arrangements in the future if we desire to do so, or that any existing or future hedging arrangements will offset increases in interest rates. As of December 31, 2019, we had $1,837 million of variable rate debt outstanding.

We have substantial fixed costs and, as a result, our operating income fluctuates disproportionately with changes in our net sales.

We operate with significant operating and financial leverage. Significant portions of our manufacturing, selling, administrative and general expenses are fixed costs that neither increase nor decrease proportionately with sales. In addition, a significant portion of our interest expense is fixed. There can be no assurance that we would be able to reduce our fixed costs proportionately in response to a decline in our net sales and therefore our competitiveness could be significantly impacted. As a result, a decline in our net sales could result in a higher percentage decline in our income from operations and net income.

We may incur significant costs in connection with our contingent liabilities and tax matters.

We have significant reserves for contingent liabilities and tax matters. The major categories of our contingent liabilities include workers' compensation and other employment-related claims, product liability and other tort claims, including asbestos claims, and environmental matters. Our recorded liabilities and estimates of reasonably possible losses for our contingent liabilities are based on our assessment of potential liability using the information available to us at the time and, where applicable, any past experience and recent and current trends with respect to similar matters. Our contingent liabilities are subject to inherent uncertainties, and unfavorable judicial or administrative decisions could occur that we did not anticipate. Such an unfavorable decision could include monetary damages, fines or other penalties or an injunction prohibiting us from taking certain actions or selling certain products. If such an unfavorable decision were to occur, it could result in a material adverse impact on our financial position and results of operations in the period in which the decision occurs, or in future periods.

The calculation of our tax liabilities involves dealing with uncertainties in the application of complex tax regulations, including with respect to transfer pricing. While we apply consistent transfer pricing policies and practices globally, support transfer prices through economic studies, seek advance pricing agreements and joint audits to the extent possible and believe our transfer prices to be appropriate, such transfer prices, and related interpretations of tax laws, are occasionally challenged by various taxing authorities globally. We have received various tax assessments challenging our interpretations of applicable tax laws in various jurisdictions. Although we believe we have complied with applicable tax laws, have strong positions and defenses and have historically been successful in defending such claims, our results of operations could be materially adversely affected in the case we are unsuccessful in the defense of existing or future claims.

If we wish to appeal any future adverse judgment in any of these proceedings, we may be required to post an appeal bond with the relevant court. If we were subject to a significant adverse judgment or experienced an interruption or reduction in the availability of bonding capacity, we may be required to provide letters of credit or post cash collateral, which may have a material adverse effect on our liquidity.

We have significant deferred tax assets, including foreign tax credits. We must generate sufficient earnings of the appropriate character in order to utilize our deferred tax assets prior to any applicable expiration dates. If our earnings remain flat or decline over an extended period of time, we may not be able to utilize certain of our deferred tax assets prior to their expiration and we may need to record a valuation allowance against them that could materially adversely affect our results of operations in the period in which the valuation allowance is recorded.

For further information regarding our contingent liabilities and tax matters, refer to Notes to the Consolidated Financial Statements No. 19, Commitments and Contingent Liabilities, and No. 6, Income Taxes. For further information regarding our accounting policies with respect to certain of our contingent liabilities and uncertain income tax positions, refer to "Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations — Critical Accounting Policies."

We are subject to extensive government regulations that may materially adversely affect our operating results.

We are subject to regulation by the Department of Transportation through the National Highway Traffic Safety Administration, or NHTSA, which has established various standards and regulations applicable to tires sold in the United States and tires sold in a foreign country that are identical or substantially similar to tires sold in the United States. NHTSA has the authority to order the recall of automotive products, including tires, having safety-related defects or that do not comply with a motor vehicle safety standard.

The Transportation Recall Enhancement, Accountability, and Documentation Act, or TREAD Act, imposes numerous requirements with respect to the early warning reporting of warranty claims, property damage claims, and bodily injury and fatality claims and also requires tire manufacturers, among other things, to comply with revised and more rigorous tire testing standards. Compliance with the TREAD Act regulations has increased the cost of producing and distributing tires in the United States. We have been subject to recalls in the past and it is possible that a recall of our tires, including under the TREAD Act or in other countries under similar regulations, could occur in the future. A substantial recall could have a material adverse effect on our reputation, operating results and financial condition.

In addition, as required by the Energy Independence and Security Act of 2007, NHTSA will establish a national tire fuel efficiency consumer information program. When the related rule-making process is completed, certain tires sold in the United States will be required to be rated for rolling resistance, traction and tread wear. While the federal law preempts state tire fuel efficiency laws adopted after January 1, 2006, we may become subject to additional tire fuel efficiency legislation, either in the United States or other countries.

Our European operations are subject to regulation by the European Union. In 2009, two regulations, the Tire Safety Regulation and the Tire Labeling Regulation, applicable to tires sold in the European Union were adopted. The Tire Safety Regulation sets performance standards that tires for cars and light and commercial trucks need to meet for rolling resistance, wet grip braking (passenger car tires only) and noise in order to be sold in the European Union, and became effective beginning in 2012, with continuing phases that will become effective through 2020. The Tire Labeling Regulation applies to all passenger car, light truck and commercial truck tires and requires that consumers be informed about the tire's fuel efficiency, wet grip and noise characteristics. Other countries, such as Brazil, have also adopted tire labeling regulations, and additional countries may also introduce similar regulations in the future.

Tires produced or sold in Europe also have to comply with various other standards, including environmental laws such as REACH (Registration, Evaluation, Authorisation and Restriction of Chemical Substances), which regulates the use of chemicals in the European Union. For example, REACH prohibits the use of highly aromatic oils in tires, which were used as compounding components to improve certain performance characteristics.

These U.S. and European regulations, rules adopted to implement these regulations, or other similar regulations that may be adopted in the United States, Europe or elsewhere in the future may require us to alter or increase our capital spending and research and development plans or cease the production of certain tires, which could have a material adverse effect on our operating results.

Laws and regulations governing environmental and occupational safety and health are complicated, change frequently and have tended to become stricter over time. As a manufacturing company, we are subject to these laws and regulations both inside and outside the United States. We may not be in complete compliance with such laws and regulations at all times. Our costs or liabilities relating to them may be more than the amount we have reserved, and that difference may be material.

In addition, our manufacturing facilities may become subject to further limitations on the emission of "greenhouse gases" due to public policy concerns regarding climate change issues or other environmental or health and safety concerns. While the form of any additional regulations cannot be predicted, a "cap-and-trade" system similar to the one adopted in the European Union could be adopted in the United States. Any such "cap-and-trade" system (including the system currently in place in the European Union) or other limitations imposed on the emission of "greenhouse gases" could require us to increase our capital expenditures, use our cash to acquire emission credits or restructure our manufacturing operations, which could have a material adverse effect on our operating results, financial condition and liquidity.

Compliance with the laws and regulations described above or any of the myriad of applicable foreign, federal, state and local laws and regulations currently in effect or that may be adopted in the future could materially adversely affect our competitive position, operating results, financial condition and liquidity.

We may be adversely affected by any disruption in, or failure of, our information technology systems.

We rely upon the capacity, reliability and security of our information technology, or IT, systems across all of our major business functions, including our research and development, manufacturing, retail, financial and administrative functions. We also face the challenge of supporting our older systems and implementing upgrades when necessary. Our security measures are focused on the prevention, detection and remediation of damage from computer viruses, unauthorized access, cyber-attack, natural disasters and other similar disruptions. We may incur significant costs in order to implement the security measures that we feel are necessary to protect our IT systems. However, our IT systems may remain vulnerable to damage despite our implementation of security measures that we deem to be appropriate.

Any system failure, accident or security breach involving our IT systems could result in disruptions to our operations. A breach in the security of our IT systems could include the theft of our intellectual property or trade secrets, negatively impact our manufacturing or retail operations, or result in the compromise of personal information of our employees, customers or suppliers. While we have, from time to time, experienced system failures, accidents and security breaches involving our IT systems, these incidents have not had a material impact on our operations, and we are not aware of any resulting theft, loss or disclosure of, or damage to, material data or confidential information. To the extent that any system failure, accident or security breach results in material disruptions to our operations or the theft, loss or disclosure of, or damage to, material data or confidential information, our reputation, business, results of operations and financial condition could be materially adversely affected.

If we are unable to attract and retain key personnel our business could be materially adversely affected.

Our business substantially depends on the continued service of key members of our management. The loss of the services of a significant number of members of our management could have a material adverse effect on our business. Our future success will also depend on our ability to attract and retain highly skilled personnel, such as engineering, marketing and senior management professionals. Competition for these employees is intense, and we could experience difficulty from time to time in hiring and retaining the personnel necessary to support our business. Our ability to attract and retain employees may be hampered due to the current cyclical downturn in the automotive and tire industries, which has resulted in reduced payments under our incentive compensation plans over the last several years. If we do not succeed in retaining our current employees and attracting new high quality employees, our business could be materially adversely affected.

We may be impacted by economic and supply disruptions associated with events beyond our control, such as war, acts of terror, political unrest, public health concerns, labor disputes or natural disasters.

We manage businesses and facilities worldwide. Our facilities and operations, and the facilities and operations of our suppliers and customers, could be disrupted by events beyond our control, such as war, acts of terror, political unrest, public health concerns, labor disputes or natural disasters. Any such disruption could cause delays in the production and distribution of our products and the loss of sales and customers. We may not be insured against all such potential losses and, if insured, the insurance proceeds that we receive may not adequately compensate us for all of our losses. If the frequency or severity of natural disasters increases over time, we may experience a greater number of losses at certain of our facilities. Such losses could lead to an increase in the deductibles or cost of insurance for those facilities, or to the unavailability of insurance on terms that are acceptable to us.

ITEM 1B. UNRESOLVED STAFF COMMENTS.

None.

ITEM 2. PROPERTIES.

We manufacture our products in 47 manufacturing facilities located around the world including 14 plants in the United States.

AMERICAS MANUFACTURING FACILITIES. Americas owns or leases and operates 24 manufacturing facilities in 7 countries, including:

- 13 tire plants,
- 4 chemical plants,
- 1 tire mold plant,
- 2 tire retread plants,
- 3 aviation retread plants, and
- 1 mix plant.

EUROPE, MIDDLE EAST AND AFRICA MANUFACTURING FACILITIES. EMEA owns or leases and operates 15 manufacturing facilities in 8 countries, including:

- 13 tire plants,
- 1 tire mold and tire manufacturing machine facility, and
- 1 aviation retread plant.

ASIA PACIFIC MANUFACTURING FACILITIES. Asia Pacific owns and operates 8 manufacturing facilities in 6 countries, including 7 tire plants and 1 aviation retread plant.

PLANT UTILIZATION. Our worldwide tire capacity utilization rate was approximately 85% during 2019 compared to approximately 87% in 2018 and 84% in 2017. The reported capacity utilization is an overall average for the Company. Our utilization rate can vary significantly between product lines, depending on the complexity of the tires, and between consumer and commercial tires, and can also vary between business segments.

OTHER FACILITIES. We also own and operate two research and development facilities and technical centers, and seven tire proving grounds. We lease our Corporate and Americas headquarters and our research and development facility and technical center in Akron, Ohio. We operate approximately 1,000 retail outlets for the sale of our tires to consumer and commercial customers, approximately 50 tire retreading facilities and approximately 190 warehouse distribution facilities. Substantially all of these facilities are leased. We do not consider any one of these leased properties to be material to our operations. For additional information regarding leased properties, refer to the Notes to the Consolidated Financial Statements No. 13, Property, Plant and Equipment and No. 14, Leases, in this Form 10-K. Certain of our manufacturing facilities are mortgaged as collateral for our secured credit facilities. Refer to the Note to the Consolidated Financial Statements No. 15, Financing Arrangements and Derivative Financial Instruments, in this Form 10-K.

ITEM 3. LEGAL PROCEEDINGS.

Asbestos Litigation

We are currently one of numerous defendants in legal proceedings in certain state and federal courts involving approximately 39,600 claimants at December 31, 2019 relating to their alleged exposure to materials containing asbestos in products allegedly manufactured by us or asbestos materials present at our facilities. We manufactured, among other things, rubber coated asbestos sheet gasket materials from 1914 through 1973 and aircraft brake assemblies containing asbestos materials prior to 1987. Some of the claimants are independent contractors or their employees who allege exposure to asbestos while working at certain of our facilities. It is expected that in a substantial portion of these cases there will be no evidence of exposure to a Goodyear manufactured product containing asbestos or asbestos in our facilities. The amount expended by us and our insurers on defense and claim resolution was approximately $22 million during 2019. The plaintiffs in the pending cases allege that they were exposed to asbestos and, as a result of such exposure, suffer from various respiratory diseases, including in some cases mesothelioma and lung cancer. The plaintiffs are seeking unspecified actual and punitive damages and other relief. For additional information on asbestos litigation, refer to the Note to the Consolidated Financial Statements No. 19, Commitments and Contingent Liabilities, in this Form 10-K.

Amiens Labor Claims

Approximately 850 former employees of the closed Amiens, France manufacturing facility have asserted wrongful termination or other claims totaling €140 million ($157 million) against Goodyear France SAS (formerly known as Goodyear Dunlop Tires France). We intend to vigorously defend ourselves against these claims, and any additional claims that may be asserted against us, and cannot estimate the amounts, if any, that we may ultimately pay in respect of such claims.

Shareholder Derivative Litigation

On October 24, 2018, a purported shareholder of the Company filed a derivative action on behalf of the Company in the Court of Common Pleas for Summit County, Ohio against certain of our directors, our chief executive officer, and certain former officers and directors. The complaint also names the Company as a nominal defendant. The lawsuit alleges, among other things, breach of fiduciary duties, waste of corporate assets and fraudulent concealment in connection with certain G159 tires manufactured by us from 1996 until 2003. The lawsuit seeks unspecified monetary damages, an award of attorney’s fees and expenses, and other legal and equitable relief.

Other Matters

In addition to the legal proceedings described above, various other legal actions, indirect tax assessments, claims and governmental investigations and proceedings covering a wide range of matters are pending against us, including claims and proceedings relating to several waste disposal sites that have been identified by the United States Environmental Protection Agency and similar agencies of various states for remedial investigation and cleanup, which sites were allegedly used by us in the past for the disposal of industrial waste materials. Based on available information, we do not consider any such action, assessment, claim, investigation or proceeding to be material, within the meaning of that term as used in Item 103 of Regulation S-K and the instructions thereto. For additional information regarding our legal proceedings, refer to the Note to the Consolidated Financial Statements No. 19, Commitments and Contingent Liabilities, in this Form 10-K.

PART II.

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

The principal market for our common stock is the Nasdaq Global Select Market (Stock Exchange Symbol: GT). At December 31, 2019, there were 12,321 holders of record of the 232,650,318 shares of our common stock then outstanding.

Set forth in the table below is certain information regarding the number of shares of our common stock that were subject to outstanding stock options or other compensation plan awards at December 31, 2019.

EQUITY COMPENSATION PLAN INFORMATION

Plan Category	Number of Shares to be Issued upon Exercise of Outstanding Options, Warrants and Rights	Weighted Average Exercise Price of Outstanding Options, Warrants and Rights	Number of Shares Remaining Available for Future Issuance under Equity Compensation Plans (Excluding Shares Reflected in Column (a))
	(a)		
Equity compensation plans approved by shareholders	4,998,021	$ 20.61	12,305,582 (1)
Equity compensation plans not approved by shareholders	—	—	—
Total	**4,998,021**	**$ 20.61**	**12,305,582**

(1) Under our equity compensation plans, up to a maximum of 1,427,342 performance shares in respect of performance periods ending on or subsequent to December 31, 2019, 103,492 shares of restricted stock and 2,734,475 restricted stock units have been awarded. In addition, up to 7,092 shares of common stock may be issued in respect of the deferred payout of awards made under our equity compensation plans. The number of performance shares indicated assumes the maximum possible payout that may be earned during the relevant performance periods.

ITEM 6. SELECTED FINANCIAL DATA.

(In millions, except per share amounts)	Year Ended December 31,[1] 2019[2]	2018[2]	2017[2]	2016[2]	2015[2]
Net Sales	$ 14,745	$ 15,475	$ 15,377	$ 15,158	$ 16,443
Net Income (Loss)	(297)	708	365	1,284	376
Less: Minority Shareholders' Net Income	14	15	19	20	69
Goodyear Net Income (Loss)	$ (311)	$ 693	$ 346	$ 1,264	$ 307
Goodyear Net Income (Loss) — Per Share of Common Stock:					
Basic	$ (1.33)	$ 2.92	$ 1.39	$ 4.81	$ 1.14
Diluted	$ (1.33)	$ 2.89	$ 1.37	$ 4.74	$ 1.12
Cash Dividends Declared per Common Share	$ 0.64	$ 0.58	$ 0.44	$ 0.31	$ 0.25
Total Assets	$ 17,185	$ 16,872	$ 17,064	$ 16,511	$ 16,391
Long Term Debt and Finance Leases Due Within One Year	562	243	391	436	585
Long Term Debt and Finance Leases	4,753	5,110	5,076	4,798	5,074
Goodyear Shareholders' Equity	4,351	4,864	4,603	4,507	3,920
Total Shareholders' Equity	4,545	5,070	4,850	4,725	4,142

(1) Refer to "Basis of Presentation" and "Principles of Consolidation" in the Note to the Consolidated Financial Statements No. 1, Accounting Policies.

(2) Effective January 1, 2019, we adopted, using the modified retrospective adoption approach, an accounting standards update with new guidance relating to leases. Our adoption of this standards update resulted in adjustments that increased Total Assets by $873 million, increased Long Term Debt and Finance Leases by $14 million, and decreased Goodyear Shareholders' Equity and Total Shareholders' Equity by $23 million. Periods prior to 2019 have not been restated for the adoption of this standards update.

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

OVERVIEW

The Goodyear Tire & Rubber Company is one of the world's leading manufacturers of tires, with one of the most recognizable brand names in the world and operations in most regions of the world. We have a broad global footprint with 47 manufacturing facilities in 21 countries, including the United States. We operate our business through three operating segments representing our regional tire businesses: Americas; Europe, Middle East and Africa; and Asia Pacific.

This management's discussion and analysis provides comparisons of material changes in the consolidated financial statements for the years ended December 31, 2019 and 2018. For a comparison of the years ended December 31, 2018 and 2017, refer to Management's Discussion and Analysis of Financial Condition and Results of Operations included in our annual report on Form 10-K for the year ended December 31, 2018.

Results of Operations

In 2019, challenging macro-economic industry conditions persisted throughout much of the year, including higher raw material costs, foreign currency headwinds due to a strong U.S. dollar, lower OE industry volumes, softening demand in Europe, weak market conditions in China, and economic volatility in Latin America, particularly in Brazil. These headwinds were partially offset by continued strength in U.S. consumer replacement sales.

In order to continue to drive growth in our business and address the challenging economic environment, we remain focused on our key strategies by:

- Developing great products and services that anticipate and respond to the needs of consumers;
- Building the value of our brand, helping our customers win in their markets, and becoming consumers' preferred choice; and
- Improving our manufacturing efficiency and creating an advantaged supply chain focused on reducing our total delivered costs, optimizing working capital levels and delivering best in industry customer service.

Our 2019 results reflect a 2.4% decrease in tire unit shipments compared to 2018. In 2019, we realized approximately $199 million of cost savings, including raw material cost saving measures of approximately $93 million, which exceeded the impact of general inflation. Our raw material costs, including cost saving measures, increased by approximately 4% in 2019 compared to 2018.

Net sales were $14,745 million in 2019, compared to $15,475 million in 2018. Net sales decreased in 2019 primarily due to unfavorable foreign currency translation, primarily in EMEA, lower volume, primarily in EMEA, and lower sales in other tire-related businesses, primarily due to a decrease in third-party sales of chemical products in Americas, partially offset by improvements in price and product mix, primarily in EMEA and Americas.

Goodyear net loss in 2019 was $311 million, or $1.33 per diluted share, compared to Goodyear net income of $693 million, or $2.89 per diluted share, in 2018. The decrease in Goodyear net income in 2019 was primarily driven by lower segment operating income, the net gain recognized on the TireHub transaction in 2018, higher income tax expense and higher rationalization expense.

Our total segment operating income for 2019 was $945 million, compared to $1,274 million in 2018. The $329 million, or 25.8%, decrease in segment operating income was primarily due to the impact of higher raw material costs of $185 million, primarily in Americas and EMEA, lower volume of $81 million, primarily in EMEA, higher selling, administrative and general expense ("SAG") of $47 million, primarily due to higher wages and benefits driven by higher incentive compensation, lower income in other tire-related businesses of $38 million, driven by lower third-party chemical sales in Americas, the impact of unfavorable foreign currency translation of $38 million, and higher conversion costs of $36 million, primarily in EMEA and Asia Pacific. These decreases more than offset improvements in price and product mix of $120 million, primarily in Americas and EMEA. Refer to "Results of Operations — Segment Information" for additional information.

Liquidity

At December 31, 2019, we had $908 million in Cash and cash equivalents as well as $3,578 million of unused availability under our various credit agreements, compared to $801 million and $3,151 million, respectively, at December 31, 2018. Cash flows from operating activities of $1,207 million, which are driven by the profitability of our strategic business units ("SBUs") and changes in working capital, were used to fund capital expenditures of $770 million, dividends paid on our common stock of $148 million, and net debt repayments of $119 million. Refer to "Liquidity and Capital Resources" for additional information.

Outlook

We expect to continue to experience challenging global industry conditions in 2020, including lower global OE industry demand, particularly in Europe and Asia, foreign currency headwinds, weak consumer replacement demand in Europe, and volatility in emerging markets. We anticipate our consumer OE tire unit volume to decline by about 2.0 million units in 2020, primarily in

Asia Pacific. We also expect that the changes we plan to pursue to our distribution network in Europe could reduce our consumer replacement tire unit volume by up to 1.5 million units in 2020.

In 2020, we expect to continue to see benefits from pricing actions that we implemented to recover raw material cost increases and continued strong performance in our sales of 17-inch and above consumer replacement tires.

For the full year of 2020, we expect our raw material costs will be essentially flat compared to 2019, excluding transactional foreign currency and raw material cost saving measures. Natural and synthetic rubber prices and other commodity prices historically have been volatile, and this estimate could change significantly based on fluctuations in the cost of these and other key raw materials. We are continuing to focus on price and product mix, to substitute lower cost materials where possible, to work to identify additional substitution opportunities, to reduce the amount of material required in each tire, and to pursue alternative raw materials.

The recent coronavirus outbreak in China has caused the temporary closure of many businesses in China, including our Pulandian manufacturing facility, which has limited business activity and automotive production. Given the dynamic nature of this situation, our outlook does not currently include any impact from the coronavirus since that impact cannot be reasonably estimated at this time.

Refer to “Item 1A. Risk Factors” for a discussion of the factors that may impact our business, results of operations, financial condition or liquidity and “Forward-Looking Information — Safe Harbor Statement” for a discussion of our use of forward-looking statements.

RESULTS OF OPERATIONS — CONSOLIDATED

All per share amounts are diluted and refer to Goodyear net income (loss).

Goodyear net loss in 2019 was $311 million, or $1.33 per share, compared to Goodyear net income of $693 million, or $2.89 per share, in 2018. The decrease in Goodyear net income in 2019 was driven by lower segment operating income, the net gain recognized on the TireHub transaction in 2018, higher income tax expense and higher rationalization expense.

Net Sales

Net sales in 2019 of $14,745 million decreased $730 million, or 4.7%, compared to $15,475 million in 2018, primarily due to unfavorable foreign currency translation of $451 million, primarily in EMEA, lower volume of $307 million, primarily in EMEA, and lower sales in other tire-related businesses of $168 million, primarily due to a decrease in third-party sales of chemical products in Americas, partially offset by improvements in price and product mix of $196 million, primarily in EMEA and Americas. Goodyear worldwide tire unit net sales were $12,524 million and $13,060 million in 2019 and 2018, respectively. Consumer and commercial net sales were $8,835 million and $2,953 million, respectively, in 2019. Consumer and commercial net sales were $9,167 million and $3,002 million, respectively, in 2018.

The following table presents our tire unit sales for the periods indicated:

	Year Ended December 31,		
(In millions of tires)	2019	2018	% Change
Replacement Units			
United States	40.3	38.9	3.6 %
International	74.7	76.2	(2.0)
Total	**115.0**	**115.1**	**(0.1)**
OE Units			
United States	11.2	13.2	(15.2)
International	29.1	30.9	(5.8)
Total	**40.3**	**44.1**	**(8.5)**
Goodyear worldwide tire units	**155.3**	**159.2**	**(2.4)**

The decrease in worldwide tire unit sales of 3.9 million units, or 2.4%, compared to 2018, included a decrease of 0.1 million replacement tire units, or 0.1%, comprised primarily of a decrease in EMEA partially offset by an increase in Americas. OE tire units decreased by 3.8 million units, or 8.5%, primarily due to lower vehicle production globally. Consumer and commercial unit sales in 2019 were 141.9 million and 11.7 million, respectively. Consumer and commercial unit sales in 2018 were 145.5 million and 11.8 million, respectively.

Cost of Goods Sold

Cost of goods sold (“CGS”) was $11,602 million in 2019, decreasing $359 million, or 3.0%, from $11,961 million in 2018. CGS was 78.7% of sales in 2019 compared to 77.3% of sales in 2018. CGS in 2019 decreased due to foreign currency translation of $345 million, primarily in EMEA and Americas, lower volume of $226 million, primarily in EMEA, lower costs in other tire-related businesses of $130 million, driven by lower third-party chemical sales in Americas, and lower start-up costs of $36 million associated with our new plant in San Luis Potosi, Mexico. These decreases were partially offset by higher raw material costs of $185 million, primarily in Americas and EMEA, higher costs related to product mix of $76 million, primarily in EMEA and Asia Pacific, the year-over-year impact of favorable indirect tax settlements in Brazil of $42 million, and higher conversion costs of $36 million, primarily in EMEA and Asia Pacific. CGS in 2019 included pension expense of $14 million compared to $15 million in 2018. CGS in 2019 and 2018 also included incremental savings from rationalization plans of $20 million and $41 million, respectively.

CGS in 2019 included accelerated depreciation and asset write-offs of $15 million ($12 million after-tax and minority) and favorable indirect tax settlements in Brazil of $11 million ($7 million after-tax and minority) and in the U.S. of $6 million ($5 million after-tax and minority). CGS in 2018 included accelerated depreciation and asset write-offs of $4 million ($3 million after-tax and minority) and favorable indirect tax settlements in Brazil of $53 million, of which $51 million ($39 million after-tax and minority) related to years prior to 2018, and in the U.S. of $4 million ($3 million after-tax and minority).

Selling, Administrative and General Expense

SAG was $2,323 million in 2019, increasing $11 million, or 0.5%, from $2,312 million in 2018. SAG was 15.8% of sales in 2019 compared to 14.9% of sales in 2018. The increase in SAG was primarily due to higher wages and benefits of $65 million, primarily due to higher incentive compensation, and higher information technology expense of $11 million, partially offset by foreign currency translation of $68 million. SAG in 2019 included pension expense of $15 million compared to $17 million in 2018. SAG in 2019 and 2018 also included incremental savings from rationalization plans of $17 million and $34 million, respectively.

Rationalizations

We recorded net rationalization charges of $205 million ($165 million after-tax and minority) in 2019. Net rationalization charges include $115 million in EMEA, primarily related to a plan to modernize two of our manufacturing facilities in Germany, and $90 million in Americas, primarily related to a plan to curtail production of tires for declining, less profitable segments of the tire market at our Gadsden, Alabama manufacturing facility.

We recorded net rationalization charges of $44 million ($32 million after-tax and minority) in 2018. Net rationalization charges included charges of $31 million related to global plans to reduce SAG headcount, $16 million related to plans to reduce manufacturing headcount and improve operating efficiency in EMEA, and $15 million related to the closure of our tire manufacturing facility in Philippsburg, Germany. Net rationalization charges in 2018 also included reversals of $19 million for actions no longer needed for their originally intended purposes.

Upon completion of the 2019 plans, we estimate that annual segment operating income will benefit from an improvement in CGS of approximately $140 million. The savings realized in 2019 from rationalization plans totaled $37 million ($20 million CGS and $17 million SAG).

For further information, refer to the Note to the Consolidated Financial Statements No. 3, Costs Associated with Rationalization Programs, in this Form 10-K.

Interest Expense

Interest expense was $340 million in 2019, increasing $19 million from $321 million in 2018. The increase was primarily due to higher average debt balances of $6,408 million in 2019 compared to $6,218 million in 2018 and a higher average interest rate of 5.31% in 2019 compared to 5.16% in 2018.

Other (Income) Expense

Other (Income) Expense in 2019 was expense of $98 million, compared to income of $174 million in 2018. The $272 million change in Other (Income) Expense was primarily driven by the gain, net of transaction costs, of $272 million ($207 million after-tax and minority) recognized on the TireHub transaction in 2018, a decrease in interest income on favorable indirect tax settlements in Brazil of $30 million, and charges of $25 million ($25 million after-tax and minority) related to flooding at our Beaumont, Texas chemical facility in 2019. These increases in expense were partially offset by an increase in net gains on asset sales of $15 million, $12 million ($12 million after-tax and minority) in expenses related to hurricanes Harvey and Irma in 2018, and a net gain on insurance recoveries of $4 million ($3 million after-tax and minority) in 2019.

Non-service related pension and other postretirement benefits expense of $118 million in 2019 includes pension settlement charges of $5 million ($4 million after-tax and minority). Non-service related pension and other postretirement benefits expense of $121 million in 2018 includes pension settlement charges of $22 million ($17 million after-tax and minority) and a one-time charge of $9 million ($7 million after-tax and minority) related to the adoption of the new accounting standards update which no longer allows non-service related pension and other postretirement benefits cost to be capitalized in inventory.

Net (gains) losses on asset sales were a gain of $16 million ($15 million after-tax and minority) in 2019 as compared to a gain of $1 million ($1 million after-tax and minority) in 2018.

Other (Income) Expense in 2019 included interest income on favorable indirect tax settlements in Brazil of $8 million ($5 million after-tax and minority), compared to interest income on favorable indirect tax settlements in Brazil of $38 million ($29 million after-tax and minority) in 2018. Other (Income) Expense in 2019 included charges of $5 million ($4 million after-tax and minority), compared to charges of $4 million ($3 million after-tax and minority) in 2018, for non-asbestos legal claims related to discontinued products. Other (Income) Expense in 2019 also included a net gain of $2 million ($2 million after-tax and minority) related to an acquisition and $2 million ($2 million after-tax and minority) of favorable foreign currency translation on indirect tax items.

For further information, refer to the Note to the Consolidated Financial Statements No. 5, Other (Income) Expense, in this Form 10-K.

Income Taxes

Income tax expense in 2019 was $474 million on income before income taxes of $177 million. In 2019, income tax expense was unfavorably impacted by net discrete adjustments totaling $386 million ($386 million after minority interest). Discrete adjustments were due to non-cash charges of $334 million related to an acceleration of royalty income in the U.S. from the sale of certain European royalty payments to Luxembourg and $150 million related to an increase in our valuation allowance on tax losses in Luxembourg, which were partially offset by a non-cash tax benefit of $98 million related to a reduction of our U.S. valuation allowance for foreign tax credits.

At December 31, 2019, our valuation allowance on certain of our U.S. federal, state and local deferred tax assets was $13 million, primarily related to state tax loss and credit carryforwards, and our valuation allowance on our foreign deferred tax assets was $969 million. At December 31, 2018, our valuation allowance on certain U.S. federal, state and local deferred tax assets was $113 million and our valuation allowance on our foreign deferred tax assets was $204 million.

Foreign source taxable income for the fourth quarter of 2019 includes accelerated royalty income in the U.S. of $2.1 billion received from Luxembourg as payment for the purchase of the right to receive technology royalties from our European operations for a period of 12 years. External specialists assisted management with this transaction. The royalty sale transaction resulted in a U.S. tax charge of $334 million and a deferred tax asset and offsetting valuation allowance of $576 million in Luxembourg.

Foreign source taxable income for the fourth quarter of 2019 also includes $320 million of accelerated cross-border sales of inventory from the U.S. to Canada, resulting in a U.S. tax charge of approximately $70 million that was offset by the establishment of a deferred tax asset.

The federal portion of the tax charges related to both the royalty acceleration and Canadian prepayment transactions was fully offset by the utilization of foreign tax credits of approximately $310 million. In addition, as a result of these transactions, we released an existing U.S. valuation allowance on foreign tax credits of $98 million.

We considered our current forecasts of future profitability in assessing our ability to realize our remaining net foreign tax credits of $403 million. These forecasts include the impact of recent trends, including various macroeconomic factors such as raw material prices, on our profitability, as well as the impact of tax planning strategies. Macroeconomic factors, including raw material prices, possess a high degree of volatility and can significantly impact our profitability. As such, there is a risk that future foreign source income will not be sufficient to fully utilize these foreign tax credits. However, we believe our forecasts of future profitability along with three significant sources of foreign income as described in "Critical Accounting Policies" provide us sufficient positive evidence to conclude that it is more likely than not that our foreign tax credits, net of remaining valuation allowances, will be fully utilized prior to their various expiration dates.

Income tax expense in 2018 was $303 million on income before income taxes of $1,011 million. In 2018, income tax expense was unfavorably impacted by net discrete adjustments of $65 million ($65 million after minority interest). Discrete adjustments were primarily due to charges totaling $135 million related to deferred tax assets for foreign tax credits, including the establishment of a valuation allowance on foreign tax credits of $98 million, partially offset by a tax benefit of $88 million related to a worthless stock deduction created by permanently ceasing operations of our Venezuelan subsidiary during the fourth quarter of 2018. Income tax expense in 2018 also included net charges of $18 million for various other discrete tax adjustments, including those related to finalizing our accounting for certain provisional items related to the Tax Cuts and Jobs Act that was enacted on December 22, 2017 (the "Tax Act").

Our losses in various foreign taxing jurisdictions in recent periods represented sufficient negative evidence to require us to maintain a full valuation allowance against certain of our net deferred tax assets. In Luxembourg, we maintained a valuation allowance on all deferred tax assets with limited lives. As a result of recent negative evidence, including cumulative losses in the most recent three-year period and a forecast of continued losses for 2020, we increased our valuation allowance on our net deferred tax assets in Luxembourg to now include losses with unlimited lives, resulting in a non-cash tax charge of $150 million. Each reporting period we assess available positive and negative evidence and estimate if sufficient future taxable income will be generated to utilize these existing deferred tax assets. We do not believe that sufficient positive evidence required to release valuation allowances having a significant impact on our financial position or results of operations will exist within the next twelve months.

For further information, refer to "Critical Accounting Policies" and Note to the Consolidated Financial Statements No. 6, Income Taxes, in this Form 10-K.

Minority Shareholders’ Net Income

Minority shareholders’ net income was $14 million in 2019, compared to $15 million in 2018. Minority shareholders' net income in 2019 includes $7 million ($7 million after-tax and minority) of expense related to an indirect tax settlement in Turkey.

RESULTS OF OPERATIONS — SEGMENT INFORMATION

Segment information reflects our SBUs, which are organized to meet customer requirements and global competition and are segmented on a regional basis.

Results of operations are measured based on net sales to unaffiliated customers and segment operating income. Each segment exports tires to other segments. The financial results of each segment exclude sales of tires exported to other segments, but include operating income derived from such transactions. Segment operating income is computed as follows: Net Sales less CGS (excluding asset write-off and accelerated depreciation charges) and SAG (including certain allocated corporate administrative expenses). Segment operating income also includes certain royalties and equity in earnings of most affiliates. Segment operating income does not include net rationalization charges (credits), asset sales and certain other items.

Total segment operating income was $945 million in 2019, and $1,274 million in 2018. Total segment operating margin (segment operating income divided by segment sales) in 2019 was 6.4%, compared to 8.2% in 2018.

Management believes that total segment operating income is useful because it represents the aggregate value of income created by our SBUs and excludes items not directly related to the SBUs for performance evaluation purposes. Total segment operating income is the sum of the individual SBUs' segment operating income. Refer to the Note to the Consolidated Financial Statements No. 8, Business Segments, for further information and for a reconciliation of total segment operating income to Income before Income Taxes.

Americas

	Year Ended December 31,		
(In millions)	2019	2018	2017
Tire Units	70.4	70.9	70.9
Net Sales	$ 7,922	$ 8,168	$ 8,212
Operating Income	550	654	847
Operating Margin	6.9%	8.0%	10.3%

Americas unit sales in 2019 decreased 0.5 million units, or 0.7%, to 70.4 million units. Replacement tire volume increased 1.3 million units, or 2.5%, primarily in our consumer business in the United States driven by growth in 17-inch and above rim size tires. OE tire volume decreased 1.8 million units, or 10.6%, primarily in our consumer business in the United States, driven by lower vehicle production, including the impact resulting from a strike at a major OE customer, and our OE selectivity strategy.

Net sales in 2019 were $7,922 million, decreasing $246 million, or 3.0%, compared to $8,168 million in 2018. The decrease in net sales was driven by a decrease in other tire-related businesses of $160 million, primarily due to a decrease in third-party sales of chemical products, unfavorable foreign currency translation of $105 million, primarily related to the Argentine peso and the Brazilian real, and a decrease in volume of $41 million. These decreases were partially offset by improvements in price and product mix of $58 million, driven by an increase in pricing.

Operating income in 2019 was $550 million, decreasing $104 million, or 15.9%, from $654 million in 2018. The decrease in operating income was due to increased raw material costs of $108 million, which more than offset favorable price and product mix of $70 million, a decrease in favorable indirect tax settlements in Brazil of $42 million, higher SAG of $35 million, primarily due to higher wages and benefits driven by higher incentive compensation, lower income in other tire-related businesses of $33 million, primarily due to lower third-party chemical sales driven by lower global demand by tire manufacturers, unfavorable foreign currency translation of $11 million, and lower volume of $8 million. Income in other tire-related businesses included a $7 million negative impact related to flooding at our Beaumont, Texas chemical facility. These decreases were partially offset by lower start-up costs of $36 million associated with our new plant in San Luis Potosi, Mexico and lower conversion costs of $29 million, reflecting a benefit from overhead absorption. Conversion costs included incremental savings from rationalization plans of $14 million.

Operating income in 2019 excluded rationalization charges of $90 million and accelerated depreciation and asset write-offs of $13 million. Operating income in 2018 excluded the net gain recognized on the TireHub transaction of $272 million, rationalization charges of $3 million and net gains on asset sales of $3 million.

Price and product mix improvements include TireHub equity losses of $33 million and $15 million in 2019 and 2018, respectively. These losses reflect higher than expected start-up expenses and additional costs incurred to build out TireHub's distribution footprint for future growth. We expect to continue to incur our share of these losses as TireHub transitions through its start-up phase, however these losses are expected to moderate in 2020.

Americas' results are highly dependent upon the United States, which accounted for 81% of Americas' net sales in both 2019 and 2018. Results of operations in the United States are expected to continue to have a significant impact on Americas' future performance.

Europe, Middle East and Africa

	Year Ended December 31,		
(In millions)	2019	2018	2017
Tire Units	55.1	57.8	57.1
Net Sales	$ 4,708	$ 5,090	$ 4,928
Operating Income	202	363	367
Operating Margin	4.3%	7.1%	7.4%

Europe, Middle East and Africa unit sales in 2019 decreased 2.7 million units, or 4.6%, to 55.1 million units. Replacement tire volume decreased 1.4 million units, or 3.3%, primarily in our consumer business, driven by increased competition and decreased industry demand. OE tire volume decreased 1.3 million units, or 8.5%, primarily in our consumer business, driven by lower vehicle production and our exit of declining, less profitable market segments.

Net sales in 2019 were $4,708 million, decreasing $382 million, or 7.5%, compared to $5,090 million in 2018. Net sales decreased primarily due to unfavorable foreign currency translation of $287 million, driven by the weakening of the euro, Turkish lira, South African rand and Polish zloty, and lower volume of $217 million. These decreases were partially offset by improvements in price and product mix of $117 million, driven by our continued focus on 17-inch and above rim size consumer tires and price increases on commercial replacement tire sales.

Operating income in 2019 was $202 million, decreasing $161 million, or 44.4%, compared to $363 million in 2018. Operating income decreased due to lower volume of $59 million, higher raw material costs of $57 million, higher conversion costs of $43 million, driven by inflation, unfavorable foreign currency translation of $19 million, higher SAG of $15 million, primarily due to inflation, higher research and development costs of $6 million, $5 million of start-up costs, primarily at our new plant in Luxembourg, and higher transportation costs of $5 million. These decreases in operating income were partially offset by improvements in price and product mix of $64 million. SAG and conversion costs included incremental savings from rationalization plans of $15 million and $6 million, respectively.

Operating income in 2019 excluded net rationalization charges of $115 million, net gains on asset sales of $16 million, and accelerated depreciation and asset write-offs of $2 million. Operating income in 2018 excluded net rationalization charges of $36 million, accelerated depreciation and asset write-offs of $4 million, and net losses on asset sales of $2 million.

EMEA’s results are highly dependent upon Germany, which accounted for 21% and 33% of EMEA’s net sales in 2019 and 2018, respectively. The decline in sales reported in Germany is primarily related to a business reorganization that centralized our OE sales for EMEA in Luxembourg. Results of operations in Germany are expected to continue to have a significant impact on EMEA’s future performance.

Asia Pacific

	Year Ended December 31,		
(In millions)	2019	2018	2017
Tire Units	29.8	30.5	31.2
Net Sales	$ 2,115	$ 2,217	$ 2,237
Operating Income	193	257	342
Operating Margin	9.1%	11.6%	15.3%

Asia Pacific unit sales in 2019 decreased 0.7 million units, or 2.3%, to 29.8 million units. OE tire volume decreased 0.7 million units, or 5.5%, primarily in our consumer business in India and China as a result of lower vehicle production. Replacement tire volume remained consistent.

Net sales in 2019 were $2,115 million, decreasing $102 million, or 4.6%, from $2,217 million in 2018. Net sales decreased due to unfavorable foreign currency translation of $59 million, primarily related to the weakening of the Australian dollar, Chinese yuan and Indian rupee, lower volume of $49 million, and lower sales in other tire-related businesses of $15 million, primarily in the retail business. These decreases were partially offset by improvements in price and product mix of $21 million.

Operating income in 2019 was $193 million, decreasing $64 million, or 24.9%, from $257 million in 2018. Operating income decreased due to higher conversion costs of $22 million, primarily due to the impact of lower tire production on overhead absorption, higher raw material costs of $20 million, lower volume of $14 million, and unfavorable price and product mix of $14 million.

Operating income in 2018 excluded net rationalization charges of $3 million.

Asia Pacific’s results are highly dependent upon China and Australia. China accounted for 26% and 27% of Asia Pacific's net sales in 2019 and 2018, respectively. Australia accounted for 27% of Asia Pacific’s net sales in both 2019 and 2018. Results of operations in China and Australia are expected to continue to have a significant impact on Asia Pacific's future performance.

CRITICAL ACCOUNTING POLICIES

The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the amounts reported in the consolidated financial statements and related notes to the financial statements. On an ongoing basis, management reviews its estimates, based on currently available information. Changes in facts and circumstances may alter such estimates and affect our results of operations and financial position in future periods. Our critical accounting policies relate to:

- general and product liability and other litigation,
- workers’ compensation,
- recoverability of goodwill,
- deferred tax asset valuation allowances and uncertain income tax positions, and
- pensions and other postretirement benefits.

General and Product Liability and Other Litigation. We have recorded liabilities totaling $293 million, including related legal fees expected to be incurred, for potential product liability and other tort claims, including asbestos claims, at December 31, 2019. General and product liability and other litigation liabilities are recorded based on management’s assessment that a loss arising from these matters is probable. If the loss can be reasonably estimated, we record the amount of the estimated loss. If the loss is estimated within a range and no point within the range is more probable than another, we record the minimum amount in the range. As additional information becomes available, any potential liability related to these matters is assessed and the estimates are revised, if necessary. Loss ranges are based upon the specific facts of each claim or class of claims and are determined after review by counsel. Court rulings on our cases or similar cases may impact our assessment of the probability and our estimate of the loss, which may have an impact on our reported results of operations, financial position and liquidity. We record receivables for insurance recoveries related to our litigation claims when it is probable that we will receive reimbursement from the insurer. Specifically, we are a defendant in numerous lawsuits alleging various asbestos-related personal injuries purported to result from alleged exposure to asbestos in certain products previously manufactured by us or present in certain of our facilities. Typically, these lawsuits have been brought against multiple defendants in federal and state courts.

We periodically, and at least annually, update, using actuarial analyses, our existing reserves for pending claims, including a reasonable estimate of the liability associated with unasserted asbestos claims, and estimate our receivables from probable insurance recoveries. In determining the estimate of our asbestos liability, we evaluated claims over the next ten-year period. Due to the difficulties in making these estimates, analysis based on new data and/or changed circumstances arising in the future may result in an increase in the recorded obligation, and that increase may be significant. We had recorded gross liabilities for both asserted and unasserted asbestos claims, inclusive of defense costs, totaling $153 million at December 31, 2019.

We maintain certain primary and excess insurance coverage under coverage-in-place agreements, and also have additional excess liability insurance with respect to asbestos liabilities. We record a receivable with respect to such policies when we determine that recovery is probable and we can reasonably estimate the amount of a particular recovery. This determination is based on consultation with our outside legal counsel and takes into consideration agreements with certain of our insurance carriers, the financial viability and legal obligations of our insurance carriers, and other relevant factors.

As of December 31, 2019, we recorded a receivable related to asbestos claims of $95 million, and we expect that approximately 60% of asbestos claim related losses would be recoverable through insurance through the period covered by the estimated liability. Of this amount, $13 million was included in Current Assets as part of Accounts Receivable at December 31, 2019. The recorded receivable consists of an amount we expect to collect under coverage-in-place agreements with certain primary and excess insurance carriers as well as an amount we believe is probable of recovery from certain of our other excess insurance carriers. Although we believe these amounts are collectible under primary and certain excess policies today, future disputes with insurers could result in significant charges to operations.

Workers’ Compensation. We had recorded liabilities, on a discounted basis, of $198 million for anticipated costs related to U.S. workers’ compensation claims at December 31, 2019. The costs include an estimate of expected settlements on pending claims, defense costs and a provision for claims incurred but not reported. These estimates are based on our assessment of potential liability using an analysis of available information with respect to pending claims, historical experience and current cost trends. The amount of our ultimate liability in respect of these matters may differ from these estimates. We periodically, and at least annually, update our loss development factors based on actuarial analyses. The liability is discounted using the risk-free rate of return.

For further information on general and product liability and other litigation, and workers’ compensation, refer to Note to the Consolidated Financial Statements No. 19, Commitments and Contingent Liabilities, in this Form 10-K.

Recoverability of Goodwill. Goodwill is tested for impairment annually or more frequently if an indicator of impairment is present. Goodwill totaled $565 million at December 31, 2019.

We test goodwill for impairment on at least an annual basis, with the option to perform a qualitative assessment to determine whether further impairment testing is necessary or to perform a quantitative assessment by comparing the fair value of a reporting unit to its carrying amount, including goodwill. Under the qualitative assessment, an entity is not required to calculate the fair value of a reporting unit unless the entity determines that it is more likely than not (defined as a likelihood of more than 50%) that its fair value is less than its carrying amount. If under the quantitative assessment the fair value of a reporting unit is less than its carrying amount, then an impairment charge is recorded for that difference, not to exceed the total goodwill allocated to that reporting unit. Our policy is to perform a quantitative assessment at least once every five years.

As a result of industry conditions, the decrease in our market capitalization and the length of time since the last quantitative assessment was performed for all reporting units, management performed a quantitative assessment as of October 31, 2019, the date of our annual goodwill impairment testing. Based upon the results of our assessment, there were no impairments of the Company's goodwill. Fair values substantially exceeded the carrying amounts for each reporting unit tested, except for the EMEA reporting unit discussed below. In addition, we assessed the period from October 31, 2019 to December 31, 2019 and determined there were no factors that caused us to change our conclusions as of October 31, 2019.

We determine the estimated fair value for each reporting unit based on discounted cash flow projections and market values for comparable businesses. Our estimates of future cash flows include assumptions concerning future operating performance and economic conditions and may differ from actual future cash flows. Under the discounted cash flow approach, fair value is calculated as the sum of the projected discounted cash flows of the reporting unit over the next five years and the terminal value at the end of those five years and is dependent on estimates for future revenue, operating margin, capital expenditures, rationalization activities and working capital changes, as well as expected long-term growth rates for cash flows and an appropriate discount rate. The risk adjusted discount rate used is consistent with the weighted average cost of capital for companies in the tire industry and is intended to represent a rate of return that would be expected by a market participant. Under the market value approach, market multiples are derived from market prices of stocks of companies that are in the tire industry. The appropriate multiple is applied to the forecasted revenues and earnings before interest, taxes, depreciation and amortization of the reporting unit to obtain an estimated fair value.

As of December 31, 2019, goodwill of $411 million is allocated to the EMEA reporting unit. As of the October 31, 2019 measurement date, EMEA had an estimated fair value that exceeded its carrying value, including goodwill, by approximately 10%. The most critical assumptions used in the calculation of the fair value of the EMEA reporting unit are the projected long term operating margin, discount rate, and the selection of market multiples. The projected long term operating margin utilized in our fair value estimates is consistent with the reporting unit operating plan and is dependent on the successful execution of our business plan, overall industry growth rates and the competitive environment. As a result, the long term operating margin could be adversely impacted by our ability to execute our business plan as well as by volatile macroeconomic factors such as raw material prices, industry conditions or competition. Our business plan includes rationalization programs, aligned distribution actions, and recovering past raw material cost increases by improving price and product mix, including through continued focus on higher margin tires. The discount rate could be adversely impacted by changes in the macroeconomic environment and volatility in the equity and debt markets. Although management believes its estimate of fair value is reasonable, if the EMEA reporting unit's future financial performance falls below our expectations or there are negative revisions to significant assumptions, or if our market capitalization declines further, and if such a decline becomes indicative that the fair value of our reporting units has declined below their carrying values, we may need to record a material, non-cash goodwill impairment charge in a future period.

Deferred Tax Asset Valuation Allowances and Uncertain Income Tax Positions. At December 31, 2019, our valuation allowance on certain of our U.S. federal, state and local deferred tax assets was $13 million, primarily related to state tax loss and credit carryforwards, and our valuation allowance on our foreign deferred tax assets was $969 million. At December 31, 2018, our valuation allowance on certain U.S. federal, state and local deferred tax assets was $113 million and our valuation allowance on our foreign deferred tax assets was $204 million.

We record a reduction to the carrying amounts of deferred tax assets by recording a valuation allowance if, based on the available evidence, it is more likely than not such assets will not be realized. The valuation of deferred tax assets requires judgment in assessing future profitability and the tax consequences of events that have been recognized in either our financial statements or tax returns.

We consider both positive and negative evidence when measuring the need for a valuation allowance. The weight given to the evidence is commensurate with the extent to which it may be objectively verified. Current and cumulative financial reporting results are a source of objectively verifiable evidence. We give operating results during the most recent three-year period a significant weight in our analysis. We typically only consider forecasts of future profitability when positive cumulative operating results exist in the most recent three-year period. We perform scheduling exercises to determine if sufficient taxable income of the appropriate character exists in the periods required in order to realize our deferred tax assets with limited lives (such as tax loss carryforwards and tax credits) prior to their expiration. We consider tax planning strategies available to accelerate taxable amounts if required to utilize expiring deferred tax assets. A valuation allowance is not required to the extent that, in our judgment, positive evidence exists with a magnitude and duration sufficient to result in a conclusion that it is more likely than not that our deferred tax assets will be realized.

At December 31, 2019, our net deferred tax assets include $403 million of foreign tax credits, net of a valuation allowance of $3 million, as compared to $637 million, net of a valuation allowance of $103 million, at December 31, 2018. If not utilized, these foreign tax credits will expire from 2022 to 2028. These credits were generated primarily from the receipt of foreign dividends. Our earnings and forecasts of future profitability along with three significant sources of foreign income provide us sufficient positive evidence to utilize these credits, despite the negative evidence of their limited carryforward periods. Those sources of foreign income are (1) 100% of our domestic profitability can be re-characterized as foreign source income under current U.S. tax law to the extent domestic losses have offset foreign source income in prior years, (2) annual net foreign source income, exclusive of dividends, primarily from royalties, and (3) tax planning strategies, including capitalizing research and development costs, accelerating income on cross border sales of inventory or raw materials to our subsidiaries and reducing U.S. interest expense by, for example, reducing intercompany loans through repatriating current year earnings of foreign subsidiaries, all of which would increase our domestic profitability.

We considered our current forecasts of future profitability in assessing our ability to realize our remaining net foreign tax credits. These forecasts include the impact of recent trends, including various macroeconomic factors such as raw material prices, on our profitability, as well as the impact of tax planning strategies. Macroeconomic factors, including raw material prices, possess a high degree of volatility and can significantly impact our profitability. As such, there is a risk that future foreign source income will not be sufficient to fully utilize these foreign tax credits. However, we believe our forecasts of future profitability along with the three significant sources of foreign income described above provide us sufficient positive evidence to conclude that it is more likely than not that our foreign tax credits, net of remaining valuation allowances, will be fully utilized prior to their various expiration dates.

We recognize the effects of changes in tax rates and laws on deferred tax balances in the period in which legislation is enacted. We remeasure existing deferred tax assets and liabilities considering the tax rates at which they will be realized. We also consider the effects of enacted tax laws in our analysis of the need for valuation allowances.

Effective January 1, 2018, the Tax Act subjects a U.S. parent to current tax on its "global intangible low-taxed income" ("GILTI"). To the extent that we incur expense under the GILTI provisions, we will treat it as a component of income tax expense in the period incurred.

The calculation of our tax liabilities involves dealing with uncertainties in the application of complex tax regulations, including those for transfer pricing. We recognize liabilities for anticipated tax audit issues based on our estimate of whether, and the extent to which, additional taxes will be due. If we ultimately determine that payment of these amounts is unnecessary, we reverse the liability and recognize a tax benefit during the period in which we determine that the liability is no longer necessary. We also recognize income tax benefits to the extent that it is more likely than not that our positions will be sustained when challenged by the taxing authorities. We derecognize income tax benefits when, based on new information, we determine that it is no longer more likely than not that our position will be sustained. To the extent we prevail in matters for which liabilities have been established, or determine we need to derecognize tax benefits recorded in prior periods, our results of operations and effective tax rate in a given period could be materially affected. An unfavorable tax settlement would require use of our cash, and lead to recognition of expense to the extent the settlement amount exceeds recorded liabilities, resulting in an increase in our effective tax rate in the period of resolution. To reduce our risk of an unfavorable transfer price settlement, the Company applies consistent transfer pricing policies and practices globally, supports pricing with economic studies and seeks advance pricing agreements and joint audits to the extent possible. A favorable tax settlement would be recognized as a reduction of expense to the extent the settlement amount is lower than recorded liabilities and, in the case of an income tax settlement, would result in a reduction in our effective tax rate in the period of resolution. We report interest and penalties related to uncertain income tax positions as income tax expense.

For additional information regarding uncertain income tax positions and valuation allowances, refer to Note to the Consolidated Financial Statements No. 6, Income Taxes, in this Form 10-K.

Pensions and Other Postretirement Benefits. We have recorded liabilities for pension and other postretirement benefits of $684 million and $241 million, respectively, at December 31, 2019. Our recorded liabilities and net periodic costs for pensions and other postretirement benefits are based on a number of assumptions, including:

- life expectancies,
- retirement rates,
- discount rates,
- long term rates of return on plan assets,
- inflation rates,
- future compensation levels,
- future health care costs, and
- maximum company-covered benefit costs.

Certain of these assumptions are determined with the assistance of independent actuaries. Assumptions about life expectancies, retirement rates, future compensation levels and future health care costs are based on past experience and anticipated future trends. The discount rate for our U.S. plans is based on a yield curve derived from a portfolio of corporate bonds from issuers rated AA or higher as of December 31 and is reviewed annually. Our expected benefit payment cash flows are discounted based on spot rates developed from the yield curve. The mortality assumption for our U.S. plans is based on actual historical experience, an assumed long term rate of future improvement based on published actuarial tables, and current government regulations related to lump sum payment factors. The long term rate of return on U.S. plan assets is based on estimates of future long term rates of return similar to the target allocation of substantially all fixed income securities. Actual U.S. pension fund asset allocations are reviewed on a monthly basis and the pension fund is rebalanced to target ranges on an as-needed basis. These assumptions are reviewed regularly and revised when appropriate. Changes in one or more of them may affect the amount of our recorded liabilities and net periodic costs for these benefits. Other assumptions involving demographic factors such as retirement age and turnover are evaluated periodically and are updated to reflect our experience and expectations for the future. If actual experience differs from expectations, our financial position, results of operations and liquidity in future periods may be affected.

The weighted average discount rate used in estimating the total liability for our U.S. pension and other postretirement benefit plans was 3.22% and 3.14%, respectively, at December 31, 2019, compared to 4.24% and 4.16%, respectively, at December 31, 2018. The decrease in the discount rate at December 31, 2019 was due primarily to lower yields on highly rated corporate bonds. Interest cost included in our U.S. net periodic pension cost was $173 million in 2019, compared to $157 million in 2018 and $160 million in 2017. Interest cost included in our worldwide net periodic other postretirement benefits cost was $11 million in 2019, compared to $12 million in 2018 and $13 million in 2017.

The following table presents the sensitivity of our U.S. projected pension benefit obligation, accumulated other postretirement benefits obligation, and annual expense to the indicated increase/decrease in key assumptions:

		+ / − Change at December 31, 2019	
(Dollars in millions)	**Change**	**PBO/ABO**	**Annual Expense**
Pensions:			
Assumption:			
Discount rate	+/- 0.5%	$ 267	$ 4
Other Postretirement Benefits:			
Assumption:			
Discount rate	+/- 0.5%	$ 4	$ —
Health care cost trends — total cost	+/- 1.0%	1	—

Changes in general interest rates and corporate (AA or better) credit spreads impact our discount rate and thereby our U.S. pension benefit obligation. Our U.S. pension plans are invested in a portfolio of substantially all fixed income securities designed to offset the impact of future discount rate movements on liabilities for these plans. If corporate (AA or better) interest rates increase or decrease in parallel (i.e., across all maturities), the investment portfolio described above is designed to mitigate a substantial portion of the expected change in our U.S. pension benefit obligation. For example, if corporate (AA or better) interest rates increased or decreased by 0.5%, the investment portfolio described above would be expected to mitigate more than 85% of the expected change in our U.S. pension benefit obligation.

At December 31, 2019, our net actuarial loss included in Accumulated Other Comprehensive Loss ("AOCL") related to global pension plans was $3,162 million, $2,380 million of which related to our U.S. pension plans. The net actuarial loss included in AOCL related to our U.S. pension plans is a result of declines in U.S. discount rates and plan asset losses that occurred prior to 2015, plus the impact of prior increases in estimated life expectancies. For purposes of determining our 2019 U.S. pension total benefits cost, we recognized $112 million of the net actuarial losses in 2019. We will recognize approximately $110 million of net actuarial losses in 2020 U.S. net periodic pension cost. If our future experience is consistent with our assumptions as of December 31, 2019, actuarial loss recognition over the next few years will remain at an amount near that to be recognized in 2020 before it begins to gradually decline. In addition, if annual lump sum payments from a pension plan exceed annual service and interest cost for that plan, accelerated recognition of net actuarial losses will be required through a settlement in total benefits cost.

The actual rate of return on our U.S. pension fund was 15.90%, (1.90%) and 8.70% in 2019, 2018 and 2017, respectively, as compared to the expected rate of 5.25%, 4.58% and 5.08% in 2019, 2018 and 2017, respectively. We use the fair value of our pension assets in the calculation of pension expense for all of our U.S. pension plans.

The weighted average amortization period for our U.S. pension plans is approximately 17 years.

Service cost of pension plans was recorded in CGS, as part of the cost of inventory sold during the period, or SAG in our Consolidated Statements of Operations, based on the specific roles (i.e., manufacturing vs. non-manufacturing) of employee groups covered by each of our pension plans. In 2019, 2018 and 2017, approximately 45% and 55% of service cost was included in CGS and SAG, respectively. Non-service related net periodic pension costs were recorded in Other (Income) Expense.

Globally, we expect our 2020 net periodic pension cost to be approximately $110 million to $130 million, including approximately $35 million of service cost, compared to $132 million in 2019, which included $29 million of service cost. The decrease in expected net periodic pension cost is primarily due to lower interest cost for our U.S. pension plans from decreases in interest rates.

We experienced a decrease in our U.S. discount rate at the end of 2019 and a large portion of the $30 million net actuarial loss included in AOCL for our worldwide other postretirement benefit plans as of December 31, 2019 is a result of the overall decline in U.S. discount rates over time. For purposes of determining 2019 worldwide net periodic other postretirement benefits cost, we recognized $3 million of net actuarial losses in 2019. We will recognize approximately $4 million of net actuarial losses in 2020. If our future experience is consistent with our assumptions as of December 31, 2019, actuarial loss recognition over the next few years will remain at an amount near that to be recognized in 2020 before it begins to gradually decline.

For further information on pensions and other postretirement benefits, refer to Note to the Consolidated Financial Statements No. 17, Pension, Other Postretirement Benefits and Savings Plans, in this Form 10-K.

LIQUIDITY AND CAPITAL RESOURCES

OVERVIEW

Our primary sources of liquidity are cash generated from our operating and financing activities. Our cash flows from operating activities are driven primarily by our operating results and changes in our working capital requirements and our cash flows from financing activities are dependent upon our ability to access credit or other capital.

In the first quarter of 2019, we amended and restated our European revolving credit facility. Significant changes include extending the maturity to March 27, 2024, increasing the available commitments from €550 million to €800 million, decreasing the interest rate margin by 25 basis points and decreasing the annual commitment fee by 5 basis points.

For further information on the other strategic initiatives we pursued in 2019, refer to "Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations — Overview."

At December 31, 2019, we had $908 million of Cash and Cash Equivalents, compared to $801 million at December 31, 2018. The increase in cash and cash equivalents of $107 million was primarily due to cash flows from operating activities of $1,207 million, driven by segment operating income of $945 million and cash from working capital of $82 million. These sources of cash were partially offset by cash used in investing activities of $800 million, primarily reflecting capital expenditures of $770 million, and cash used in financing activities of $307 million, primarily due to cash used for dividends of $148 million and net debt repayments of $119 million.

At December 31, 2019 and 2018, we had $3,578 million and $3,151 million, respectively, of unused availability under our various credit agreements. The table below provides unused availability by our significant credit facilities as of December 31:

(In millions)	**2019**	**2018**
First lien revolving credit facility	$ 1,662	$ 1,633
European revolving credit facility	899	629
Chinese credit facilities	290	199
Mexican credit facilities	—	140
Other domestic and international debt	338	221
Notes payable and overdrafts	389	329
	$ 3,578	**$ 3,151**

We have deposited our cash and cash equivalents and entered into various credit agreements and derivative contracts with financial institutions that we considered to be substantial and creditworthy at the time of such transactions. We seek to control our exposure to these financial institutions by diversifying our deposits, credit agreements and derivative contracts across multiple financial institutions, by setting deposit and counterparty credit limits based on long term credit ratings and other indicators of credit risk such as credit default swap spreads, and by monitoring the financial strength of these financial institutions on a regular basis. We also enter into master netting agreements with counterparties when possible. By controlling and monitoring exposure to financial institutions in this manner, we believe that we effectively manage the risk of loss due to nonperformance by a financial institution. However, we cannot provide assurance that we will not experience losses or delays in accessing our deposits or lines of credit due to the nonperformance of a financial institution. Our inability to access our cash deposits or make draws on our lines of credit, or the inability of a counterparty to fulfill its contractual obligations to us, could have a material adverse effect on our liquidity, financial condition or results of operations in the period in which it occurs.

We expect our 2020 cash flow needs to include capital expenditures of approximately $800 million. We also expect interest expense to range between $350 million and $375 million, restructuring payments to be $125 million to $150 million, dividends on our common stock to be approximately $150 million, and contributions to our funded non-U.S. pension plans to be $25 million to $50 million. We expect working capital to be a use of cash of $50 million to $100 million in 2020. We intend to operate the business in a way that allows us to address these needs with our existing cash and available credit if they cannot be funded by cash generated from operations.

We believe that our liquidity position is adequate to fund our operating and investing needs and debt maturities in 2020 and to provide us with flexibility to respond to further changes in the business environment.

Our ability to service debt and operational requirements is also dependent, in part, on the ability of our subsidiaries to make distributions of cash to various other entities in our consolidated group, whether in the form of dividends, loans or otherwise. In certain countries where we operate, such as China and South Africa, transfers of funds into or out of such countries by way of dividends, loans, advances or payments to third-party or affiliated suppliers are generally or periodically subject to certain requirements, such as obtaining approval from the foreign government and/or currency exchange board before net assets can be transferred out of the country. In addition, certain of our credit agreements and other debt instruments limit the ability of foreign subsidiaries to make distributions of cash. Thus, we would have to repay and/or amend these credit agreements and other debt instruments in order to use this cash to service our consolidated debt. Because of the inherent uncertainty of satisfactorily meeting these requirements or limitations, we do not consider the net assets of our subsidiaries, including our Chinese and South African subsidiaries, which are subject to such requirements or limitations, to be integral to our liquidity or our ability to service our debt and operational requirements. At December 31, 2019, approximately $711 million of net assets, including $102 million of cash and cash equivalents, were subject to such requirements. The requirements we must comply with to transfer funds out of China and South Africa have not adversely impacted our ability to make transfers out of those countries.

Cash Position

At December 31, 2019, significant concentrations of cash and cash equivalents held by our international subsidiaries included the following amounts:

- $337 million or 37% in Asia Pacific, primarily China, India and Japan ($278 million or 35% at December 31, 2018),
- $214 million or 24% in EMEA, primarily Belgium ($261 million or 33% at December 31, 2018), and
- $190 million or 21% in Americas, primarily Brazil, Canada and Chile ($134 million or 17% at December 31, 2018).

Operating Activities

Net cash provided by operating activities was $1,207 million in 2019, increasing $291 million compared to net cash provided by operating activities of $916 million in 2018.

The increase in net cash provided by operating activities was driven by an increase in cash provided by working capital of $202 million and lower cash payments for rationalizations of $115 million, reflecting cash payments made during 2018 related to the closure of our tire manufacturing facility in Philippsburg, Germany. Also, cash flows from operating activities were favorably impacted by an increase in Balance Sheet accruals for Compensation and Benefits of $210 million, primarily due to higher wages and benefits, including higher incentive compensation, and a lower decrease in Other Current Liabilities in 2019 as compared to 2018 providing a net benefit of $131 million, primarily due to changes in indirect taxes. These impacts were partially offset by a decrease in operating income from our SBUs of $329 million.

Working capital was a source of cash of $82 million in 2019 as compared to a use of cash of $120 million in 2018, reflecting the Company's continued focus on reducing working capital, including actions taken with our vendors and customers related to accounts payable and accounts receivable and managing production levels, as well as the impact of moderating raw material prices during 2019.

Investing Activities

Net cash used by investing activities was $800 million in 2019, compared to $867 million in 2018. Capital expenditures were $770 million in 2019, compared to $811 million in 2018. Beyond expenditures required to sustain our facilities, capital expenditures in 2019 and 2018 primarily related to investments in additional 17-inch and above capacity around the world.

Financing Activities

Net cash used by financing activities was $307 million in 2019, compared to $243 million in 2018. Financing activities in 2019 included net debt repayments of $119 million. Financing activities in 2018 included net borrowings of $135 million. We paid dividends on our common stock of $148 million and $138 million in 2019 and 2018, respectively. We repurchased $220 million of our common stock in 2018 and did not repurchase any shares in 2019.

Credit Sources

In aggregate, we had total credit arrangements of $9,078 million available at December 31, 2019, of which $3,578 million were unused, compared to $8,971 million available at December 31, 2018, of which $3,151 million were unused. At December 31, 2019, we had long term credit arrangements totaling $8,320 million, of which $3,189 million were unused, compared to $8,212 million and $2,822 million, respectively, at December 31, 2018. At December 31, 2019, we had short term committed and uncommitted credit arrangements totaling $758 million, of which $389 million were unused, compared to $759 million and $329 million, respectively, at December 31, 2018. The continued availability of the short term uncommitted arrangements is at the discretion of the relevant lender and may be terminated at any time.

Outstanding Notes

At December 31, 2019, we had $3,311 million of outstanding notes, compared to $3,314 million at December 31, 2018.

$2.0 Billion Amended and Restated First Lien Revolving Credit Facility due 2021

Our amended and restated first lien revolving credit facility is available in the form of loans or letters of credit, with letter of credit availability limited to $800 million. Availability under the facility is subject to a borrowing base, which is based primarily on (i) eligible accounts receivable and inventory of The Goodyear Tire & Rubber Company and certain of its U.S. and Canadian subsidiaries, (ii) the value of our principal trademarks, and (iii) certain cash in an amount not to exceed $200 million. To the extent that our eligible accounts receivable and inventory and other components of the borrowing base decline in value, our borrowing base will decrease and the availability under the facility may decrease below $2.0 billion. In addition, if the amount of outstanding borrowings and letters of credit under the facility exceeds the borrowing base, we are required to prepay borrowings and/or cash collateralize letters of credit sufficient to eliminate the excess. As of December 31, 2019, our borrowing base, and therefore our availability, under the facility was $301 million below the facility's stated amount of $2.0 billion. Based on our current liquidity, amounts drawn under this facility bear interest at LIBOR plus 125 basis points, and undrawn amounts under the facility will be subject to an annual commitment fee of 30 basis points.

At December 31, 2019 and 2018, we had no borrowings and $37 million of letters of credit issued under the revolving credit facility.

During 2016, we began entering into bilateral letter of credit agreements. At December 31, 2019, we had $351 million in letters of credit issued under bilateral credit agreements.

Amended and Restated Second Lien Term Loan Facility due 2025

Our amended and restated second lien term loan facility matures on March 7, 2025. The term loan bears interest, at our option, at (i) 200 basis points over LIBOR or (ii) 100 basis points over an alternative base rate (the higher of (a) the prime rate, (b) the federal funds effective rate or the overnight bank funding rate plus 50 basis points or (c) LIBOR plus 100 basis points). In addition, if the Total Leverage Ratio is equal to or less than 1.25 to 1.00, we have the option to further reduce the spreads described above by 25 basis points. "Total Leverage Ratio" has the meaning given it in the facility.

At December 31, 2019 and 2018, the amounts outstanding under this facility were $400 million.

€800 Million Amended and Restated Senior Secured European Revolving Credit Facility due 2024

On March 27, 2019, we amended and restated our European revolving credit facility. Significant changes to the European revolving credit facility include extending the maturity to March 27, 2024, increasing the available commitments thereunder from €550 million to €800 million, decreasing the interest rate margin by 25 basis points and decreasing the annual commitment fee by 5 basis points to 25 basis points. Loans will now bear interest at LIBOR plus 150 basis points for loans denominated in U.S. dollars or pounds sterling and EURIBOR plus 150 basis points for loans denominated in euros.

The European revolving credit facility consists of (i) a €180 million German tranche that is available only to Goodyear Dunlop Tires Germany GmbH (“GDTG”) and (ii) a €620 million all-borrower tranche that is available to Goodyear Europe B.V. (“GEBV”), GDTG and Goodyear Dunlop Tires Operations S.A. Up to €175 million of swingline loans and €75 million in letters of credit are available for issuance under the all-borrower tranche. Subject to the consent of the lenders whose commitments are to be increased, we may request that the facility be increased by up to €200 million.

At December 31, 2019 and 2018, there were no borrowings and no letters of credit outstanding under the European revolving credit facility.

Each of our first lien revolving credit facility and our European revolving credit facility have customary representations and warranties including, as a condition to borrowing, that all such representations and warranties are true and correct, in all material respects, on the date of the borrowing, including representations as to no material adverse change in our business or financial condition since December 31, 2015 under the first lien facility and December 31, 2018 under the European facility.

Accounts Receivable Securitization Facilities (On-Balance Sheet)

GEBV and certain other of our European subsidiaries are parties to a pan-European accounts receivable securitization facility that expires in 2023. The terms of the facility provide the flexibility to designate annually the maximum amount of funding available under the facility in an amount of not less than €30 million and not more than €450 million. For the period from October 18, 2018 through October 15, 2020, the designated maximum amount of the facility is €320 million.

The facility involves the ongoing daily sale of substantially all of the trade accounts receivable of certain GEBV subsidiaries. These subsidiaries retain servicing responsibilities. Utilization under this facility is based on eligible receivable balances.

The funding commitments under the facility will expire upon the earliest to occur of: (a) September 26, 2023, (b) the non-renewal and expiration (without substitution) of all of the back-up liquidity commitments, (c) the early termination of the facility according to its terms (generally upon an Early Amortisation Event (as defined in the facility), which includes, among other things, events similar to the events of default under our senior secured credit facilities; certain tax law changes; or certain changes to law, regulation or accounting standards), or (d) our request for early termination of the facility. The facility’s current back-up liquidity commitments will expire on October 15, 2020.

At December 31, 2019, the amounts available and utilized under this program totaled $327 million (€291 million). At December 31, 2018, the amounts available and utilized under this program totaled $335 million (€293 million). The program does not qualify for sale accounting, and accordingly, these amounts are included in Long Term Debt and Finance Leases.

Accounts Receivable Factoring Facilities (Off-Balance Sheet)

We have sold certain of our trade receivables under off-balance sheet programs. For these programs, we have concluded that there is generally no risk of loss to us from non-payment of the sold receivables. At December 31, 2019 and 2018, the amount of receivables sold was $548 million and $568 million, respectively.

Supplier Financing

We have entered into payment processing agreements with several financial institutions. Under these agreements, the financial institution acts as our paying agent with respect to accounts payable due to our suppliers. These agreements also allow our suppliers to sell their receivables to the financial institutions at the sole discretion of both the supplier and the financial institution on terms that are negotiated between them. We are not always notified when our suppliers sell receivables under these programs. Our obligations to our suppliers, including the amounts due and scheduled payment dates, are not impacted by our suppliers' decisions to sell their receivables under the program. Agreements for such supplier financing programs totaled up to $500 million at December 31, 2019 and 2018.

Further Information

After 2021, it is unclear whether banks will continue to provide LIBOR submissions to the administrator of LIBOR, and no consensus currently exists as to what benchmark rate or rates may become accepted alternatives to LIBOR. In the United States, efforts to identify a set of alternative U.S. dollar reference interest rates include proposals by the Alternative Reference Rates Committee that has been convened by the Federal Reserve Board and the Federal Reserve Bank of New York. Additionally, the International Swaps and Derivatives Association, Inc. launched a consultation on technical issues related to new benchmark fallbacks for derivative contracts that reference certain interbank offered rates, including LIBOR. We cannot currently predict the effect of the discontinuation of, or other changes to, LIBOR or any establishment of alternative reference rates in the United States, the European Union or elsewhere on the global capital markets. The uncertainty regarding the future of LIBOR, as well as the transition from LIBOR to any alternative reference rate or rates, could have adverse impacts on floating rate obligations, loans, deposits, derivatives and other financial instruments that currently use LIBOR as a benchmark rate. We are in the process of evaluating our financing obligations and other contracts that refer to LIBOR. Our second lien term loan facility and our European revolving credit facility, which constitute the most significant of our LIBOR-based debt obligations that mature after 2021, contain “fallback” provisions that address the potential discontinuation of LIBOR and facilitate the adoption of an alternate rate of interest. Our first lien revolving credit facility matures in 2021 and we have not issued any long term floating rate notes. Our first lien revolving credit facility and second lien term loan facility also contain express provisions for the use, at our option, of an alternative base rate (the higher of (a) the prime rate, (b) the federal funds effective rate or the overnight bank funding rate plus 50 basis points or (c) LIBOR plus 100 basis points). We do not believe that the discontinuation of LIBOR, or its replacement with an alternative reference rate or rates, will have a material impact on our results of operations, financial position or liquidity.

For a further description of the terms of our outstanding notes, first lien revolving credit facility, second lien term loan facility, European revolving credit facility and pan-European accounts receivable securitization facility, refer to Note to the Consolidated Financial Statements No. 15, Financing Arrangements and Derivative Financial Instruments, in this Form 10-K.

Covenant Compliance

Our first and second lien credit facilities and some of the indentures governing our notes contain certain covenants that, among other things, limit our ability to incur additional debt or issue redeemable preferred stock, pay dividends, repurchase shares or make certain other restricted payments or investments, incur liens, sell assets, incur restrictions on the ability of our subsidiaries to pay dividends or to make other payments to us, enter into affiliate transactions, engage in sale and leaseback transactions, and consolidate, merge, sell or otherwise dispose of all or substantially all of our assets. These covenants are subject to significant exceptions and qualifications. Our first and second lien credit facilities and the indentures governing our notes also have customary defaults, including cross-defaults to material indebtedness of Goodyear and its subsidiaries.

We have additional financial covenants in our first and second lien credit facilities that are currently not applicable. We only become subject to these financial covenants when certain events occur. These financial covenants and related events are as follows:

- We become subject to the financial covenant contained in our first lien revolving credit facility when the aggregate amount of our Parent Company (The Goodyear Tire & Rubber Company) and guarantor subsidiaries cash and cash equivalents (“Available Cash”) plus our availability under our first lien revolving credit facility is less than $200 million. If this were to occur, our ratio of EBITDA to Consolidated Interest Expense may not be less than 2.0 to 1.0 for the most recent period of four consecutive fiscal quarters. As of December 31, 2019, our availability under this facility of $1,662 million plus our Available Cash of $211 million totaled $1,873 million, which is in excess of $200 million.

- We become subject to a covenant contained in our second lien credit facility upon certain asset sales. The covenant provides that, before we use cash proceeds from certain asset sales to repay any junior lien, senior unsecured or subordinated indebtedness, we must first offer to use such cash proceeds to prepay borrowings under the second lien credit facility unless our ratio of Consolidated Net Secured Indebtedness to EBITDA (Pro Forma Senior Secured Leverage Ratio) for any period of four consecutive fiscal quarters is equal to or less than 3.0 to 1.0.

In addition, our European revolving credit facility contains non-financial covenants similar to the non-financial covenants in our first and second lien credit facilities that are described above and a financial covenant applicable only to GEBV and its subsidiaries. This financial covenant provides that we are not permitted to allow GEBV's ratio of Consolidated Net GEBV Indebtedness to Consolidated GEBV EBITDA for a period of four consecutive fiscal quarters to be greater than 3.0 to 1.0 at the end of any fiscal quarter. Consolidated Net GEBV Indebtedness is determined net of the sum of cash and cash equivalents in excess of $100 million held by GEBV and its subsidiaries, cash and cash equivalents in excess of $150 million held by the Parent Company and its U.S. subsidiaries, and availability under our first lien revolving credit facility if the ratio of EBITDA to Consolidated Interest Expense described above is not applicable and the conditions to borrowing under the first lien revolving credit facility are met. Consolidated Net GEBV Indebtedness also excludes loans from other consolidated Goodyear entities. This financial covenant is also included in our pan-European accounts receivable securitization facility. At December 31, 2019, we were in compliance with this financial covenant.

Our credit facilities also state that we may only incur additional debt or make restricted payments that are not otherwise expressly permitted if, after giving effect to the debt incurrence or the restricted payment, our ratio of EBITDA to Consolidated Interest Expense for the prior four fiscal quarters would exceed 2.0 to 1.0. Certain of our senior note indentures have substantially similar limitations on incurring debt and making restricted payments. Our credit facilities and indentures also permit the incurrence of additional debt through other provisions in those agreements without regard to our ability to satisfy the ratio-based incurrence test described above. We believe that these other provisions provide us with sufficient flexibility to incur additional debt necessary to meet our operating, investing and financing needs without regard to our ability to satisfy the ratio-based incurrence test.

Covenants could change based upon a refinancing or amendment of an existing facility, or additional covenants may be added in connection with the incurrence of new debt.

As of December 31, 2019, we were in compliance with the currently applicable material covenants imposed by our principal credit facilities and indentures.

The terms "Available Cash," "EBITDA," "Consolidated Interest Expense," "Consolidated Net Secured Indebtedness," "Pro Forma Senior Secured Leverage Ratio," "Consolidated Net GEBV Indebtedness" and "Consolidated GEBV EBITDA" have the meanings given them in the respective credit facilities.

Potential Future Financings

In addition to our previous financing activities, we may seek to undertake additional financing actions which could include restructuring bank debt or capital markets transactions, possibly including the issuance of additional debt or equity. Given the inherent uncertainty of market conditions, access to the capital markets cannot be assured.

Our future liquidity requirements may make it necessary for us to incur additional debt. However, a substantial portion of our assets are already subject to liens securing our indebtedness. As a result, we are limited in our ability to pledge our remaining assets as security for additional secured indebtedness. In addition, no assurance can be given as to our ability to raise additional unsecured debt.

Dividends and Common Stock Repurchase Program

Under our primary credit facilities and some of our note indentures, we are permitted to pay dividends on and repurchase our capital stock (which constitute restricted payments) as long as no default will have occurred and be continuing, additional indebtedness can be incurred under the credit facilities or indentures following the payment, and certain financial tests are satisfied.

During 2019, 2018 and 2017 we paid cash dividends of $148 million, $138 million and $110 million, respectively, on our common stock. On January 14, 2020, the Company's Board of Directors (or a duly authorized committee thereof) declared cash dividends of $0.16 per share of our common stock, or approximately $37 million in the aggregate. The cash dividend will be paid on March 2, 2020 to stockholders of record as of the close of business on February 3, 2020. Future quarterly dividends are subject to Board approval.

On September 18, 2013, the Board of Directors approved our common stock repurchase program and, from time to time, approved increases in the amount authorized to be purchased under that program. The program expired on December 31, 2019. During 2019, we did not repurchase any shares under this program. Since 2013, we repurchased 52,905,959 shares at an average price, including commissions, of $28.99 per share, or $1,534 million in the aggregate.

The restrictions imposed by our credit facilities and indentures did not affect our ability to pay the dividends on or repurchase our capital stock as described above, and are not expected to affect our ability to pay similar dividends or make similar repurchases in the future.

Asset Dispositions

The restrictions on asset sales imposed by our material indebtedness have not affected our ability to divest non-core businesses, and those divestitures have not affected our ability to comply with those restrictions.

COMMITMENTS AND CONTINGENT LIABILITIES

Contractual Obligations

The following table presents our contractual obligations and commitments to make future payments as of December 31, 2019:

(In millions)	Total	2020	2021	2022	2023	2024	Beyond 2024
Debt Obligations(1)	$ 5,444	$ 907	$ 250	$ 391	$ 1,648	$ 85	$ 2,163
Finance Lease Obligations(2)	249	4	15	2	1	2	225
Interest Payments(3)	1,670	270	218	205	190	129	658
Operating Lease Obligations(4)	1,124	242	192	141	109	81	359
Pension Benefits(5)	310	62	62	62	62	62	NA
Other Postretirement Benefits(6)	153	17	17	16	16	15	72
Workers' Compensation(7)	261	39	23	18	14	11	156
Binding Commitments(8)	2,405	1,310	390	181	152	130	242
Uncertain Income Tax Positions(9)	8	2	4	—	—	—	2
	$ 11,624	**$ 2,853**	**$ 1,171**	**$ 1,016**	**$ 2,192**	**$ 515**	**$ 3,877**

(1) Debt obligations include Notes Payable and Overdrafts, and excludes the impact of deferred financing fees and unamortized discounts.

(2) The minimum lease payments for finance lease obligations are $813 million.

(3) These amounts represent future interest payments related to our existing debt obligations and finance leases based on fixed and variable interest rates specified in the associated debt and lease agreements. The amounts provided relate only to existing debt obligations and do not assume the refinancing or replacement of such debt or future changes in variable interest rates.

(4) Operating lease obligations have not been reduced by minimum sublease rentals of $13 million, $9 million, $6 million, $4 million, $2 million and $4 million in each of the periods above, respectively, for a total of $38 million. Payments, net of minimum sublease rentals, total $1,086 million. The present value of the net operating lease payments, including sublease rentals, is $834 million. The operating leases relate to, among other things, real estate, vehicles, data processing equipment and miscellaneous other assets. No asset is leased from any related party.

(5) The obligation related to pension benefits is actuarially determined and is reflective of obligations as of December 31, 2019. Although subject to change, the amounts set forth in the table represent the mid-point of the range of our expected contributions for funded U.S. and non-U.S. pension plans, plus expected cash funding of direct participant payments to our U.S. and non-U.S. pension plans.

We made significant contributions to fully fund our U.S. pension plans in 2013 and 2014. We have no minimum funding requirements for our funded U.S. pension plans under current ERISA law or the provisions of our USW collective bargaining agreement, which requires us to maintain an annual ERISA funded status for the hourly U.S. pension plan of at least 97%.

Future U.S. pension contributions will be affected by our ability to offset changes in future interest rates with asset returns from our fixed income portfolio and any changes to ERISA law. For further information on the U.S. pension investment strategy, refer to Note to the Consolidated Financial Statements No. 17, Pension, Other Postretirement Benefits and Savings Plans, in this Form 10-K.

Future non-U.S. contributions are affected by factors such as:

- future interest rate levels,
- the amount and timing of asset returns, and
- how contributions in excess of the minimum requirements could impact the amount and timing of future contributions.

(6) The payments presented above are expected payments for the next 10 years. The payments for other postretirement benefits reflect the estimated benefit payments of the plans using the provisions currently in effect. Under the relevant summary plan descriptions or plan documents we have the right to modify or terminate the plans. The obligation related to other postretirement benefits is actuarially determined on an annual basis.

(7) The payments for workers' compensation obligations are based upon recent historical payment patterns on claims. The present value of anticipated claims payments for workers' compensation is $198 million.

(8) Binding commitments are for raw materials, capital expenditures, utilities, and various other types of contracts. The obligations to purchase raw materials include supply contracts at both fixed and variable prices. Those with variable prices are based on index rates for those commodities at December 31, 2019.

(9) These amounts primarily represent expected payments with interest for uncertain income tax positions as of December 31, 2019. We have reflected them in the period in which we believe they will be ultimately settled based upon our experience with these matters.

Additional other long term liabilities include items such as general and product liabilities, environmental liabilities and miscellaneous other long term liabilities. These other liabilities are not contractual obligations by nature. We cannot, with any degree of reliability, determine the years in which these liabilities might ultimately be settled. Accordingly, these other long term liabilities are not included in the above table.

In addition, pursuant to certain long term agreements, we will purchase varying amounts of certain raw materials and finished goods at agreed upon base prices that may be subject to periodic adjustments for changes in raw material costs and market price adjustments, or in quantities that may be subject to periodic adjustments for changes in our or our suppliers' production levels. These contingent contractual obligations, the amounts of which cannot be estimated, are not included in the table above.

We do not engage in the trading of commodity contracts or any related derivative contracts. We generally purchase raw materials and energy through short term, intermediate and long term supply contracts at fixed prices or at formula prices related to market prices or negotiated prices. We may, however, from time to time, enter into contracts to hedge our energy costs.

At December 31, 2019, we had an agreement to provide a revolving loan commitment to TireHub of $50 million. No amounts were drawn on that commitment as of December 31, 2019.

Off-Balance Sheet Arrangements

An off-balance sheet arrangement is any transaction, agreement or other contractual arrangement involving an unconsolidated entity under which a company has:

- made guarantees,
- retained or held a contingent interest in transferred assets,
- undertaken an obligation under certain derivative instruments, or
- undertaken any obligation arising out of a material variable interest in an unconsolidated entity that provides financing, liquidity, market risk or credit risk support to the company, or that engages in leasing, hedging or research and development arrangements with the company.

We have entered into certain arrangements under which we have provided guarantees that are off-balance sheet arrangements. Those guarantees totaled approximately $74 million at December 31, 2019. For further information about our guarantees, refer to Note to the Consolidated Financial Statements No. 19, Commitments and Contingent Liabilities, in this Form 10-K.

FORWARD-LOOKING INFORMATION — SAFE HARBOR STATEMENT

Certain information in this Annual Report on Form 10-K (other than historical data and information) may constitute forward-looking statements regarding events and trends that may affect our future operating results and financial position. The words “estimate,” “expect,” “intend” and “project,” as well as other words or expressions of similar meaning, are intended to identify forward-looking statements. You are cautioned not to place undue reliance on forward-looking statements, which speak only as of the date of this Annual Report on Form 10-K. Such statements are based on current expectations and assumptions, are inherently uncertain, are subject to risks and should be viewed with caution. Actual results and experience may differ materially from the forward-looking statements as a result of many factors, including:

- if we do not successfully implement our strategic initiatives, our operating results, financial condition and liquidity may be materially adversely affected;
- we face significant global competition and our market share could decline;
- deteriorating economic conditions in any of our major markets, or an inability to access capital markets or third-party financing when necessary, may materially adversely affect our operating results, financial condition and liquidity;
- raw material and energy costs may materially adversely affect our operating results and financial condition;
- if we experience a labor strike, work stoppage or other similar event our business, results of operations, financial condition and liquidity could be materially adversely affected;
- our international operations have certain risks that may materially adversely affect our operating results, financial condition and liquidity;
- we have foreign currency translation and transaction risks that may materially adversely affect our operating results, financial condition and liquidity;
- our long term ability to meet our obligations, to repay maturing indebtedness or to implement strategic initiatives may be dependent on our ability to access capital markets in the future and to improve our operating results;
- financial difficulties, work stoppages, supply disruptions or economic conditions affecting our major OE customers, dealers or suppliers could harm our business;
- our capital expenditures may not be adequate to maintain our competitive position and may not be implemented in a timely or cost-effective manner;
- we have a substantial amount of debt, which could restrict our growth, place us at a competitive disadvantage or otherwise materially adversely affect our financial health;
- any failure to be in compliance with any material provision or covenant of our debt instruments, or a material reduction in the borrowing base under our revolving credit facility, could have a material adverse effect on our liquidity and operations;
- our variable rate indebtedness subjects us to interest rate risk, which could cause our debt service obligations to increase significantly;
- we have substantial fixed costs and, as a result, our operating income fluctuates disproportionately with changes in our net sales;
- we may incur significant costs in connection with our contingent liabilities and tax matters;
- our reserves for contingent liabilities and our recorded insurance assets are subject to various uncertainties, the outcome of which may result in our actual costs being significantly higher than the amounts recorded;
- we are subject to extensive government regulations that may materially adversely affect our operating results;
- we may be adversely affected by any disruption in, or failure of, our information technology systems due to computer viruses, unauthorized access, cyber-attack, natural disasters or other similar disruptions;
- if we are unable to attract and retain key personnel, our business could be materially adversely affected; and
- we may be impacted by economic and supply disruptions associated with events beyond our control, such as war, acts of terror, political unrest, public health concerns, labor disputes or natural disasters.

It is not possible to foresee or identify all such factors. We will not revise or update any forward-looking statement or disclose any facts, events or circumstances that occur after the date hereof that may affect the accuracy of any forward-looking statement.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK.

We utilize derivative financial instrument contracts and nonderivative instruments to manage interest rate, foreign exchange and commodity price risks. We have established a control environment that includes policies and procedures for risk assessment and the approval, reporting and monitoring of derivative financial instrument activities. We do not hold or issue derivative financial instruments for trading purposes.

Commodity Price Risk

The raw materials costs to which our operations are principally exposed include the cost of natural rubber, synthetic rubber, carbon black, fabrics, steel cord and other petrochemical-based commodities. Approximately two-thirds of our raw materials are petroleum-based, the cost of which may be affected by fluctuations in the price of oil. We currently do not hedge commodity prices. We do, however, use various strategies to partially offset cost increases for raw materials, including centralizing purchases of raw materials through our global procurement organization in an effort to leverage our purchasing power, expanding our capabilities to substitute lower-cost raw materials, and reducing the amount of material required in each tire.

Interest Rate Risk

We continuously monitor our fixed and floating rate debt mix. Within defined limitations, we manage the mix using refinancing. At December 31, 2019, 32% of our debt was at variable interest rates averaging 3.81% compared to 33% at an average rate of 4.92% at December 31, 2018.

The following table presents information about long term fixed rate debt, excluding finance leases, at December 31:

(In millions)	2019	2018
Carrying amount — liability	$ 3,434	$ 3,609
Fair value — liability	3,558	3,443
Pro forma fair value — liability	3,629	3,583

The pro forma information assumes a 100 basis point decrease in market interest rates at December 31 of each year, and reflects the estimated fair value of fixed rate debt outstanding at that date under that assumption. The sensitivity of our fixed rate debt to changes in interest rates was determined using current market pricing models.

Foreign Currency Exchange Risk

We enter into foreign currency contracts in order to reduce the impact of changes in foreign exchange rates on our consolidated results of operations and future foreign currency-denominated cash flows. These contracts reduce exposure to currency movements affecting existing foreign currency-denominated assets, liabilities, firm commitments and forecasted transactions resulting primarily from trade purchases and sales, equipment acquisitions, intercompany loans and royalty agreements. Contracts hedging short term trade receivables and payables normally have no hedging designation.

The following table presents foreign currency derivative information at December 31:

(In millions)	2019	2018
Fair value — asset (liability)	$ (8)	$ 11
Pro forma decrease in fair value	(199)	(152)
Contract maturities	1/20-12/21	1/19-12/20

The pro forma decrease in fair value assumes a 10% adverse change in underlying foreign exchange rates at December 31 of each year, and reflects the estimated change in the fair value of contracts outstanding at that date under that assumption. The sensitivity of our foreign currency positions to changes in exchange rates was determined using current market pricing models.

Fair values are recognized on the Consolidated Balance Sheets at December 31 as follows:

(In millions)	2019	2018
Current asset (liability):		
Accounts receivable	$ 10	$ 16
Other current liabilities	(18)	(7)
Long term asset (liability):		
Other assets	$ 1	$ 2
Other long term liabilities	(1)	—

For further information on foreign currency contracts, refer to Note to the Consolidated Financial Statements No. 15, Financing Arrangements and Derivative Financial Instruments, in this Form 10-K.

Refer to "Management's Discussion and Analysis of Financial Condition and Results of Operations — Liquidity and Capital Resources" for a discussion of our management of counterparty risk.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA.

INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

Schedules not listed above have been omitted since they are not applicable or are not required, or the information required to be set forth therein is included in the Consolidated Financial Statements or Notes thereto.

MANAGEMENT'S REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING

Management of the Company is responsible for establishing and maintaining adequate internal control over financial reporting as such term is defined under Rule 13a-15(f) promulgated under the Securities Exchange Act of 1934, as amended.

Internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of the Company's consolidated financial statements for external purposes in accordance with generally accepted accounting principles.

Internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the Company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit the preparation of the consolidated financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the Company are being made only in accordance with appropriate authorizations of management and directors of the Company; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of the Company's assets that could have a material effect on the consolidated 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.

Management conducted an assessment of the Company's internal control over financial reporting as of December 31, 2019 using the framework specified in *Internal Control — Integrated Framework (2013)*, published by the Committee of Sponsoring Organizations of the Treadway Commission. Based on such assessment, management has concluded that the Company's internal control over financial reporting was effective as of December 31, 2019.

The effectiveness of the Company's internal control over financial reporting as of December 31, 2019 has been audited by PricewaterhouseCoopers LLP, an independent registered public accounting firm, as stated in their report which is presented in this Annual Report on Form 10-K.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Shareholders of The Goodyear Tire & Rubber Company

Opinions on the Financial Statements and Internal Control over Financial Reporting

We have audited the consolidated financial statements, including the related notes and financial statement schedule, of The Goodyear Tire & Rubber Company and its subsidiaries (the "Company") as listed in the index appearing under Item 8 (collectively referred to as the "consolidated financial statements"). We also have audited the Company's internal control over financial reporting as of December 31, 2019, based on criteria established in Internal Control - Integrated Framework (2013) issued by the *Committee of Sponsoring Organizations of the Treadway Commission* (COSO).

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company as of December 31, 2019 and 2018, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2019 in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2019, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the COSO.

Change in Accounting Principle

As discussed in Note 1 to the consolidated financial statements, the Company changed the manner in which it accounts for leases as of January 1, 2019.

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. Our responsibility is to express opinions on the Company's consolidated financial statements and on the Company's internal control over financial reporting based on our 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 (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

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

Critical Audit Matters

The critical audit 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 (i) relate to accounts or disclosures that are material to the consolidated financial statements and (ii) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the consolidated financial statements, taken as a whole, and we are not, by communicating the critical audit matters below, providing separate opinions on the critical audit matters or on the accounts or disclosures to which they relate.

Income Taxes - Utilization of Foreign Tax Credits

As described in Note 6 to the consolidated financial statements, during the fourth quarter of 2019, the Company’s foreign source income included accelerated royalty income (the "transaction”). The transaction, in combination with other tax planning, resulted in the utilization of foreign tax credits of $310 million in 2019, a significant portion of which related to the transaction. Management performs scheduling exercises to determine if sufficient taxable income of the appropriate character exists in the periods required in order to realize these foreign tax credits prior to their expiration and considers tax planning strategies available to accelerate taxable amounts if required to utilize expiring foreign tax credits. The utilization of foreign tax credits requires judgment in assessing the tax consequences of events that have been recognized in either the Company’s financial statements or tax returns.

The principal considerations for our determination that performing procedures relating to the utilization of foreign tax credits is a critical audit matter are there was significant judgment by management in evaluating the tax consequences of the transaction, including determining the appropriate application of tax law to the transaction and a high degree of estimation uncertainty relative to the numerous and complex tax laws. This in turn led to a high degree of auditor judgment, subjectivity, and effort in performing procedures and evaluating the appropriateness of the application of tax law, including evaluating the implications of specific tax actions executed to accelerate recognition of royalty income in the U.S. Also, the evaluation of audit evidence available to support the application of tax law to the transaction is complex and required significant auditor judgment as the nature of the evidence is often highly subjective, and the audit effort involved the use of professionals with specialized skill and knowledge to assist in evaluating the audit evidence obtained.

Addressing the matter involved performing procedures and evaluating audit evidence in connection with forming our overall opinion on the consolidated financial statements. These procedures included testing the effectiveness of controls relating to the income tax process, specifically the controls related to management’s assessment of the utilization of foreign tax credits. These procedures also included, among others (i) testing the information used to determine the tax gain from the transaction, including reading of intercompany agreements and (ii) evaluating management’s assessment of the technical merits of the transaction, including evaluation of external tax opinions. Professionals with specialized skill and knowledge were used to assist in evaluating the transaction and application of the relevant tax law.

Goodwill Impairment Assessment - EMEA Reporting Unit

As described in Note 11 to the consolidated financial statements, the Company’s consolidated goodwill balance was $565 million as of December 31, 2019, and the goodwill associated with the Europe, Middle East and Africa (EMEA) reporting unit was $411 million. Goodwill is tested for impairment annually or more frequently if an indicator of impairment is present. Management performed a quantitative assessment for the EMEA reporting unit as of October 31, 2019, the date of its annual goodwill impairment testing. Management tests goodwill for impairment by comparing the fair value of a reporting unit to its carrying amount, including goodwill. Management determines the estimated fair value for each reporting unit based on discounted cash flow projections and market values for comparable businesses. The most critical assumptions used in the calculation of the fair value of the EMEA reporting unit are the projected long term operating margin, discount rate, and the selection of market multiples.

The principal considerations for our determination that performing procedures relating to the goodwill impairment assessment of the EMEA reporting unit is a critical audit matter are there was significant judgment by management when developing the fair value measurement of the reporting unit. This in turn led to a high degree of auditor judgment, subjectivity, and effort in performing procedures to evaluate management’s fair value estimate and significant assumptions, including the projected long term operating margin, discount rate, and the selection of market multiples. In addition, the audit effort involved the use of professionals with specialized skill and knowledge to assist in performing these procedures and evaluating the audit evidence obtained.

Addressing the matter involved performing procedures and evaluating audit evidence in connection with forming our overall opinion on the consolidated financial statements. These procedures included testing the effectiveness of controls relating to management’s goodwill impairment assessment, including controls over the valuation of the Company’s EMEA reporting unit. These procedures also included, among others (i) testing management’s process for developing the fair value estimate of the EMEA reporting unit, (ii) evaluating the appropriateness of the discounted cash flow model and market approach, (iii) testing the completeness, accuracy, and relevance of underlying data used in the models, and (iv) evaluating the significant assumptions used by management, including the projected long term operating margin, discount rate, and the selection of market multiples. Evaluating management’s assumptions related to the projected long term operating margin involved evaluating whether the assumptions used by management were reasonable considering (i) the current and past performance of the reporting unit, (ii) the consistency with external market and industry data, and (iii) whether these assumptions were consistent with evidence obtained in other areas of the audit. Professionals with specialized skill and knowledge were used to assist in the evaluation of the Company’s discounted cash flow model and certain significant assumptions, including the discount rate and the selection of market multiples.

/s/ PricewaterhouseCoopers LLP

PricewaterhouseCoopers LLP

Cleveland, Ohio

February 11, 2020

We have served as the Company’s auditor since 1898.

THE GOODYEAR TIRE & RUBBER COMPANY AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF OPERATIONS

	Year Ended December 31,		
(In millions, except per share amounts)	2019	2018	2017
Net Sales (Note 2)	$ 14,745	$ 15,475	$ 15,377
Cost of Goods Sold	11,602	11,961	11,680
Selling, Administrative and General Expense	2,323	2,312	2,279
Rationalizations (Note 3)	205	44	135
Interest Expense (Note 4)	340	321	335
Other (Income) Expense (Note 5)	98	(174)	70
Income before Income Taxes	177	1,011	878
United States and Foreign Tax Expense (Note 6)	474	303	513
Net Income (Loss)	(297)	708	365
Less: Minority Shareholders' Net Income	14	15	19
Goodyear Net Income (Loss)	**$ (311)**	**$ 693**	**$ 346**
Goodyear Net Income (Loss) — Per Share of Common Stock			
Basic	**$ (1.33)**	**$ 2.92**	**$ 1.39**
Weighted Average Shares Outstanding (Note 7)	233	237	249
Diluted	**$ (1.33)**	**$ 2.89**	**$ 1.37**
Weighted Average Shares Outstanding (Note 7)	233	239	253

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

THE GOODYEAR TIRE & RUBBER COMPANY AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS)

	Year Ended December 31,		
(In millions)	**2019**	**2018**	**2017**
Net Income (Loss)	$ (297)	$ 708	$ 365
Other Comprehensive Income (Loss):			
Foreign currency translation, net of tax of $4 in 2019 (($10) in 2018, $39 in 2017)	5	(264)	257
Defined benefit plans:			
Amortization of prior service cost and unrecognized gains and losses included in total benefit cost, net of tax of $33 in 2019 ($34 in 2018, $40 in 2017)	104	105	77
(Increase)/decrease in net actuarial losses, net of tax of ($42) in 2019 ($1 in 2018, ($37) in 2017)	(169)	16	(100)
Immediate recognition of prior service cost and unrecognized gains and losses due to curtailments, settlements, and divestitures, net of tax of $2 in 2019 ($5 in 2018, $14 in 2017)	4	20	27
Prior service credit (cost) from plan amendments, net of tax of $1 in 2019 (($3) in 2018, ($2) in 2017)	1	(12)	(4)
Deferred derivative gains (losses), net of tax of $0 in 2019 ($3 in 2018, ($8) in 2017)	10	9	(20)
Reclassification adjustment for amounts recognized in income, net of tax of $0 in 2019 ($0 in 2018, $1 in 2017)	(14)	7	1
Other Comprehensive Income (Loss)	**(59)**	**(119)**	**238**
Comprehensive Income (Loss)	**(356)**	**589**	**603**
Less: Comprehensive Income (Loss) Attributable to Minority Shareholders	15	(4)	35
Goodyear Comprehensive Income (Loss)	**$ (371)**	**$ 593**	**$ 568**

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

THE GOODYEAR TIRE & RUBBER COMPANY AND SUBSIDIARIES

CONSOLIDATED BALANCE SHEETS

(In millions, except share data)	December 31, 2019	December 31, 2018
Assets:		
Current Assets:		
Cash and Cash Equivalents (Note 1)	$ 908	$ 801
Accounts Receivable (Note 9)	1,941	2,030
Inventories (Note 10)	2,851	2,856
Prepaid Expenses and Other Current Assets	234	238
Total Current Assets	**5,934**	**5,925**
Goodwill (Note 11)	565	569
Intangible Assets (Note 11)	137	136
Deferred Income Taxes (Note 6)	1,527	1,847
Other Assets (Note 12)	959	1,136
Operating Lease Right-of-Use Assets (Note 14)	855	—
Property, Plant and Equipment (Note 13)	7,208	7,259
Total Assets	**$ 17,185**	**$ 16,872**
Liabilities:		
Current Liabilities:		
Accounts Payable — Trade	$ 2,908	$ 2,920
Compensation and Benefits (Notes 17 and 18)	536	471
Other Current Liabilities	734	737
Notes Payable and Overdrafts (Note 15)	348	410
Operating Lease Liabilities due Within One Year (Note 14)	199	—
Long Term Debt and Finance Leases due Within One Year (Notes 14 and 15)	562	243
Total Current Liabilities	**5,287**	**4,781**
Operating Lease Liabilities (Note 14)	668	—
Long Term Debt and Finance Leases (Notes 14 and 15)	4,753	5,110
Compensation and Benefits (Notes 17 and 18)	1,334	1,345
Deferred Income Taxes (Note 6)	90	95
Other Long Term Liabilities	508	471
Total Liabilities	**12,640**	**11,802**
Commitments and Contingent Liabilities (Note 19)		
Shareholders' Equity:		
Goodyear Shareholders' Equity:		
Common Stock, no par value:		
Authorized, 450 million shares, Outstanding shares — 233 million (232 million in 2018)	233	232
Capital Surplus	2,141	2,111
Retained Earnings	6,113	6,597
Accumulated Other Comprehensive Loss (Note 21)	(4,136)	(4,076)
Goodyear Shareholders' Equity	**4,351**	**4,864**
Minority Shareholders' Equity — Nonredeemable	194	206
Total Shareholders' Equity	**4,545**	**5,070**
Total Liabilities and Shareholders' Equity	**$ 17,185**	**$ 16,872**

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

THE GOODYEAR TIRE & RUBBER COMPANY AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY

(Dollars in millions, except per share amounts)	Common Stock Shares	Common Stock Amount	Capital Surplus	Retained Earnings	Accumulated Other Comprehensive Loss	Goodyear Shareholders' Equity	Minority Shareholders' Equity — Non-Redeemable	Total Shareholders' Equity
Balance at December 31, 2016								
(after deducting 26,866,893 common treasury shares)	**251,596,534**	**$ 252**	**$ 2,645**	**$ 5,808**	**$ (4,198)**	**$ 4,507**	**$ 218**	**$ 4,725**
Comprehensive income (loss):								
Net income				346		346	19	365
Foreign currency translation (net of tax of $39)					240	240	17	257
Amortization of prior service cost and unrecognized gains and losses included in total benefit cost (net of tax of $40)					77	77		77
Increase in net actuarial losses (net of tax of ($37))					(99)	(99)	(1)	(100)
Immediate recognition of prior service cost and unrecognized gains and losses due to curtailments, settlements and divestitures (net of tax of $14)					27	27		27
Prior service cost from plan amendments (net of tax of ($2))					(4)	(4)		(4)
Deferred derivative losses (net of tax of ($8))					(20)	(20)		(20)
Reclassification adjustment for amounts recognized in income (net of tax of $1)					1	1		1
Other comprehensive income (loss)						**222**	**16**	**238**
Total comprehensive income (loss)						**568**	**35**	**603**
Stock-based compensation plans			24			24		24
Repurchase of common stock	(12,755,547)	(13)	(387)			(400)		(400)
Dividends declared				(110)		(110)	(6)	(116)
Common stock issued from treasury	1,313,615	1	13			14		14
Balance at December 31, 2017								
(after deducting 38,308,825 common treasury shares)	**240,154,602**	**$ 240**	**$ 2,295**	**$ 6,044**	**$ (3,976)**	**$ 4,603**	**$ 247**	**$ 4,850**

We declared and paid cash dividends of $0.44 per common share for the year ended December 31, 2017.

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

THE GOODYEAR TIRE & RUBBER COMPANY AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY — (Continued)

	Common Stock				Accumulated Other Comprehensive	Goodyear Shareholders'	Minority Shareholders' Equity — Non-	Total Shareholders'
(Dollars in millions, except per share amounts)	Shares	Amount	Capital Surplus	Retained Earnings	Loss	Equity	Redeemable	Equity
Balance at December 31, 2017								
(after deducting 38,308,825 common treasury shares)	**240,154,602**	**$ 240**	**$ 2,295**	**$ 6,044**	**$ (3,976)**	**$ 4,603**	**$ 247**	**$ 4,850**
Comprehensive income (loss):								
Net income				693		693	15	708
Foreign currency translation (net of tax of ($10))					(245)	(245)	(19)	(264)
Amortization of prior service cost and unrecognized gains and losses included in total benefit cost (net of tax of $34)					105	105		105
Decrease in net actuarial losses (net of tax of $1)					16	16		16
Immediate recognition of prior service cost and unrecognized gains and losses due to curtailments, settlements and divestitures (net of tax of $5)					20	20		20
Prior service cost from plan amendments (net of tax of ($3))					(12)	(12)		(12)
Deferred derivative gains (net of tax of $3)					9	9		9
Reclassification adjustment for amounts recognized in income (net of tax of $0)					7	7		7
Other comprehensive income (loss)						**(100)**	**(19)**	**(119)**
Total comprehensive income (loss)						**593**	**(4)**	**589**
Adoption of new accounting standard				(1)		(1)		(1)
Stock-based compensation plans			19			19		19
Repurchase of common stock	(8,936,302)	(9)	(211)			(220)		(220)
Dividends declared				(139)		(139)	(8)	(147)
Common stock issued from treasury	952,743	1	3			4		4
Purchase of minority shares			5			5	(29)	(24)
Balance at December 31, 2018								
(after deducting 46,292,384 common treasury shares)	**232,171,043**	**$ 232**	**$ 2,111**	**$ 6,597**	**$ (4,076)**	**$ 4,864**	**$ 206**	**$ 5,070**

We declared and paid cash dividends of $0.58 per common share for the year ended December 31, 2018.

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

THE GOODYEAR TIRE & RUBBER COMPANY AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY — (Continued)

(Dollars in millions, except per share amounts)	Common Stock Shares	Common Stock Amount	Capital Surplus	Retained Earnings	Accumulated Other Comprehensive Loss	Goodyear Shareholders' Equity	Minority Shareholders' Equity — Non-Redeemable	Total Shareholders' Equity
Balance at December 31, 2018								
(after deducting 46,292,384 common treasury shares)	**232,171,043**	**$ 232**	**$ 2,111**	**$ 6,597**	**$ (4,076)**	**$ 4,864**	**$ 206**	**$ 5,070**
Comprehensive income (loss):								
Net income (loss)				(311)		(311)	14	(297)
Foreign currency translation (net of tax of $4)					4	4	1	5
Amortization of prior service cost and unrecognized gains and losses included in total benefit cost (net of tax of $33)					104	104		104
Increase in net actuarial losses (net of tax of ($42))					(169)	(169)		(169)
Immediate recognition of prior service cost and unrecognized gains and losses due to curtailments, settlements and divestitures (net of tax of $2)					4	4		4
Prior service credit from plan amendments (net of tax of $1)					1	1		1
Deferred derivative gains (net of tax of $0)					10	10		10
Reclassification adjustment for amounts recognized in income (net of tax of $0)					(14)	(14)		(14)
Other comprehensive income (loss)						**(60)**	**1**	**(59)**
Total comprehensive income (loss)						**(371)**	**15**	**(356)**
Adoption of new accounting standard (Note 1)				(23)		(23)		(23)
Stock-based compensation plans			29			29		29
Dividends declared				(150)		(150)	(5)	(155)
Common stock issued from treasury	479,275	1				1		1
Purchase of minority shares			1			1	(22)	(21)
Balance at December 31, 2019								
(after deducting 45,813,109 common treasury shares)	**232,650,318**	**$ 233**	**$ 2,141**	**$ 6,113**	**$ (4,136)**	**$ 4,351**	**$ 194**	**$ 4,545**

We declared and paid cash dividends of $0.64 per common share for the year ended December 31, 2019.

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

THE GOODYEAR TIRE & RUBBER COMPANY AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF CASH FLOWS

	Year Ended December 31,		
(In millions)	2019	2018	2017
Cash Flows from Operating Activities:			
Net Income (Loss)	**$ (297)**	**$ 708**	**$ 365**
Adjustments to Reconcile Net Income (Loss) to Cash Flows from Operating Activities:			
Depreciation and Amortization	795	778	781
Amortization and Write-Off of Debt Issuance Costs	15	15	21
Provision for Deferred Income Taxes	323	131	366
Net Pension Curtailments and Settlements (Note 17)	6	22	19
Net Rationalization Charges (Note 3)	205	44	135
Rationalization Payments	(59)	(174)	(154)
Net Gains on Asset Sales (Note 5)	(16)	(1)	(14)
Gain on TireHub transaction, net of transaction costs (Note 5)	—	(272)	—
Operating Lease Expense (Note 14)	292	—	—
Operating Lease Payments (Note 14)	(267)	—	—
Pension Contributions and Direct Payments	(79)	(74)	(90)
Changes in Operating Assets and Liabilities, Net of Asset Acquisitions and Dispositions:			
Accounts Receivable	71	(172)	(147)
Inventories	6	(171)	(44)
Accounts Payable — Trade	5	223	85
Compensation and Benefits	184	(26)	(65)
Other Current Liabilities	(50)	(181)	(76)
Other Assets and Liabilities	73	66	(24)
Total Cash Flows from Operating Activities	**1,207**	**916**	**1,158**
Cash Flows from Investing Activities:			
Capital Expenditures	(770)	(811)	(881)
Asset Dispositions (Note 5)	12	2	12
Short Term Securities Acquired	(113)	(68)	(83)
Short Term Securities Redeemed	106	68	83
Notes Receivable	(7)	(55)	—
Other Transactions	(28)	(3)	(10)
Total Cash Flows from Investing Activities	**(800)**	**(867)**	**(879)**
Cash Flows from Financing Activities:			
Short Term Debt and Overdrafts Incurred	1,880	1,944	1,054
Short Term Debt and Overdrafts Paid	(1,933)	(1,795)	(1,046)
Long Term Debt Incurred	5,942	6,455	6,463
Long Term Debt Paid	(6,008)	(6,469)	(6,342)
Common Stock Issued (Note 18)	1	4	14
Common Stock Repurchased (Note 20)	—	(220)	(400)
Common Stock Dividends Paid (Note 20)	(148)	(138)	(110)
Transactions with Minority Interests in Subsidiaries	(26)	(31)	(7)
Debt Related Costs and Other Transactions	(15)	7	(41)
Total Cash Flows from Financing Activities	**(307)**	**(243)**	**(415)**
Effect of Exchange Rate Changes on Cash, Cash Equivalents and Restricted Cash	1	(43)	57
Net Change in Cash, Cash Equivalents and Restricted Cash	**101**	**(237)**	**(79)**
Cash, Cash Equivalents and Restricted Cash at Beginning of the Year	873	1,110	1,189
Cash, Cash Equivalents and Restricted Cash at End of the Year	**$ 974**	**$ 873**	**$ 1,110**

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

Note 1. Accounting Policies

A summary of the significant accounting policies used in the preparation of the accompanying consolidated financial statements follows:

Basis of Presentation

Recently Adopted Accounting Standards

Effective January 1, 2019, we adopted an accounting standards update with new guidance intended to increase transparency and comparability among organizations relating to leases. The new guidance requires lessees to recognize a liability to make lease payments and a right-of-use asset representing the right to use the underlying asset for the lease term. The standards update retained a dual model for lease classification, requiring leases to be classified as finance or operating leases to determine recognition in the statements of operations and cash flows; however, substantially all leases are now required to be recognized on the balance sheet. The standards update also requires quantitative and qualitative disclosures regarding key information about leasing arrangements. We elected the optional transition method and applied the new guidance at the date of adoption, without adjusting the comparative periods presented. We also elected the practical expedients permitted under the transition guidance that retain the lease classification and initial direct costs for any leases that existed prior to adoption of the standard, and we have elected to not evaluate land easements that existed as of, or expired before, adoption of the new standard. In addition, we did not reassess whether any contracts entered into prior to adoption are leases.

The adoption of this standards update had a material impact on our Consolidated Balance Sheets and related disclosures. In addition to recognizing right-of-use assets and lease liabilities for our operating leases, we recorded $23 million as a cumulative effect adjustment to decrease Retained Earnings as a result of using the modified retrospective adoption approach. The adoption of this standards update did not have a material impact on our results of operations or cash flows.

The cumulative effect of the changes made to our January 1, 2019 balance sheet for the adoption of the standards update was as follows:

(In millions)	Balance at December 31, 2018	Adjustment for New Standard	Balance at January 1, 2019
Deferred Income Taxes — Asset	$ 1,847	$ 7	$ 1,854
Operating Lease Right-of-Use Assets	—	882	882
Property, Plant and Equipment, less Accumulated Depreciation	7,259	(16)	7,243
Operating Lease Liabilities due Within One Year	—	204	204
Operating Lease Liabilities	—	684	684
Long Term Debt and Finance Leases	5,110	14	5,124
Other Long Term Liabilities	471	(6)	465
Retained Earnings	6,597	(23)	6,574

Effective January 1, 2019, we adopted an accounting standards update, intended to reduce complexity in hedge accounting and make hedge results easier to understand. This includes simplifying how hedge results are presented and disclosed in the financial statements, expanding the types of hedging strategies allowed and providing relief around the documentation and assessment requirements. The adoption of this standards update did not materially impact our consolidated financial statements.

Effective January 1, 2019, we adopted an accounting standards update that allows an optional one-time reclassification from Accumulated Other Comprehensive Income (Loss) ("AOCL") to Retained Earnings for the stranded tax effects resulting from the new corporate tax rate under the Tax Cuts and Jobs Act (the "Tax Act") that was enacted on December 22, 2017 in the United States. We have elected not to reclassify the income tax effects of the Tax Act from AOCL to Retained Earnings. As such, the adoption of this standards update did not impact our consolidated financial statements. Our policy is to utilize an item-by-item approach to release stranded income tax effects from AOCL. Under this approach, the stranded income tax effects are released from AOCL when the related item ceases to exist.

Effective October 31, 2019, in conjunction with our annual impairment testing, we early adopted an accounting standards update with new guidance intended to simplify the subsequent measurement of goodwill. The standards update eliminates the requirement for an entity to calculate the implied fair value of goodwill to measure a goodwill impairment charge. Instead, an entity will perform its annual, or interim, goodwill impairment testing by comparing the fair value of a reporting unit with its carrying amount and recording an impairment charge for the amount by which the carrying amount exceeds the fair value, not to exceed the total goodwill allocated to that reporting unit. The adoption of this standards update did not impact our consolidated financial statements.

Recently Issued Accounting Standards

In January 2020, the Financial Accounting Standards Board ("FASB") issued an accounting standards update with clarifying guidance on the application of the measurement alternative for certain equity securities and the scoping assessment for forward contracts and purchased options on certain securities. The standards update is effective prospectively for fiscal years and interim periods beginning after December 15, 2020, with early adoption permitted. We are currently assessing the impact of this standards update on our consolidated financial statements.

In December 2019, the FASB issued an accounting standards update with new guidance that changes the accounting for certain income tax transactions. The standards update is effective for fiscal years and interim periods beginning after December 15, 2020, with early adoption permitted. The amendments in this update related to separate financial statements of legal entities that are not subject to tax should be applied on a retrospective basis for all periods presented. The amendments related to changes in ownership of foreign equity method investments or foreign subsidiaries should be applied on a modified retrospective basis. The amendments related to franchise taxes that are partially based on income should be applied on either a retrospective basis for all periods presented or a modified retrospective basis. All other amendments should be applied on a prospective basis. We are currently assessing the impact of this standards update on our consolidated financial statements.

In August 2018, the FASB issued an accounting standards update with new guidance requiring a customer in a cloud computing arrangement that is a service contract to follow existing internal-use software guidance to determine which implementation costs to capitalize as an asset. The standards update is effective for fiscal years and interim periods beginning after December 15, 2019, with early adoption permitted, and may be applied retrospectively or as of the beginning of the period of adoption. The adoption of this standards update will not have a material impact on our consolidated financial statements.

In June 2016, the FASB issued an accounting standards update with new guidance on accounting for credit losses on financial instruments. The new guidance includes an impairment model for estimating credit losses that is based on expected losses, rather than incurred losses. The standards update is effective prospectively for fiscal years and interim periods beginning after December 15, 2019, with early adoption permitted. The adoption of this standards update will not have a material impact on our consolidated financial statements.

Principles of Consolidation

The consolidated financial statements include the accounts of all legal entities in which we hold a controlling financial interest. A controlling financial interest generally arises from our ownership of a majority of the voting shares of our subsidiaries. We would also hold a controlling financial interest in variable interest entities if we are considered to be the primary beneficiary. Investments in companies in which we do not own a majority interest and we have the ability to exercise significant influence over operating and financial policies are accounted for using the equity method. Investments in other companies are carried at cost. All intercompany balances and transactions have been eliminated in consolidation.

Use of Estimates

The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the amounts reported in the consolidated financial statements and related notes to the consolidated financial statements. Actual results could differ from those estimates. On an ongoing basis, management reviews its estimates, including those related to:

- general and product liabilities and other litigation,
- workers' compensation,
- recoverability of intangibles and other long-lived assets,
- deferred tax asset valuation allowances and uncertain income tax positions,
- pension and other postretirement benefits, and
- various other operating allowances and accruals, based on currently available information.

Changes in facts and circumstances may alter such estimates and affect results of operations and financial position in future periods.

Revenue Recognition and Accounts Receivable Valuation

Sales are recognized when obligations under the terms of a contract are satisfied and control is transferred. This generally occurs with shipment or delivery, depending on the terms of the underlying contract, or when services have been rendered. Sales are measured as the amount of consideration we expect to receive in exchange for transferring goods or providing services. The amount of consideration we receive and sales we recognize can vary due to changes in sales incentives, rebates, rights of return or other items we offer our customers, for which we estimate the expected amounts based on an analysis of historical experience, or as the most likely amount in a range of possible outcomes. Payment terms with customers vary by region and customer, but are generally 30-90 days or at the point of sale for our consumer retail locations. Net sales exclude sales, value added and other taxes. Costs to obtain contracts are generally expensed as incurred due to the short term nature of individual contracts. Incidental items that are immaterial in the context of the contract are recognized as expense as incurred. We have elected to recognize the costs incurred for transportation of products to customers as a component of cost of goods sold ("CGS").

Appropriate provisions are made for uncollectible accounts based on historical loss experience, portfolio duration, economic conditions and credit risk, considering both expected future losses as well as current incurred losses. The adequacy of the allowances are assessed quarterly.

Research and Development Costs

Research and development costs include, among other things, materials, equipment, compensation and contract services. These costs are expensed as incurred and included as a component of CGS. Research and development expenditures were $430 million, $424 million and $406 million in 2019, 2018 and 2017, respectively.

Warranty

Warranties are provided on the sale of certain of our products and services and an accrual for estimated future claims is recorded at the time revenue is recognized. Tire replacement under most of the warranties we offer is on a prorated basis. Warranty reserves are based on past claims experience, sales history and other considerations. Refer to Note to the Consolidated Financial Statements No. 19, Commitments and Contingent Liabilities, in this Form 10-K.

Environmental Cleanup Matters

We expense environmental costs related to existing conditions resulting from past or current operations and from which no current or future benefit is discernible. Expenditures that extend the life of the related property or mitigate or prevent future environmental contamination are capitalized. We determine our liability on a site by site basis and record a liability at the time when it is probable and can be reasonably estimated. Our estimated liability is reduced to reflect the anticipated participation of other potentially responsible parties in those instances where it is probable that such parties are legally responsible and financially capable of paying their respective shares of the relevant costs. Our estimated liability is not discounted or reduced for possible recoveries from insurance carriers. Refer to Note to the Consolidated Financial Statements No. 19, Commitments and Contingent Liabilities, in this Form 10-K.

Legal Costs

We record a liability for estimated legal and defense costs related to pending general and product liability claims, environmental matters and workers' compensation claims. Refer to Note to the Consolidated Financial Statements No. 19, Commitments and Contingent Liabilities, in this Form 10-K.

Advertising Costs

Costs incurred for producing and communicating advertising are generally expensed when incurred as a component of selling, administrative and general expense ("SAG"). Costs incurred under our cooperative advertising programs with dealers and franchisees are generally recorded as reductions of sales as related revenues are recognized. Advertising costs, including costs for our cooperative advertising programs with dealers and franchisees, were $353 million, $345 million and $320 million in 2019, 2018 and 2017, respectively.

Rationalizations

We record costs for rationalization actions implemented to reduce excess and high-cost manufacturing capacity and operating and administrative costs. Associate-related costs include severance, supplemental unemployment compensation and benefits, medical benefits, pension curtailments, postretirement benefits, and other termination benefits. For ongoing benefit arrangements, a liability is recognized when it is probable that employees will be entitled to benefits and the amount can be reasonably estimated. For one-time benefit arrangements, a liability is incurred and must be accrued at the date the plan is communicated to employees, unless they will be retained beyond a minimum retention period. In this case, the liability is calculated at the date the plan is communicated to employees and is accrued ratably over the future service period. For voluntary benefit arrangements, a liability is not estimable and is not recognized until eligible associates apply for the benefit and we accept the applications. Other costs generally include non-cancelable lease costs, contract terminations and relocation costs. A liability for these costs is recognized in the period in which the liability is incurred. Rationalization charges related to accelerated depreciation and asset impairments are recorded in CGS or SAG. Refer to Note to the Consolidated Financial Statements No. 3, Costs Associated with Rationalization Programs, in this Form 10-K.

Income Taxes

Income taxes are recognized during the year in which transactions enter into the determination of financial statement income, with deferred taxes being provided for temporary differences between carrying values of assets and liabilities for financial reporting purposes and such carrying values as measured under applicable tax laws. The effect on deferred tax assets or liabilities of a change in the tax law or tax rate is recognized in the period the change is enacted. Valuation allowances are recorded to reduce net deferred tax assets to the amount that is more likely than not to be realized. The calculation of our tax liabilities also involves considering uncertainties in the application of complex tax regulations. We recognize liabilities for uncertain income tax positions based on our estimate of whether it is more likely than not that additional taxes will be required and we report related interest and penalties as income taxes. To the extent that we incur expense under the global intangible low-taxed income provisions we will treat it as a component of income tax expense in the period incurred. Refer to Note to the Consolidated Financial Statements No. 6, Income Taxes, in this Form 10-K.

Cash and Cash Equivalents / Consolidated Statements of Cash Flows

Cash and cash equivalents consist of cash on hand and marketable securities with original maturities of three months or less. Substantially all of our cash and short-term investment securities are held with investment grade rated counterparties. At December 31, 2019, our cash investments with any single counterparty did not exceed $170 million.

Cash flows associated with derivative financial instruments designated as hedges of identifiable transactions or events are classified in the same category as the cash flows from the related hedged items. Cash flows associated with derivative financial instruments not designated as hedges are classified as operating activities. Bank overdrafts, if any, are recorded within Notes Payable and Overdrafts. Cash flows associated with bank overdrafts are classified as financing activities.

Customer prepayments for products and government grants received that predominately relate to operations are reported as operating activities. Government grants received that are predominately related to capital expenditures are reported as investing activities. The Consolidated Statements of Cash Flows are presented net of finance leases of $36 million, $6 million and $5 million originating in the years ended December 31, 2019, 2018 and 2017, respectively. Cash flows from investing activities in 2019 exclude $243 million of accrued capital expenditures remaining unpaid at December 31, 2019, and include payment for $266 million of capital expenditures that were accrued and unpaid at December 31, 2018. Cash flows from investing activities in 2018 exclude $266 million of accrued capital expenditures remaining unpaid at December 31, 2018, and include payment for $265 million of capital expenditures that were accrued and unpaid at December 31, 2017. Cash flows from investing activities in 2017 exclude $265 million of accrued capital expenditures remaining unpaid at December 31, 2017, and include payment for $264 million of capital expenditures that were accrued and unpaid at December 31, 2016.

Restricted Cash

The following table provides a reconciliation of Cash, Cash Equivalents and Restricted Cash as reported within the Consolidated Statements of Cash Flows:

	December 31,		
(In millions)	**2019**	**2018**	**2017**
Cash and Cash Equivalents	$ 908	$ 801	$ 1,043
Restricted Cash	66	72	67
Total Cash, Cash Equivalents and Restricted Cash	**$ 974**	**$ 873**	**$ 1,110**

Restricted Cash, which is included in Prepaid Expenses and Other Current Assets in the Consolidated Balance Sheets, primarily represents amounts required to be set aside in connection with accounts receivable factoring programs. The restrictions lapse when cash from factored accounts receivable is remitted to the purchaser of those receivables.

Restricted Net Assets

In certain countries where we operate, transfers of funds into or out of such countries by way of dividends, loans or advances are generally or periodically subject to various governmental regulations. In addition, certain of our credit agreements and other debt instruments limit the ability of foreign subsidiaries to make cash distributions. At December 31, 2019, approximately $711 million of net assets were subject to such regulations or limitations.

Inventories

Inventories are stated at the lower of cost or net realizable value. Cost is determined using the first-in, first-out or the average cost method. Costs include direct material, direct labor and applicable manufacturing and engineering overhead. We allocate fixed manufacturing overheads based on normal production capacity and recognize abnormal manufacturing costs as period costs. We determine a provision for excess and obsolete inventory based on management's review of inventories on hand compared to estimated future usage and sales. Refer to Note to the Consolidated Financial Statements No. 10, Inventories, in this Form 10-K.

Goodwill and Other Intangible Assets

Goodwill is recorded when the cost of acquired businesses exceeds the fair value of the identifiable net assets acquired. Goodwill and intangible assets with indefinite useful lives are not amortized but are assessed for impairment annually with the option to perform a qualitative assessment to determine whether further impairment testing is necessary or to perform a quantitative assessment by comparing the fair value of the reporting unit or indefinite-lived intangible to its carrying amount. Under the qualitative assessment, an entity is not required to calculate the fair value unless the entity determines that it is more likely than not that the fair value is less than the carrying amount. If under the quantitative assessment the fair value is less than the carrying amount, then an impairment loss will be recorded for the difference between the carrying value and the fair value, limited to the carrying amount of goodwill. We perform a quantitative assessment at least once every five years.

In addition to annual testing, impairment testing is conducted when events occur or circumstances change that would more likely than not reduce the fair value of the asset below its carrying amount. Goodwill and intangible assets with indefinite useful lives would be written down to fair value if considered impaired. Intangible assets with finite useful lives are amortized to their estimated residual values over such finite lives, and reviewed for impairment whenever events or circumstances warrant such a review. Refer to Note to the Consolidated Financial Statements No. 11, Goodwill and Intangible Assets, in this Form 10-K.

Investments

Investments in marketable securities are stated at fair value. Fair value is determined using quoted market prices at the end of the reporting period and, when appropriate, exchange rates at that date. Unrealized gains and losses on marketable equity securities are recorded in earnings. Unrealized gains and losses on marketable debt securities classified as available-for-sale are recorded in AOCL, net of tax. Our investment in TireHub is accounted for under the equity method.

We regularly review our investments to determine whether a decline in fair value below their recorded amount is other than temporary. If the decline in fair value is judged to be other than temporary, the investment is written down to fair value and the amount of the write-down is included in the Consolidated Statements of Operations. Refer to Notes to the Consolidated Financial Statements No. 12, Other Assets and Investments, No. 16, Fair Value Measurements, and No. 21, Reclassifications out of Accumulated Other Comprehensive Loss, in this Form 10-K.

Property, Plant and Equipment

Property, plant and equipment are stated at cost. Depreciation is computed using the straight-line method. Additions and improvements that substantially extend the useful life of property, plant and equipment, and interest costs incurred during the construction period of major projects are capitalized. Government grants to us that are predominately related to capital expenditures are recorded as reductions of the cost of the associated assets. Repair and maintenance costs are expensed as incurred. Property, plant and equipment are depreciated to their estimated residual values over their estimated useful lives, and reviewed for impairment whenever events or circumstances warrant such a review. Depreciation expense for property, plant and equipment was $793 million, $776 million and $779 million in 2019, 2018 and 2017, respectively. Refer to Notes to the Consolidated Financial Statements No. 4, Interest Expense, and No. 13, Property, Plant and Equipment, in this Form 10-K.

Foreign Currency Translation

The functional currency for most subsidiaries outside the United States is the local currency. Financial statements of these subsidiaries are translated into U.S. dollars using the exchange rate at each balance sheet date for assets and liabilities and a weighted average exchange rate for each period for revenues, expenses, gains and losses. The U.S. dollar is used as the functional currency in countries with a history of high inflation and in countries that predominantly sell into the U.S. dollar export market. For all operations, gains or losses from remeasuring foreign currency transactions into the functional currency are included in Other (Income) Expense. Translation adjustments are recorded in AOCL. Income taxes are generally not provided for foreign currency translation adjustments.

Derivative Financial Instruments and Hedging Activities

To qualify for hedge accounting, hedging instruments must be designated as hedges and meet defined correlation and effectiveness criteria. These criteria require that the anticipated cash flows and/or changes in fair value of the hedging instrument substantially offset those of the position being hedged.

Derivative contracts are reported at fair value on the Consolidated Balance Sheets as Accounts Receivable, Other Assets, Other Current Liabilities or Other Long Term Liabilities. Deferred gains and losses on contracts designated as cash flow hedges are recorded net of tax in AOCL.

Interest Rate Contracts — Gains and losses on contracts designated as cash flow hedges are initially deferred and recorded in AOCL. Amounts are transferred from AOCL and recognized in income as Interest Expense in the same period that the hedged item is recognized in income. Gains and losses on contracts designated as fair value hedges are recognized in income in the current period as Interest Expense. Gains and losses on contracts with no hedging designation are recorded in the current period in Other (Income) Expense.

Foreign Currency Contracts — Gains and losses on contracts designated as cash flow hedges are initially deferred and recorded in AOCL. Amounts are transferred from AOCL and recognized in income in the same period and on the same line that the hedged item is recognized in income. Gains and losses on contracts designated as fair value hedges, excluding premiums and discounts, are recorded in Other (Income) Expense in the current period. Gains and losses on contracts with no hedging designation are also recorded in Other (Income) Expense in the current period. We do not include premiums or discounts on forward currency contracts in our assessment of hedge effectiveness. Premiums and discounts on contracts designated as hedges are recorded in AOCL. The amounts are recognized in the Statement of Operations on a straight-line basis over the life of the contract on the same line that the hedged item is recognized in the Statement of Operations.

Net Investment Hedging — Nonderivative instruments denominated in foreign currencies are used from time to time to hedge net investments in foreign subsidiaries. Gains and losses on these instruments are deferred and recorded in AOCL as Foreign Currency Translation Adjustments. These gains and losses are only recognized in income upon the complete or partial sale of the related investment or the complete liquidation of the investment.

Termination of Contracts — Gains and losses (including deferred gains and losses in AOCL) are recognized in Other (Income) Expense when contracts are terminated concurrently with the termination of the hedged position. To the extent that such position remains outstanding, gains and losses are amortized to Interest Expense or to Other (Income) Expense over the remaining life of that position. Gains and losses on contracts that we temporarily continue to hold after the early termination of a hedged position, or that otherwise no longer qualify for hedge accounting, are recognized in Other (Income) Expense. Refer to Note to the Consolidated Financial Statements No. 15, Financing Arrangements and Derivative Financial Instruments, in this Form 10-K.

Stock-Based Compensation

We measure compensation cost arising from the grant of stock-based awards to employees at fair value and recognize such cost in income over the period during which the service is provided, usually the vesting period. We recognize compensation expense using the straight-line approach.

Stock-based awards to employees include grants of performance share units, restricted stock units and stock options. We measure the fair value of grants of performance share units and restricted stock units based primarily on the closing market price of a share of our common stock on the date of the grant, modified as appropriate to take into account the features of such grants.

We estimate the fair value of stock options using the Black-Scholes valuation model. Assumptions used to estimate compensation expense are determined as follows:

- Expected term represents the period of time that options granted are expected to be outstanding based on our historical experience of option exercises;
- Expected volatility is measured using the weighted average of historical daily changes in the market price of our common stock over the expected term of the award and implied volatility calculated for our exchange traded options with an expiration date greater than one year;
- Risk-free interest rate is equivalent to the implied yield on zero-coupon U.S. Treasury bonds with a remaining maturity equal to the expected term of the awards; and
- Forfeitures are based substantially on the history of cancellations of similar awards granted in prior years.

Refer to Note to the Consolidated Financial Statements No. 18, Stock Compensation Plans, in this Form 10-K.

Earnings Per Share of Common Stock

Basic earnings per share are computed based on the weighted average number of common shares outstanding. Diluted earnings per share primarily reflects the dilutive impact of outstanding stock options and other stock based awards. All earnings per share amounts in these notes to the consolidated financial statements are diluted, unless otherwise noted. Refer to Note to the Consolidated Financial Statements No. 7, Earnings Per Share, in this Form 10-K.

Fair Value Measurements

Valuation Hierarchy

Assets and liabilities measured at fair value are classified using the following hierarchy, which is based upon the transparency of inputs to the valuation as of the measurement date.

- Level 1 — Valuation is based upon quoted prices (unadjusted) for identical assets or liabilities in active markets.
- Level 2 — Valuation is based upon quoted prices for similar assets and liabilities in active markets, or other inputs that are observable for the asset or liability, either directly or indirectly, for substantially the full term of the financial instrument.
- Level 3 — Valuation is based upon other unobservable inputs that are significant to the fair value measurement.

The classification of fair value measurements within the hierarchy is based upon the lowest level of input that is significant to the measurement. Valuation methodologies used for assets and liabilities measured at fair value are as follows:

Investments

Where quoted prices are available in an active market, investments are classified within Level 1 of the valuation hierarchy. Level 1 securities include highly liquid government bonds, certain mortgage products and exchange-traded equities. If quoted market prices are not available, fair values are estimated using quoted prices of securities with similar characteristics or inputs other than quoted prices that are observable for the security, and would be classified within Level 2 of the valuation hierarchy. In certain cases where there is limited activity or less transparency around inputs to the valuation, securities would be classified within Level 3 of the valuation hierarchy.

Derivative Financial Instruments

Exchange-traded derivative financial instruments that are valued using quoted prices would be classified within Level 1 of the valuation hierarchy. Derivative financial instruments valued using internally-developed models that use as their basis readily observable market parameters are classified within Level 2 of the valuation hierarchy. Derivative financial instruments that are valued based upon models with significant unobservable market parameters, and that are normally traded less actively, would be classified within Level 3 of the valuation hierarchy. Refer to Notes to the Consolidated Financial Statements No. 15, Financing Arrangements and Derivative Financial Instruments, and No. 16, Fair Value Measurements, in this Form 10-K.

Reclassifications and Adjustments

Certain items previously reported in specific financial statement captions have been reclassified to conform to the current presentation.

Note 2. Net Sales

The following table shows disaggregated net sales from contracts with customers by major source for the year ended December 31, 2019:

(In millions)	Americas	Europe, Middle East and Africa	Asia Pacific	Total
Tire unit sales	$ 6,300	$ 4,300	$ 1,924	$ 12,524
Other tire and related sales	659	363	117	1,139
Retail services and service related sales	535	39	70	644
Chemical sales	403	—	—	403
Other	25	6	4	35
Net Sales by reportable segment	**$ 7,922**	**$ 4,708**	**$ 2,115**	**$ 14,745**

The following table shows disaggregated net sales from contracts with customers by major source for the year ended December 31, 2018:

(In millions)	Americas	Europe, Middle East and Africa	Asia Pacific	Total
Tire unit sales	$ 6,381	$ 4,670	$ 2,009	$ 13,060
Other tire and related sales	656	379	127	1,162
Retail services and service related sales	564	34	77	675
Chemical sales	554	—	—	554
Other	13	7	4	24
Net Sales by reportable segment	**$ 8,168**	**$ 5,090**	**$ 2,217**	**$ 15,475**

Tire unit sales consist of consumer, commercial, farm and off-the-road tire sales, including the sale of new Company-branded tires through Company-owned retail channels. Other tire and related sales consist of aviation, race, motorcycle and all-terrain vehicle tire sales, retread sales and other tire related sales. Sales of tires in this category are not included in reported tire unit information. Retail services and service related sales consist of automotive services performed for customers through our Company-owned retail channels, and includes service related products. Chemical sales relate to the sale of synthetic rubber and other chemicals to third parties, and exclude intercompany sales. Other sales include items such as franchise fees and ancillary tire parts.

When we receive consideration from a customer prior to transferring goods or services under the terms of a sales contract, we record deferred revenue, which represents a contract liability. Deferred revenue included in Other Current Liabilities in the Consolidated Balance Sheets totaled $23 million and $39 million at December 31, 2019 and 2018, respectively. Deferred revenue included in Other Long Term Liabilities in the Consolidated Balance Sheets totaled $31 million and $39 million at December 31, 2019 and 2018, respectively. We recognize deferred revenue after we have transferred control of the goods or services to the customer and all revenue recognition criteria are met.

The following table presents the balances of deferred revenue related to contracts with customers, and changes during the years ended December 31:

(In millions)	2019	2018
Balance at January 1	**$ 78**	**$ 121**
Revenue deferred during period	155	116
Revenue recognized during period	(179)	(159)
Impact of foreign currency translation	—	—
Balance at December 31	**$ 54**	**$ 78**

Note 3. Costs Associated with Rationalization Programs

In order to maintain our global competitiveness, we have implemented rationalization actions over the past several years to reduce high-cost and excess manufacturing capacity and associate headcount.

The following table presents the roll-forward of the liability balance between periods:

(In millions)	Associate-Related Costs	Other Costs	Total
Balance at December 31, 2016	**$ 214**	**$ 5**	**$ 219**
2017 charges[1]	103	32	135
Incurred, net of foreign currency translation of $25 million and $1 million, respectively	(94)	(34)	(128)
Reversed to the Statement of Operations	(13)	—	(13)
Balance at December 31, 2017	**$ 210**	**$ 3**	**$ 213**
2018 charges[1]	47	17	64
Incurred, net of foreign currency translation of $(3) million and $0 million, respectively	(158)	(19)	(177)
Reversed to the Statement of Operations	(19)	—	(19)
Balance at December 31, 2018	**$ 80**	**$ 1**	**$ 81**
2019 charges[1]	185	19	204
Incurred, net of foreign currency translation of $(2) million and $0 million, respectively	(41)	(20)	(61)
Reversed to the Statement of Operations	(4)	—	(4)
Balance at December 31, 2019	**$ 220**	**$ —**	**$ 220**

(1) Charges of $204 million, $64 million and $135 million in 2019, 2018 and 2017, respectively, exclude $5 million, $(1) million and $13 million, respectively, of benefit plan curtailments and settlements recorded in Rationalizations in the Statement of Operations.

On March 18, 2019, we approved a plan to modernize two of our tire manufacturing facilities in Germany. The plan is in furtherance of our strategy to strengthen the competitiveness of our manufacturing footprint and increase production of premium, large-rim diameter consumer tires. The plan will result in approximately 1,100 job reductions as a result of changes to the layout of the plants, efficiency gains from new equipment and a reduction in the production of tires for declining, less profitable market segments. We have $100 million accrued related to this plan at December 31, 2019, which is expected to be substantially paid through 2022.

On September 16, 2019, we approved a plan primarily to offer voluntary buy-outs to certain associates at our Gadsden, Alabama manufacturing facility, as part of our strategy to strengthen the competitiveness of our manufacturing footprint by curtailing production of tires for declining, less profitable segments of the tire market. Approximately 740 eligible associates submitted buy-out applications between October 1 and November 1, 2019, which have been accepted by us. We have $69 million accrued related to this plan at December 31, 2019, which is expected to be substantially paid in 2020.

The remainder of the accrual balance at December 31, 2019 is expected to be substantially utilized in the next 12 months and includes $24 million related to plans to reduce manufacturing headcount and improve operating efficiency in Europe, Middle East and Africa ("EMEA"), $16 million related to global plans to reduce SAG headcount and $7 million related to a plan to reduce manufacturing headcount and improve operating efficiency in Americas.

The following table shows net rationalization charges included in Income before Income Taxes:

(In millions)	2019	2018	2017
Current Year Plans			
Associate severance and other related costs	$ 183	$ 40	$ 81
Benefit plan curtailment and special termination benefits	5	—	—
Other exit and non-cancelable lease costs	11	—	2
Current Year Plans - Net Charges	**$ 199**	**$ 40**	**$ 83**
Prior Year Plans			
Associate severance and other related costs	$ (2)	$ (11)	$ 9
Benefit plan curtailment and special termination benefits	—	(1)	13
Other exit and non-cancelable lease costs	8	16	30
Prior Year Plans - Net Charges	**6**	**4**	**52**
Total Net Charges	**$ 205**	**$ 44**	**$ 135**
Asset write-off and accelerated depreciation charges	$ 15	$ 4	$ 40

Substantially all of the new charges in 2019 related to future cash outflows. Current year plan charges recognized in the year ended December 31, 2019 include $105 million related to the plan to modernize two of our manufacturing facilities in Germany, $76 million related to the Gadsden, Alabama plan, and $18 million related to separate plans to reduce manufacturing headcount and improve operating efficiency in Americas and EMEA.

Prior year plan charges recognized in the year ended December 31, 2019 include $10 million primarily related to EMEA manufacturing plans. Prior year plan charges for the year ended December 31, 2019 also include reversals of $4 million for actions no longer needed for their originally intended purposes.

Ongoing rationalization plans had approximately $930 million in charges through 2019 and approximately $50 million is expected to be incurred in future periods.

Approximately 2,100 associates will be released under new plans initiated in 2019, of which approximately 800 were released through December 31, 2019. In 2019, approximately 400 associates were released under plans initiated in prior years. Approximately 1,450 associates remain to be released under all ongoing rationalization plans.

At December 31, 2019, approximately 850 former associates of the closed Amiens, France manufacturing facility have asserted wrongful termination or other claims against us. Refer to Note to the Consolidated Financial Statements No. 19, Commitments and Contingent Liabilities, in this Form 10-K.

Asset write-off and accelerated depreciation charges in 2019 primarily related to the curtailment of production at our Gadsden, Alabama manufacturing facility. Asset write-off and accelerated depreciation charges for all periods were recorded in CGS.

Rationalization activities initiated in 2018 include current year charges of $28 million related to a global plan to reduce SAG headcount and $13 million related to plans to reduce manufacturing headcount and improve operating efficiency in EMEA. Current year plan charges for the year ended December 31, 2018 also include reversals of $1 million for actions no longer needed for their originally intended purposes. Prior year plan charges recognized in the year ended December 31, 2018 include charges of $15 million related to the closure of our tire manufacturing facility in Philippsburg, Germany, $3 million related to a plan to reduce manufacturing headcount in EMEA, and $3 million related to a global plan to reduce SAG headcount. Prior year plan charges for the year ended December 31, 2018 also include reversals of $18 million for actions no longer needed for their originally intended purposes.

Rationalization activities initiated in 2017 include current year charges of $30 million related to reductions in manufacturing headcount in EMEA, $25 million related to a global plan to reduce SAG headcount, $20 million related to SAG headcount reductions in EMEA, and $8 million related to a plan to improve operating efficiency in EMEA. Current year plan charges for the year ended December 31, 2017 also include reversals of $1 million for actions no longer needed for their originally intended purposes. Prior year plan charges recognized in the year ended December 31, 2017 include charges of $35 million related to the closure of our tire manufacturing facility in Philippsburg, Germany, $16 million related to manufacturing headcount reductions in EMEA, and $12 million related to a global plan to reduce SAG headcount. Prior year plan charges for the year ended December 31, 2017 also include reversals of $12 million for actions no longer needed for their originally intended purposes.

Asset write-off and accelerated depreciation charges in 2017 and 2018 primarily related to the closure of our tire manufacturing facility in Philippsburg, Germany.

Note 4. Interest Expense

Interest expense includes interest and the amortization of deferred financing fees and debt discounts, less amounts capitalized, as follows:

(In millions)	2019	2018	2017
Interest expense before capitalization	$ 351	$ 335	$ 358
Capitalized interest	(11)	(14)	(23)
	$ 340	**$ 321**	**$ 335**

Cash payments for interest, net of amounts capitalized, were $324 million, $331 million and $314 million in 2019, 2018 and 2017, respectively.

Note 5. Other (Income) Expense

(In millions)	2019	2018	2017
Gain on TireHub transaction, net of transaction costs	$ —	$ (272)	$ —
Non-service related pension and other postretirement benefits costs	118	121	62
Interest income on indirect tax settlements in Brazil	(8)	(38)	—
Financing fees and financial instruments expense	34	36	55
Net foreign currency exchange (gains) losses	(22)	(16)	(7)
General and product liability expense - discontinued products	11	9	—
Royalty income	(19)	(20)	(32)
Net (gains) losses on asset sales	(16)	(1)	(14)
Interest income	(18)	(16)	(13)
Miscellaneous expense	18	23	19
	$ 98	**$ (174)**	**$ 70**

Gain on TireHub transaction represents the difference between the fair value of the equity interest received and the net book value of the assets and liabilities contributed in connection with the formation of TireHub, LLC ("TireHub"), a distribution joint venture in the United States, net of transaction costs. For the year ended December 31, 2018, we recognized a gain of $286 million and incurred transaction costs of $14 million.

Non-service related pension and other postretirement benefits cost consists primarily of the interest cost, expected return on plan assets and amortization components of net periodic cost, as well as curtailments and settlements which are not related to rationalization plans. For further information, refer to Note to the Consolidated Financial Statements No. 17, Pension, Other Postretirement Benefits and Savings Plans, in this Form 10-K.

We previously filed claims with the Brazilian tax authorities challenging the legality of the calculation of certain indirect taxes for the years 2001 through 2018. During 2018, we received favorable rulings related to these claims. As a result of the rulings, we recorded a gain of $53 million in CGS and related interest income of $38 million in Other (Income) Expense for the year ended December 31, 2018. During 2019, there were additional favorable rulings related to these claims. As a result, we recorded an additional gain of $11 million in CGS and related interest income of $8 million in Other (Income) Expense.

Financing fees and financial instruments expense consists of commitment fees and charges incurred in connection with financing transactions. Financing fees and financial instruments expense in 2017 included a premium of $25 million related to the redemption of our $700 million 7% senior notes due 2022 in May 2017.

Miscellaneous expense for the year ended December 31, 2019 includes expenses of $25 million incurred by the Company as a direct result of flooding at our Beaumont, Texas chemical facility during the third quarter of 2019. Miscellaneous expense in 2018 and 2017 includes $12 million and $14 million, respectively, related to expenses incurred by the Company as a direct result of hurricanes Harvey and Irma during 2017.

Other (Income) Expense also includes net foreign currency exchange (gains) and losses; general and product liability expense - discontinued products, which consists of charges for claims against us related primarily to asbestos personal injury claims, net of probable insurance recoveries; royalty income which is derived primarily from licensing arrangements; net (gains) and losses on asset sales; and interest income.

Note 6. Income Taxes

The components of Income before Income Taxes follow:

(In millions)	2019	2018	2017
U.S.	$ (39)	$ 439	$ 394
Foreign	216	572	484
	$ 177	**$ 1,011**	**$ 878**

A reconciliation of income taxes at the U.S. statutory rate to United States and Foreign Tax Expense follows:

(In millions)	2019	2018	2017
U.S. federal income tax expense at the statutory rate of 21% (35% for 2017)	$ 37	$ 212	$ 307
Federal and state tax on accelerated royalty income transaction	334	—	—
Net establishment (release) of foreign valuation allowances	140	(5)	1
Net establishment (release) of U.S. valuation allowances	(98)	25	5
Net foreign losses (income) with no tax due to valuation allowances	48	7	(7)
U.S. charges (benefits) related to foreign tax credits, R&D and foreign derived intangible deduction	(17)	20	(23)
Adjustment for foreign income taxed at different rates	16	30	(55)
Net establishment (resolution) of uncertain tax positions	7	18	(6)
Deferred tax impact of enacted tax rate and law changes	3	—	389
State income taxes, net of U.S. federal benefit	(1)	(1)	9
Provision for undistributed foreign earnings, net	—	(9)	(162)
Transition tax	—	8	77
Domestic production activities deduction	—	(1)	(16)
Other	5	(1)	(6)
United States and Foreign Tax Expense	**$ 474**	**$ 303**	**$ 513**

The components of United States and Foreign Tax Expense by taxing jurisdiction, follow:

(In millions)	2019	2018	2017
Current:			
Federal	$ —	$ (15)	$ (22)
Foreign	134	188	166
State	17	(1)	3
	151	**172**	**147**
Deferred:			
Federal	133	120	389
Foreign	153	6	(8)
State	37	5	(15)
	323	**131**	**366**
United States and Foreign Tax Expense	**$ 474**	**$ 303**	**$ 513**

Income tax expense in 2019 was $474 million on income before income taxes of $177 million. In 2019, income tax expense was unfavorably impacted by net discrete adjustments totaling $386 million. Discrete adjustments were due to non-cash charges of $334 million related to an acceleration of royalty income in the U.S. from the sale of certain European royalty payments to Luxembourg and $150 million related to an increase in our valuation allowance on tax losses in Luxembourg, which were partially offset by a non-cash tax benefit of $98 million related to a reduction of our U.S. valuation allowance for foreign tax credits.

At December 31, 2019, our valuation allowance on certain of our U.S. federal, state and local deferred tax assets was $13 million, primarily related to state tax loss and credit carryforwards, and our valuation allowance on our foreign deferred tax assets was

$969 million. At December 31, 2018, our valuation allowance on certain U.S. federal, state and local deferred tax assets was $113 million and our valuation allowance on our foreign deferred tax assets was $204 million.

We consider both positive and negative evidence when measuring the need for a valuation allowance. The weight given to the evidence is commensurate with the extent to which it may be objectively verified. Current and cumulative financial reporting results are a source of objectively verifiable evidence. We give operating results during the most recent three-year period a significant weight in our analysis. We typically only consider forecasts of future profitability when positive cumulative operating results exist in the most recent three-year period. We perform scheduling exercises to determine if sufficient taxable income of the appropriate character exists in the periods required in order to realize our deferred tax assets with limited lives (such as tax loss carryforwards and tax credits) prior to their expiration. We consider tax planning strategies available to accelerate taxable amounts if required to utilize expiring deferred tax assets. A valuation allowance is not required to the extent that, in our judgment, positive evidence exists with a magnitude and duration sufficient to result in a conclusion that it is more likely than not that our deferred tax assets will be realized.

At December 31, 2019, our net deferred tax assets include approximately $403 million of foreign tax credits, net of a valuation allowance of $3 million, as compared to $637 million, net of a valuation allowance of $103 million, at December 31, 2018. If not utilized, these foreign tax credits will expire from 2022 to 2028. These credits were generated primarily from the receipt of foreign dividends. Our earnings and forecasts of future profitability along with three significant sources of foreign income provide us sufficient positive evidence to utilize these credits, despite the negative evidence of their limited carryforward periods. Those sources of foreign income are (1) 100% of our domestic profitability can be re-characterized as foreign source income under current U.S. tax law to the extent domestic losses have offset foreign source income in prior years, (2) annual net foreign source income, exclusive of dividends, primarily from royalties, and (3) tax planning strategies, including capitalizing research and development costs, accelerating income on cross border sales of inventory or raw materials to our subsidiaries and reducing U.S. interest expense by, for example, reducing intercompany loans through repatriating current year earnings of foreign subsidiaries, all of which would increase our domestic profitability.

Foreign source taxable income for the fourth quarter of 2019 includes accelerated royalty income in the U.S. of $2.1 billion received from Luxembourg as payment for the purchase of the right to receive technology royalties from our European operations for a period of 12 years. External specialists assisted management with this transaction. The royalty sale transaction resulted in a U.S. tax charge of $334 million and a deferred tax asset and offsetting valuation allowance of $576 million in Luxembourg.

Foreign source taxable income for the fourth quarter of 2019 also includes $320 million of accelerated cross-border sales of inventory from the U.S. to Canada, resulting in a U.S. tax charge of approximately $70 million that was offset by the establishment of a deferred tax asset.

The federal portion of the tax charges related to both the royalty acceleration and Canadian prepayment transactions was fully offset by the utilization of foreign tax credits of approximately $310 million. In addition, as a result of these transactions, we released an existing U.S. valuation allowance on foreign tax credits of $98 million.

We considered our current forecasts of future profitability in assessing our ability to realize our remaining net foreign tax credits. These forecasts include the impact of recent trends, including various macroeconomic factors such as raw material prices, on our profitability, as well as the impact of tax planning strategies. Macroeconomic factors, including raw material prices, possess a high degree of volatility and can significantly impact our profitability. As such, there is a risk that future foreign source income will not be sufficient to fully utilize these foreign tax credits. However, we believe our forecasts of future profitability along with the three significant sources of foreign income described above provide us sufficient positive evidence to conclude that it is more likely than not that our foreign tax credits, net of remaining valuation allowances, will be fully utilized prior to their various expiration dates.

Our losses in various foreign taxing jurisdictions in recent periods represented sufficient negative evidence to require us to maintain a full valuation allowance against certain of our net deferred tax assets. In Luxembourg, we maintained a valuation allowance on all deferred tax assets with limited lives. As a result of recent negative evidence, including cumulative losses in the most recent three-year period and a forecast of continued losses for 2020, we increased our valuation allowance on our net deferred tax assets in Luxembourg to now include losses with unlimited lives, resulting in a non-cash tax charge of $150 million. Each reporting period we assess available positive and negative evidence and estimate if sufficient future taxable income will be generated to utilize these existing deferred tax assets. We do not believe that sufficient positive evidence required to release valuation allowances having a significant impact on our financial position or results of operations will exist within the next twelve months.

In 2018, income tax expense of $303 million was unfavorably impacted by net discrete adjustments of $65 million. Discrete adjustments were primarily due to charges totaling $135 million related to deferred tax assets for foreign tax credits, including the establishment of a valuation allowance on foreign tax credits of $98 million, partially offset by a tax benefit of $88 million related to a worthless stock deduction created by permanently ceasing operations of our Venezuelan subsidiary during the fourth quarter of 2018. Income tax expense in 2018 also included net charges of $18 million for various other discrete tax adjustments, including those related to finalizing our accounting for certain provisional items related to the Tax Act.

In 2017, income tax expense of $513 million was unfavorably impacted by net discrete adjustments of $294 million, due to a net non-cash charge of $299 million related to the enactment of the Tax Act and a net benefit of $5 million for other miscellaneous discrete tax items.

Temporary differences and carryforwards giving rise to deferred tax assets and liabilities at December 31 follow:

(In millions)	2019	2018
Tax loss carryforwards and credits	$ 1,159	$ 1,473
Prepaid royalty income	576	—
Capitalized research and development expenditures	416	404
Accrued expenses deductible as paid	347	261
Postretirement benefits and pensions	221	207
Rationalizations and other provisions	38	26
Vacation and sick pay	23	23
Deferred interest deductions	—	40
Other	106	111
	2,886	**2,545**
Valuation allowance	(982)	(317)
Total deferred tax assets	**1,904**	**2,228**
Property basis differences	(466)	(475)
Tax on undistributed earnings of subsidiaries	(1)	(1)
Total net deferred tax assets	**$ 1,437**	**$ 1,752**

At December 31, 2019, we had $611 million of tax assets for net operating loss, capital loss and tax credit carryforwards related to certain foreign subsidiaries. These carryforwards are primarily from countries with unlimited carryforward periods, but include $63 million of tax credit carryforwards in various European countries that are subject to expiration from 2020 to 2029. On December 31, 2019, deferred taxes included $576 million for the prepaid royalty income in Luxembourg, as further described above. A valuation allowance totaling $969 million has been recorded against these and other deferred tax assets where recovery of the asset or carryforward is uncertain. In addition, we had $489 million of federal and $59 million of state tax assets for net operating loss and tax credit carryforwards. The federal carryforwards consist of $406 million of foreign tax credits that are subject to expiration from 2022 to 2028 and $83 million of tax assets related to research and development credits and other federal credits that are subject to expiration from 2030 to 2039. The state carryforwards are subject to expiration from 2020 to 2034. A valuation allowance of $13 million has been recorded against federal and state deferred tax assets where recovery is uncertain.

At December 31, 2019, we had unrecognized tax benefits of $82 million that if recognized, would have a favorable impact on our tax expense of $56 million. We had accrued interest of $1 million as of December 31, 2019. If not favorably settled, $6 million of the unrecognized tax benefits and all of the accrued interest would require the use of our cash. We do not expect changes during 2020 to our unrecognized tax benefits to have a significant impact on our financial position or results of operations.

Reconciliation of Unrecognized Tax Benefits

(In millions)	2019	2018	2017
Balance at January 1	**$ 71**	**$ 52**	**$ 63**
Increases related to prior year tax positions	24	9	2
Decreases related to prior year tax positions	—	(1)	(2)
Settlements	(11)	(2)	(8)
Foreign currency impact	(2)	(5)	—
Increases related to current year tax positions	—	21	—
Lapse of statute of limitations	—	(3)	(3)
Balance at December 31	**$ 82**	**$ 71**	**$ 52**

We are open to examination in the United States for 2019 and in Germany from 2016 onward. Generally, for our remaining tax jurisdictions, years from 2014 onward are still open to examination.

We have undistributed earnings and profits of our foreign subsidiaries totaling approximately $2.4 billion at December 31, 2019. We have concluded that no provision for tax in the United States is required because substantially all of the remaining undistributed earnings and profits have been or will be reinvested in property, plant and equipment and working capital outside of the United States. A foreign withholding tax charge of approximately $80 million (net of foreign tax credits) would be required if these earnings and profits were to be distributed to the United States.

Net cash payments for income taxes were $142 million, $178 million and $144 million in 2019, 2018 and 2017, respectively.

Note 7. Earnings Per Share

Basic earnings per share are computed based on the weighted average number of common shares outstanding. Diluted earnings per share are calculated to reflect the potential dilution that could occur if securities or other contracts were exercised or converted into common stock.

Basic and diluted earnings per common share are calculated as follows:

(In millions, except per share amounts)	2019	2018	2017
Earnings (loss) per share — basic:			
Goodyear net income (loss)	$ (311)	$ 693	$ 346
Weighted average shares outstanding	233	237	249
Earnings (loss) per common share — basic	**$ (1.33)**	**$ 2.92**	**$ 1.39**
Earnings (loss) per share — diluted:			
Goodyear net income (loss)	$ (311)	$ 693	$ 346
Weighted average shares outstanding	233	237	249
Dilutive effect of stock options and other dilutive securities	—	2	4
Weighted average shares outstanding — diluted	233	239	253
Earnings (loss) per common share — diluted	**$ (1.33)**	**$ 2.89**	**$ 1.37**

Weighted average shares outstanding — diluted for 2019 excludes the dilutive effect of approximately 3 million equivalent shares, related primarily to options with exercise prices less than the average market price of our common shares (i.e., "in-the-money" options), as their inclusion would have been anti-dilutive due to the Goodyear net loss. Additionally, weighted average shares outstanding — diluted for 2019 excludes approximately 2 million equivalent shares related to options with exercise prices greater than the average market price of our common shares (i.e., “underwater” options). There were approximately 2 million and 1 million equivalent shares related to options with exercise prices greater than the average market price of our common shares for 2018 and 2017, respectively.

Note 8. Business Segments

Segment information reflects our strategic business units (“SBUs”), which are organized to meet customer requirements and global competition. For the year ended December 31, 2019, we operated our business through three operating segments representing our regional tire businesses: Americas; Europe, Middle East and Africa; and Asia Pacific. Segment information is reported on the basis used for reporting to our Chief Executive Officer. Each of the three regional business segments is involved in the development, manufacture, distribution and sale of tires. Certain of the business segments also provide related products and services, which include retreads and automotive and commercial truck maintenance and repair services. Each segment also exports tires to other segments.

Americas manufactures and sells tires for automobiles, trucks, buses, earthmoving, mining and industrial equipment, aircraft, and for various other applications throughout North, Central and South America. Americas also provides related products and services including retreaded tires, tread rubber, and automotive and commercial truck maintenance and repair services, as well as sells chemical and natural rubber products to our other business segments and to unaffiliated customers.

EMEA manufactures and sells tires for automobiles, trucks, buses, aircraft, motorcycles, and earthmoving, mining and industrial equipment throughout Europe, the Middle East and Africa. EMEA also sells retreaded aviation tires, retreading and related services for commercial truck and earthmoving, mining and industrial equipment, and automotive maintenance and repair services.

Asia Pacific manufactures and sells tires for automobiles, trucks, aircraft, farm, and earthmoving, mining and industrial equipment throughout the Asia Pacific region. Asia Pacific also provides related products and services including retreaded truck and aviation tires, tread rubber, and automotive maintenance and repair services.

The following table presents segment sales and operating income, and the reconciliation of segment operating income to Income before Income Taxes:

(In millions)	2019	2018	2017
Sales			
Americas	$ 7,922	$ 8,168	$ 8,212
Europe, Middle East and Africa	4,708	5,090	4,928
Asia Pacific	2,115	2,217	2,237
Net Sales	**$ 14,745**	**$ 15,475**	**$ 15,377**
Segment Operating Income			
Americas	$ 550	$ 654	$ 847
Europe, Middle East and Africa	202	363	367
Asia Pacific	193	257	342
Total Segment Operating Income	**945**	**1,274**	**1,556**
Less:			
Rationalizations	205	44	135
Interest expense	340	321	335
Other (income) expense (1)	98	(174)	70
Asset write-offs and accelerated depreciation	15	4	40
Corporate incentive compensation plans	50	13	33
Retained expenses of divested operations	10	9	13
Other (2)	50	46	52
Income before Income Taxes	**$ 177**	**$ 1,011**	**$ 878**

(1) Refer to Note to the Consolidated Financial Statements No. 5, Other (Income) Expense, in this Form 10-K.

(2) Primarily represents unallocated corporate costs and the elimination of $17 million, $18 million and $30 million for the years ended December 31, 2019, 2018 and 2017, respectively, of royalty income attributable to the strategic business units.

The following table presents segment assets at December 31:

(In millions)	2019	2018
Assets		
Americas	$ 7,606	$ 7,160
Europe, Middle East and Africa	4,724	4,809
Asia Pacific	2,711	2,602
Total Segment Assets	**15,041**	**14,571**
Corporate(1)	2,144	2,301
	$ 17,185	**$ 16,872**

(1) Corporate includes substantially all of our U.S. net deferred tax assets.

Results of operations are measured based on net sales to unaffiliated customers and segment operating income. Each segment exports tires to other segments. The financial results of each segment exclude sales of tires exported to other segments, but include operating income derived from such transactions. Segment operating income is computed as follows: Net sales less CGS (excluding asset write-offs and accelerated depreciation charges) and SAG (including certain allocated corporate administrative expenses). Segment operating income also includes certain royalties and equity in earnings of most affiliates. Segment operating income does not include net rationalization charges, asset sales, and certain other items.

The following table presents geographic information. Net sales by country were determined based on the location of the selling subsidiary. Long-lived assets consisted of property, plant and equipment. Besides Germany, management did not consider the net sales of any other individual countries outside the United States to be significant to the consolidated financial statements. For long-lived assets, only China was considered to be significant.

(In millions)	2019	2018	2017
Net Sales			
United States	$ 6,489	$ 6,692	$ 6,678
Germany [(1)]	979	1,691	1,874
Other international	7,277	7,092	6,825
	$ 14,745	**$ 15,475**	**$ 15,377**
Long-Lived Assets			
United States	$ 2,681	$ 2,734	
China	722	762	
Other international	3,805	3,763	
	$ 7,208	**$ 7,259**	

(1) The 2018 and 2019 decrease in net sales primarily related to a business reorganization that centralized our OE sales for EMEA in Luxembourg.

At December 31, 2019, significant concentrations of cash and cash equivalents held by our international subsidiaries included the following amounts:

- $337 million or 37% in Asia Pacific, primarily China, India and Japan ($278 million or 35% at December 31, 2018),
- $214 million or 24% in EMEA, primarily Belgium ($261 million or 33% at December 31, 2018), and
- $190 million or 21% in Americas, primarily Brazil, Canada and Chile ($134 million or 17% at December 31, 2018).

Rationalizations, as described in Note to the Consolidated Financial Statements No. 3, Costs Associated with Rationalization Programs, in this Form 10-K, net (gains) losses on asset sales, as described in Note to the Consolidated Financial Statements No. 5, Other (Income) Expense, in this Form 10-K, and asset write-offs and accelerated depreciation were not charged (credited) to the SBUs for performance evaluation purposes but were attributable to the SBUs as follows:

(In millions)	2019	2018	2017
Rationalizations			
Americas	$ 90	$ 3	$ 6
Europe, Middle East and Africa	115	36	111
Asia Pacific	—	3	2
Total Segment Rationalizations	**$ 205**	**$ 42**	**$ 119**
Corporate	—	2	16
	$ 205	**$ 44**	**$ 135**

(In millions)	2019	2018	2017
Net (Gains) Losses on Asset Sales			
Americas[(1)]	$ —	$ (275)	$ (4)
Europe, Middle East and Africa	(16)	2	(10)
Total Segment Asset Sales	**$ (16)**	**$ (273)**	**$ (14)**

(1) Americas Net (Gains) Losses on Asset Sales for the year ended December 31, 2018 includes the gain of $272 million related to the TireHub transaction, net of transaction costs.

(In millions)	2019	2018	2017
Asset Write-offs and Accelerated Depreciation			
Americas	$ 13	$ —	$ —
Europe, Middle East and Africa	2	4	40
Total Segment Asset Write-offs and Accelerated Depreciation	**$ 15**	**$ 4**	**$ 40**

The following tables present segment capital expenditures and depreciation and amortization:

(In millions)	2019	2018	2017
Capital Expenditures			
Americas	$ 369	$ 406	$ 525
Europe, Middle East and Africa	227	180	159
Asia Pacific	141	188	164
Total Segment Capital Expenditures	**$ 737**	**$ 774**	**$ 848**
Corporate	33	37	33
	$ 770	**$ 811**	**$ 881**

(In millions)	2019	2018	2017
Depreciation and Amortization			
Americas	$ 430	$ 414	$ 398
Europe, Middle East and Africa	197	201	191
Asia Pacific	133	131	124
Total Segment Depreciation and Amortization	**$ 760**	**$ 746**	**$ 713**
Corporate	35	32	68
	$ 795	**$ 778**	**$ 781**

The following table presents segment equity in the net income of investees accounted for by the equity method:

(In millions)	2019	2018	2017
Equity in (Income) Loss			
Americas	$ 32	$ 11	$ (5)
Europe, Middle East and Africa	—	(1)	—
Total Segment Equity in (Income) Loss	**$ 32**	**$ 10**	**$ (5)**

Note 9. Accounts Receivable

(In millions)	2019	2018
Accounts receivable	$ 2,052	$ 2,143
Allowance for doubtful accounts	(111)	(113)
	$ 1,941	**$ 2,030**

Note 10. Inventories

(In millions)	2019	2018
Raw materials	$ 530	$ 569
Work in process	143	152
Finished goods	2,178	2,135
	$ 2,851	**$ 2,856**

Note 11. Goodwill and Intangible Assets

The following table presents the net carrying amount of goodwill allocated by segment, and changes during 2019:

(In millions)	Balance at December 31, 2018	Acquisitions	Divestitures	Translation	Balance at December 31, 2019
Americas	$ 91	$ —	$ —	$ —	$ 91
Europe, Middle East and Africa	415	2	—	(6)	411
Asia Pacific	63	1	—	(1)	63
	$ 569	**$ 3**	**$ —**	**$ (7)**	**$ 565**

The following table presents the net carrying amount of goodwill allocated by segment, and changes during 2018:

(In millions)	Balance at December 31, 2017	Acquisitions	Divestitures	Translation	Balance at December 31, 2018
Americas	$ 91	$ —	$ —	$ —	$ 91
Europe, Middle East and Africa	437	2	—	(24)	415
Asia Pacific	67	—	—	(4)	63
	$ 595	**$ 2**	**$ —**	**$ (28)**	**$ 569**

The following table presents information about intangible assets:

	2019			**2018**		
(In millions)	Gross Carrying Amount(1)	Accumulated Amortization(1)	Net Carrying Amount	Gross Carrying Amount(1)	Accumulated Amortization(1)	Net Carrying Amount
Intangible assets with indefinite lives	$ 124	$ (6)	$ 118	$ 124	$ (6)	$ 118
Trademarks and patents	24	(19)	5	23	(19)	4
Other intangible assets	25	(11)	14	23	(9)	14
	$ 173	**$ (36)**	**$ 137**	**$ 170**	**$ (34)**	**$ 136**

(1) Includes impact of foreign currency translation.

Intangible assets are primarily comprised of the rights to use the Dunlop brand name and related trademarks and certain other brand names and trademarks.

Amortization expense for intangible assets totaled $2 million in 2019, 2018 and 2017. We estimate that annual amortization expense related to intangible assets will be approximately $2 million in 2020 through 2022, and $1 million in 2023 and 2024. The weighted average remaining amortization period is approximately 20 years.

Our annual impairment analyses for 2019, 2018 and 2017 indicated no impairment of goodwill or intangible assets with indefinite lives. Our quantitative goodwill analysis as of October 31, 2019 concluded that the fair values substantially exceeded the carrying amounts for each reporting unit tested, except for the EMEA reporting unit. There were no events or circumstances that indicated the quantitative impairment tests should be re-performed for goodwill or for intangible assets with indefinite lives for any reporting unit at December 31, 2019.

We determine the estimated fair value for each reporting unit based on discounted cash flow projections and market values for comparable businesses. EMEA had an estimated fair value that exceeded its carrying value, including goodwill, by approximately 10%. The most critical assumptions used in the calculation of the fair value of the EMEA reporting unit are the projected long term operating margin, discount rate and the selection of market multiples. If we make adverse revisions to our significant assumptions, including as a result of business performance or market conditions, or if our market capitalization declines further and if such a decline becomes indicative that the fair value of our reporting units has declined below their carrying values, we may need to record a material, non-cash goodwill impairment charge in a future period.

Note 12. Other Assets and Investments

Dividends received from our consolidated subsidiaries were $43 million, $608 million and $558 million in 2019, 2018 and 2017, respectively. Dividends received in 2019 were primarily from Singapore and Brazil and paid to the United States. Dividends received in 2018 were primarily from Singapore and Japan and paid to the United States. Dividends received in 2017 were primarily from Luxembourg and paid to the United States. Dividends received from our affiliates accounted for using the equity method were $4 million, $5 million and $5 million in 2019, 2018 and 2017, respectively.

The balance of our investment in TireHub was $262 million and $270 million at December 31, 2019 and 2018, respectively, and was included in Other Assets on our Consolidated Balance Sheets. Our investment in TireHub is accounted for under the equity method of accounting and, as such, includes our 50% share of the net losses of TireHub, which totaled $33 million and $15 million in 2019 and 2018, respectively. In 2019, we contributed a loan receivable from TireHub of $30 million to their equity, which increased our investment in TireHub.

Note 13. Property, Plant and Equipment

	2019			2018		
(In millions)	Owned	Finance Leases	Total	Owned	Capital Leases	Total
Property, plant and equipment, at cost:						
Land	$ 425	$ 1	$ 426	$ 427	$ —	$ 427
Buildings[(1)]	2,431	227	2,658	2,564	29	2,593
Machinery and equipment	13,624	30	13,654	13,440	43	13,483
Construction in progress	681	1	682	654	1	655
	17,161	259	17,420	17,085	73	17,158
Accumulated depreciation	(10,438)	(50)	(10,488)	(10,128)	(33)	(10,161)
	6,723	209	6,932	6,957	40	6,997
Spare parts	276	—	276	262	—	262
	$ 6,999	**$ 209**	**$ 7,208**	**$ 7,219**	**$ 40**	**$ 7,259**

(1) Includes finance lease obligations related to our Global and Americas Headquarters at December 31, 2019 as a result of the adoption of the new lease accounting standard.

The range of useful lives of property used in arriving at the annual amount of depreciation are as follows: buildings and improvements, 3 to 45 years; and machinery and equipment, 3 to 40 years.

Note 14. Leases

We determine if an arrangement is or contains a lease at inception. We enter into leases primarily for our distribution facilities, manufacturing equipment, administrative offices, retail stores, vehicles and data processing equipment under varying terms and conditions. Our leases have remaining lease terms of less than 1 year to approximately 50 years. Most of our leases include options to extend the lease, with renewal terms ranging from 1 to 50 years years or more, and some include options to terminate the lease within 1 year. If it is reasonably certain that an option to extend or terminate a lease will be exercised, that option is considered in the lease term. Leases with an initial term of 12 months or less are not recorded on the balance sheet, and we recognize short-term lease expense for these leases on a straight-line basis over the lease term.

Certain of our lease agreements include variable lease payments, generally based on consumer price indices. Variable lease payments that are assigned to an index are determined based on the initial index at commencement, and the variability based on changes in the index is accounted for as it changes. The variable portion of payments is not included in the initial measurement of the right-of-use asset or lease liability due to the uncertainty of the payment amount and are recorded as lease expense in the period incurred. Our lease agreements do not contain any material residual value guarantees or material restrictive covenants. We have lease agreements with lease and non-lease components, which are accounted for separately.

Operating leases are included in Operating Lease Right-of-Use ("ROU") Assets, Operating Lease Liabilities due Within One Year and Operating Lease Liabilities on our Consolidated Balance Sheets. Finance leases are included in Property, Plant and Equipment, Long Term Debt and Finance Leases due Within One Year, and Long Term Debt and Finance Leases on our Consolidated Balance Sheets.

ROU assets represent our right to use an underlying asset for the lease term and lease liabilities represent our obligation to make lease payments arising from the lease. Operating lease ROU assets and liabilities are recognized at the commencement date based on the present value of lease payments over the lease term. Generally, we use our incremental borrowing rate based on the information available at the commencement date in determining the present value of lease payments, unless there is a rate stated in the lease agreement. Operating lease expense is recognized on a straight-line basis over the lease term.

The components of lease expense included in Income before Income Taxes for the year ended December 31, 2019 are as follows:

(In millions)	2019
Operating Lease Expense	$ 292
Finance Lease Expense:	
Amortization of ROU assets	11
Interest on lease liabilities	21
Short Term Lease Expense	6
Variable Lease Expense	7
Sublease Income	(15)
Total Lease Expense	**$ 322**

Net rental expense for the years ended December 31, 2018 and 2017 is comprised of the following:

(In millions)	2018	2017
Gross rental expense	$ 333	$ 332
Sublease rental income	(16)	(17)
	$ 317	**$ 315**

Supplemental cash flow information related to leases for the year ended December 31, 2019 is as follows:

(In millions)	
Cash Paid for Amounts Included in the Measurement of Lease Liabilities	
Operating Cash Flows for Operating Leases	$ 267
Operating Cash Flows for Finance Leases	21
Financing Cash Flows for Finance Leases	7
ROU Assets Obtained in Exchange for Lease Obligations	
Operating Leases	197
Finance Leases	34

Supplemental balance sheet information related to leases as of December 31, 2019 is as follows:

(In millions, except lease term and discount rate)		
Operating Leases		
Operating Lease ROU Assets	**$**	**855**
Operating Lease Liabilities due Within One Year	$	199
Operating Lease Liabilities		668
Total Operating Lease Liabilities	**$**	**867**
Finance Leases		
Property, Plant and Equipment, at cost	$	259
Accumulated Depreciation		(50)
Property, Plant and Equipment, net	**$**	**209**
Long Term Debt and Finance Leases due Within One Year	$	6
Long Term Debt and Finance Leases		243
Total Finance Lease Liabilities	**$**	**249**
Weighted Average Remaining Lease Term		
Operating Leases		7.2 years
Finance Leases		31.6 years
Weighted Average Discount Rate		
Operating Leases		6.69%
Finance Leases		8.46%

Future maturities of our lease liabilities, excluding subleases, as of December 31, 2019 are as follows:

(In millions)	**Operating Leases**	**Finance Leases**
2020	$ 242	$ 25
2021	192	35
2022	141	22
2023	109	21
2024	81	20
Thereafter	359	690
Total Lease Payments	**1,124**	**813**
Less: Imputed Interest	257	564
Total	**$ 867**	**$ 249**

As of December 31, 2019, we have additional operating leases that have not yet commenced for which the present value of lease payments over the respective lease terms totals $48 million. Accordingly, these leases are not recorded on the Consolidated Balance Sheet at December 31, 2019. These operating leases will commence in 2020 with lease terms of 10 years to 15 years.

Note 15. Financing Arrangements and Derivative Financial Instruments

At December 31, 2019, we had total credit arrangements of $9,078 million, of which $3,578 million were unused. At that date, 32% of our debt was at variable interest rates averaging 3.81%.

Notes Payable and Overdrafts, Long Term Debt and Finance Leases due Within One Year and Short Term Financing Arrangements

At December 31, 2019, we had short term committed and uncommitted credit arrangements totaling $758 million, of which $389 million were unused. These arrangements are available primarily to certain of our foreign subsidiaries through various banks at quoted market interest rates.

The following table presents amounts due within one year:

(In millions)	December 31, 2019	December 31, 2018
Chinese credit facilities	$ 118	$ 122
Other domestic and foreign debt	230	288
Notes Payable and Overdrafts	**$ 348**	**$ 410**
Weighted average interest rate	4.92%	8.03%
Chinese credit facilities	$ 95	$ 32
8.75% note due 2020	280	—
Other domestic and foreign debt (including finance leases)	187	211
Long Term Debt and Finance Leases due Within One Year	**$ 562**	**$ 243**
Weighted average interest rate	6.58%	4.57%
Total obligations due within one year	**$ 910**	**$ 653**

Long Term Debt and Finance Leases and Financing Arrangements

At December 31, 2019, we had long term credit arrangements totaling $8,320 million, of which $3,189 million were unused.

The following table presents long term debt and finance leases, net of unamortized discounts, and interest rates:

	December 31, 2019		December 31, 2018	
(In millions)	Amount	Interest Rate	Amount	Interest Rate
Notes:				
8.75% due 2020	$ 280		$ 278	
5.125% due 2023	1,000		1,000	
3.75% Euro Notes due 2023	281		286	
5% due 2026	900		900	
4.875% due 2027	700		700	
7% due 2028	150		150	
Credit Facilities:				
First lien revolving credit facility due 2021	—	—	—	—
Second lien term loan facility due 2025	400	3.97%	400	4.46%
European revolving credit facility due 2024	—	—	—	—
Pan-European accounts receivable facility	327	0.98%	335	1.01%
Mexican credit facilities	200	3.44%	200	4.30%
Chinese credit facilities	195	4.87%	219	5.03%
Other foreign and domestic debt(1)	661	4.02%	884	5.35%
	5,094		5,352	
Unamortized deferred financing fees	(28)		(36)	
	5,066		5,316	
Finance lease obligations(2)	249		37	
	5,315		5,353	
Less portion due within one year	(562)		(243)	
	$ 4,753		**$ 5,110**	

(1) Interest rates are weighted average interest rates related to various foreign credit facilities with customary terms and conditions.
(2) Includes finance lease obligations related to our Global and Americas Headquarters at December 31, 2019.

NOTES

$282 million 8.75% Senior Notes due 2020

At December 31, 2019, $282 million aggregate principal amount of 8.75% notes due 2020 were outstanding. These notes had an effective yield of 9.20% at issuance. These notes are unsecured senior obligations, are guaranteed by our U.S. and Canadian subsidiaries that also guarantee our obligations under our U.S. senior secured credit facilities described below, and will mature on August 15, 2020.

We have the option to redeem these notes, in whole or in part, at any time at a redemption price equal to the greater of 100% of the principal amount of these notes or the sum of the present values of the remaining scheduled payments on these notes, discounted using a defined treasury rate plus 50 basis points, plus in either case accrued and unpaid interest to the redemption date.

The terms of the indenture for these notes, among other things, limit our ability and the ability of certain of our subsidiaries to (i) incur secured debt, (ii) engage in sale and leaseback transactions, and (iii) consolidate, merge, sell or otherwise dispose of all or substantially all of our assets. These covenants are subject to significant exceptions and qualifications.

$1.0 billion 5.125% Senior Notes due 2023

At December 31, 2019, $1.0 billion aggregate principal amount of 5.125% senior notes due 2023 were outstanding. These notes were sold at 100% of the principal amount and will mature on November 15, 2023. These notes are unsecured senior obligations and are guaranteed by our U.S. and Canadian subsidiaries that also guarantee our obligations under our U.S. senior secured credit facilities described below.

We have the option to redeem these notes, in whole or in part, at any time at a redemption price of 101.281% and 100% during the 12-month periods commencing on November 15, 2019 and 2020 and thereafter, respectively, plus accrued and unpaid interest to the redemption date.

The terms of the indenture for these notes, among other things, limit the ability of the Company and certain of its subsidiaries, including Goodyear Europe B.V. ("GEBV"), to (i) incur additional debt or issue redeemable preferred stock, (ii) pay dividends, repurchase shares or make certain other restricted payments or investments, (iii) incur liens, (iv) sell assets, (v) incur restrictions on the ability of our subsidiaries to pay dividends or to make other payments to us, (vi) enter into affiliate transactions, (vii) engage in sale and leaseback transactions, and (viii) consolidate, merge, sell or otherwise dispose of all or substantially all of our assets. These covenants are subject to significant exceptions and qualifications. For example, if these notes are assigned an investment grade rating by Moody's and Standard and Poor's and no default has occurred and is continuing, certain covenants will be suspended and we may elect to suspend the subsidiary guarantees. The indenture has customary defaults, including a cross-default to material indebtedness of Goodyear and our subsidiaries.

€250 million 3.75% Senior Notes due 2023 of GEBV

At December 31, 2019, €250 million aggregate principal amount of GEBV’s 3.75% senior notes due 2023 were outstanding. These notes were sold at 100% of the principal amount and will mature on December 15, 2023. These notes are unsecured senior obligations of GEBV and are guaranteed, on an unsecured senior basis, by the Company and our U.S. and Canadian subsidiaries that also guarantee our obligations under our U.S. senior secured credit facilities described below.

We have the option to redeem these notes, in whole or in part, at any time at a redemption price of 100.938% and 100% during the 12-month periods commencing on December 15, 2019 and 2020 and thereafter, respectively, plus accrued and unpaid interest to the redemption date.

The indenture for these notes includes covenants that are substantially similar to those contained in the indenture governing our 5.125% senior notes due 2023, described above.

$900 million 5% Senior Notes due 2026

At December 31, 2019, $900 million aggregate principal amount of 5% senior notes due 2026 were outstanding. These notes were sold at 100% of the principal amount and will mature on May 31, 2026. These notes are unsecured senior obligations and are guaranteed by our U.S. and Canadian subsidiaries that also guarantee our obligations under our U.S. senior secured credit facilities described below.

We have the option to redeem these notes, in whole or in part, at any time on or after May 31, 2021 at a redemption price of 102.5%, 101.667%, 100.833% and 100% during the 12-month periods commencing on May 31, 2021, 2022, 2023 and 2024 and thereafter, respectively, plus accrued and unpaid interest to the redemption date. Prior to May 31, 2021, we may redeem these notes, in whole or in part, at a redemption price equal to 100% of the principal amount plus a make-whole premium and accrued and unpaid interest to the redemption date.

The indenture for these notes includes covenants that are substantially similar to those contained in the indenture governing our 5.125% senior notes due 2023, described above.

$700 million 4.875% Senior Notes due 2027

At December 31, 2019, $700 million aggregate principal amount of 4.875% senior notes due 2027 were outstanding. These notes were sold at 100% of the principal amount and will mature on March 15, 2027. These notes are unsecured senior obligations and are guaranteed by our U.S. and Canadian subsidiaries that also guarantee our obligations under our U.S. senior secured credit facilities described below.

We have the option to redeem these notes, in whole or in part, at any time prior to their maturity. If we elect to redeem the notes prior to December 15, 2026, we will pay a redemption price equal to the greater of 100% of the principal amount of the notes redeemed or the sum of the present values of the remaining scheduled payments on the notes redeemed, discounted using a defined treasury rate plus 50 basis points, plus in either case accrued and unpaid interest to the redemption date. If we elect to redeem the notes on or after December 15, 2026, we will pay a redemption price equal to 100% of the principal amount of the notes redeemed plus accrued and unpaid interest to the redemption date.

The terms of the indenture for these notes, among other things, limit our ability and the ability of certain of our subsidiaries to (i) incur certain liens, (ii) engage in sale and leaseback transactions, and (iii) consolidate, merge, sell or otherwise dispose of all or substantially all of our assets. These covenants are subject to significant exceptions and qualifications.

$150 million 7% Senior Notes due 2028

At December 31, 2019, $150 million aggregate principal amount of 7% notes due 2028 were outstanding. These notes are unsecured senior obligations and will mature on March 15, 2028.

We have the option to redeem these notes, in whole or in part, at any time at a redemption price equal to the greater of 100% of the principal amount thereof or the sum of the present values of the remaining scheduled payments thereon, discounted using a defined treasury rate plus 15 basis points, plus in either case accrued and unpaid interest to the redemption date.

The terms of the indenture for these notes, among other things, limit our ability and the ability of certain of our subsidiaries to (i) incur secured debt, (ii) engage in sale and leaseback transactions, and (iii) consolidate, merge, sell or otherwise dispose of all or substantially all of our assets. These covenants are subject to significant exceptions and qualifications.

CREDIT FACILITIES

$2.0 billion Amended and Restated First Lien Revolving Credit Facility due 2021

Our amended and restated first lien revolving credit facility is available in the form of loans or letters of credit, with letter of credit availability limited to $800 million. Subject to the consent of the lenders whose commitments are to be increased, we may request that the facility be increased by up to $250 million. Amounts drawn under this facility bear interest at LIBOR plus 125 basis points, based on our current liquidity as described below.

Our obligations under the facility are guaranteed by most of our wholly-owned U.S. and Canadian subsidiaries. Our obligations under the facility and our subsidiaries' obligations under the related guarantees are secured by first priority security interests in collateral that includes, subject to certain exceptions:

- U.S. and Canadian accounts receivable and inventory;
- certain of our U.S. manufacturing facilities;
- equity interests in our U.S. subsidiaries and up to 65% of the equity interests in our directly owned foreign subsidiaries; and
- substantially all other tangible and intangible assets, including equipment, contract rights and intellectual property.

Availability under the facility is subject to a borrowing base, which is based primarily on (i) eligible accounts receivable and inventory of The Goodyear Tire & Rubber Company and certain of its U.S. and Canadian subsidiaries, after adjusting for customary factors that are subject to modification from time to time by the administrative agent or the majority lenders at their discretion (not to be exercised unreasonably), (ii) the value of our principal trademarks, and (iii) certain cash in an amount not to exceed $200 million. Modifications are based on the results of periodic collateral and borrowing base evaluations and appraisals. To the extent that our eligible accounts receivable, inventory and other components of the borrowing base decline in value, our borrowing base will decrease and the availability under the facility may decrease below $2.0 billion. In addition, if the amount of outstanding borrowings and letters of credit under the facility exceeds the borrowing base, we are required to prepay borrowings and/or cash collateralize letters of credit sufficient to eliminate the excess. As of December 31, 2019, our borrowing base, and therefore our availability, under this facility was $301 million below the facility's stated amount of $2.0 billion.

The facility, which matures on April 7, 2021, contains certain covenants that, among other things, limit our ability and the ability of certain of our subsidiaries to (i) incur additional debt or issue redeemable preferred stock, (ii) pay dividends, repurchase shares or make certain other restricted payments or investments, (iii) incur liens, (iv) sell assets, (v) incur restrictions on the ability of our subsidiaries to pay dividends or to make other payments to us, (vi) enter into affiliate transactions, (vii) engage in sale and leaseback transactions, and (viii) consolidate, merge, sell or otherwise dispose of all or substantially all of our assets. These covenants are subject to significant exceptions and qualifications. In addition, in the event that the availability under the facility plus the aggregate amount of our Available Cash is less than $200 million, we will not be permitted to allow our ratio of EBITDA to Consolidated Interest Expense to be less than 2.0 to 1.0 for any period of four consecutive fiscal quarters. “Available Cash,” “EBITDA” and “Consolidated Interest Expense” have the meanings given them in the facility.

The facility has customary representations and warranties including, as a condition to borrowing, that all such representations and warranties are true and correct, in all material respects, on the date of the borrowing, including representations as to no material adverse change in our business or financial condition since December 31, 2015. The facility also has customary defaults, including a cross-default to material indebtedness of Goodyear and our subsidiaries.

If Available Cash (as defined in the facility) plus the availability under the facility is greater than $1.0 billion, amounts drawn under the facility will bear interest, at our option, at (i) 125 basis points over LIBOR or (ii) 25 basis points over an alternative base rate (the higher of (a) the prime rate, (b) the federal funds effective rate or the overnight bank funding rate plus 50 basis points or (c) LIBOR plus 100 basis points), and undrawn amounts under the facility will be subject to an annual commitment fee of 30 basis points. If Available Cash plus the availability under the facility is equal to or less than $1.0 billion, then amounts drawn under the facility will bear interest, at our option, at (i) 150 basis points over LIBOR or (ii) 50 basis points over an alternative base rate, and undrawn amounts under the facility will be subject to an annual commitment fee of 25 basis points.

At December 31, 2019 and 2018, we had no borrowings and $37 million of letters of credit issued under the revolving credit facility.

Amended and Restated Second Lien Term Loan Facility due 2025

Our amended and restated second lien term loan facility matures on March 7, 2025. The term loan bears interest, at our option, at (i) 200 basis points over LIBOR or (ii) 100 basis points over an alternative base rate (the higher of (a) the prime rate, (b) the federal funds effective rate or the overnight bank funding rate plus 50 basis points or (c) LIBOR plus 100 basis points). In addition, if the Total Leverage Ratio is equal to or less than 1.25 to 1.00, we have the option to further reduce the spreads described above by 25 basis points. "Total Leverage Ratio" has the meaning given it in the facility.

Our obligations under our second lien term loan facility are guaranteed by most of our wholly-owned U.S. and Canadian subsidiaries and are secured by second priority security interests in the same collateral securing the $2.0 billion first lien revolving credit facility.

The facility contains covenants, representations, warranties and defaults similar to those in the $2.0 billion first lien revolving credit facility. In addition, if our Pro Forma Senior Secured Leverage Ratio (the ratio of Consolidated Net Secured Indebtedness to EBITDA) for any period of four consecutive fiscal quarters is greater than 3.0 to 1.0, before we may use cash proceeds from certain asset sales to repay any junior lien, senior unsecured or subordinated indebtedness, we must first offer to use such cash proceeds to prepay borrowings under the second lien term loan facility. "Pro Forma Senior Secured Leverage Ratio," "Consolidated Net Secured Indebtedness" and "EBITDA" have the meanings given them in the facility.

At December 31, 2019 and 2018, the amounts outstanding under this facility were $400 million.

€800 million Amended and Restated Senior Secured European Revolving Credit Facility due 2024

On March 27, 2019, we amended and restated our European revolving credit facility. Significant changes to the European revolving credit facility include extending the maturity to March 27, 2024, increasing the available commitments thereunder from €550 million to €800 million, decreasing the interest rate margin by 25 basis points and decreasing the annual commitment fee by 5 basis points to 25 basis points. Loans will now bear interest at LIBOR plus 150 basis points for loans denominated in U.S. dollars or pounds sterling and EURIBOR plus 150 basis points for loans denominated in euros.

The European revolving credit facility consists of (i) a €180 million German tranche that is available only to Goodyear Dunlop Tires Germany GmbH (“GDTG”) and (ii) a €620 million all-borrower tranche that is available to GEBV, GDTG and Goodyear Dunlop Tires Operations S.A. Up to €175 million of swingline loans and €75 million in letters of credit are available for issuance under the all-borrower tranche. Subject to the consent of the lenders whose commitments are to be increased, we may request that the facility be increased by up to €200 million.

GEBV and certain of its subsidiaries in the United Kingdom, Luxembourg, France and Germany provide guarantees to support the facility. GEBV's obligations under the facility and the obligations of its subsidiaries under the related guarantees are secured by security interests in collateral that includes, subject to certain exceptions:

- the capital stock of the principal subsidiaries of GEBV; and
- a substantial portion of the tangible and intangible assets of GEBV and certain of its subsidiaries in the United Kingdom, Luxembourg, France and Germany, including real property, equipment, inventory, contract rights, intercompany receivables and cash accounts, but excluding accounts receivable and certain cash accounts in subsidiaries that are or may become parties to securitization or factoring transactions.

The German guarantors secure the German tranche on a first-lien basis and the all-borrower tranche on a second-lien basis. GEBV and its other subsidiaries that provide guarantees secure the all-borrower tranche on a first-lien basis and generally do not provide collateral support for the German tranche. The Company and its U.S. and Canadian subsidiaries that guarantee our U.S. senior secured credit facilities described above also provide unsecured guarantees in support of the facility.

The facility contains covenants similar to those in our first lien revolving credit facility, with additional limitations applicable to GEBV and its subsidiaries. In addition, under the facility, GEBV's ratio of Consolidated Net GEBV Indebtedness to Consolidated GEBV EBITDA for a period of four consecutive fiscal quarters is not permitted to be greater than 3.0 to 1.0 at the end of any fiscal quarter. "Consolidated Net GEBV Indebtedness" and "Consolidated GEBV EBITDA" have the meanings given them in the facility.

The facility has customary representations and warranties including, as a condition to borrowing, that all such representations and warranties are true and correct, in all material respects, on the date of the borrowing, including representations as to no material adverse change in our business or financial condition since December 31, 2018. The facility also has customary defaults, including a cross-default to material indebtedness of Goodyear and our subsidiaries.

At December 31, 2019 and 2018, there were no borrowings and no letters of credit outstanding under the European revolving credit facility.

Accounts Receivable Securitization Facilities (On-Balance Sheet)

GEBV and certain other of our European subsidiaries are parties to a pan-European accounts receivable securitization facility that expires in 2023. The terms of the facility provide the flexibility to designate annually the maximum amount of funding available under the facility in an amount of not less than €30 million and not more than €450 million. For the period from October 18, 2018 through October 15, 2020, the designated maximum amount of the facility is €320 million.

The facility involves an ongoing daily sale of substantially all of the trade accounts receivable of certain GEBV subsidiaries. These subsidiaries retain servicing responsibilities. Utilization under this facility is based on eligible receivable balances.

The funding commitments under the facility will expire upon the earliest to occur of: (a) September 26, 2023, (b) the non-renewal and expiration (without substitution) of all of the back-up liquidity commitments, (c) the early termination of the facility according to its terms (generally upon an Early Amortisation Event (as defined in the facility), which includes, among other things, events similar to the events of default under our senior secured credit facilities; certain tax law changes; or certain changes to law, regulation or accounting standards), or (d) our request for early termination of the facility. The facility's current back-up liquidity commitments will expire on October 15, 2020.

At December 31, 2019, the amounts available and utilized under this program totaled $327 million (€291 million). At December 31, 2018, the amounts available and utilized under this program totaled $335 million (€293 million). The program does not qualify for sale accounting, and accordingly, these amounts are included in Long Term Debt and Finance Leases.

Accounts Receivable Factoring Facilities (Off-Balance Sheet)

We have sold certain of our trade receivables under off-balance sheet programs. For these programs, we have concluded that there is generally no risk of loss to us from non-payment of the sold receivables. At December 31, 2019 and 2018, the amount of receivables sold was $548 million and $568 million, respectively.

Other Foreign Credit Facilities

A Mexican subsidiary and a U.S. subsidiary have a revolving credit facility in Mexico. At December 31, 2019, the amounts available and utilized under this facility was $200 million. The facility ultimately matures in 2022, has covenants relating to the Mexican and U.S. subsidiary, and has customary representations and warranties and default provisions relating to the Mexican and U.S. subsidiary's ability to perform its respective obligations under the facility. At December 31, 2018, the subsidiaries had several financing arrangements in Mexico, and the amounts available and utilized under these facilities were $340 million and $200 million, respectively.

A Chinese subsidiary has several financing arrangements in China. At December 31, 2019 and 2018, the amounts available under these facilities were $735 million and $672 million, respectively. At December 31, 2019, the amount utilized under these facilities was $313 million, of which $118 million represented notes payable and $195 million represented long term debt. At December 31, 2019, $95 million of the long term debt was due within a year. At December 31, 2018, the amount utilized under these facilities was $341 million, of which $122 million represented notes payable and $219 million represented long term debt. At December 31, 2018, $32 million of the long term debt was due within a year. The facilities contain covenants relating to the Chinese subsidiary and have customary representations and warranties and defaults relating to the Chinese subsidiary's ability to perform its obligations under the facilities. Certain of the facilities can only be used to finance the expansion of our manufacturing facility in China and, at December 31, 2019 and 2018, the unused amounts available under these restricted facilities were $106 million and $116 million, respectively.

Debt Maturities

The annual aggregate maturities of our debt (excluding the impact of deferred financing fees and unamortized discounts) and finance leases for the five years subsequent to December 31, 2019 are presented below. Maturities of debt credit agreements have been reported on the basis that the commitments to lend under these agreements will be terminated effective at the end of their current terms.

(In millions)	2020	2021	2022	2023	2024
U.S.	$ 283	$ 1	$ 166	$ 998	$ —
Foreign	628	264	227	651	87
	$ 911	**$ 265**	**$ 393**	**$ 1,649**	**$ 87**

DERIVATIVE FINANCIAL INSTRUMENTS

We utilize derivative financial instrument contracts and nonderivative instruments to manage interest rate, foreign exchange and commodity price risks. We have established a control environment that includes policies and procedures for risk assessment and the approval, reporting and monitoring of derivative financial instrument activities. We do not hold or issue derivative financial instruments for trading purposes.

Foreign Currency Contracts

We enter into foreign currency contracts in order to manage the impact of changes in foreign exchange rates on our consolidated results of operations and future foreign currency-denominated cash flows. These contracts may be used to reduce exposure to currency movements affecting existing foreign currency-denominated assets, liabilities, firm commitments and forecasted transactions resulting primarily from trade purchases and sales, equipment acquisitions, intercompany loans and royalty agreements. Contracts hedging short term trade receivables and payables normally have no hedging designation.

The following table presents the fair values for foreign currency hedge contracts that do not meet the criteria to be accounted for as cash flow hedging instruments:

(In millions)	December 31, 2019	December 31, 2018
Fair Values — Current asset (liability):		
Accounts Receivable	$ 1	$ 7
Other Current Liabilities	(15)	(6)

At December 31, 2019 and 2018, these outstanding foreign currency derivatives had notional amounts of $1,707 million and $1,240 million, respectively, and were primarily related to intercompany loans. Other (Income) Expense included net transaction gains on derivatives of $22 million and $80 million in 2019 and 2018, respectively. These amounts were substantially offset in Other (Income) Expense by the effect of changing exchange rates on the underlying currency exposures.

The following table presents fair values for foreign currency hedge contracts that meet the criteria to be accounted for as cash flow hedging instruments:

(In millions)	December 31, 2019	December 31, 2018
Fair Values — Current asset (liability):		
Accounts Receivable	$ 9	$ 9
Other Current Liabilities	(3)	(1)
Fair Values — Long term asset (liability):		
Other Assets	$ 1	$ 2
Other Long Term Liabilities	(1)	—

At December 31, 2019 and 2018, these outstanding foreign currency derivatives had notional amounts of $365 million and $347 million, respectively, and primarily related to U.S. dollar denominated intercompany transactions.

We enter into master netting agreements with counterparties. The amounts eligible for offset under the master netting agreements are not material and we have elected a gross presentation of foreign currency contracts in the Consolidated Balance Sheets.

The following table presents the classification of changes in fair values of foreign currency contracts that meet the criteria to be accounted for as cash flow hedging instruments (before tax and minority):

	Year Ended December 31,	
(In millions)	2019	2018
Amount of gains (losses) deferred to AOCL[1]	$ 10	$ 12
Reclassification adjustment for amounts recognized in CGS[1]	(14)	7

(1) Excluded components deferred to AOCL and excluded components reclassified from AOCL to CGS for the twelve months ended December 31, 2019 and 2018 were not material.

The estimated net amount of the deferred gains at December 31, 2019 that is expected to be reclassified to earnings within the next twelve months is $3 million.

The counterparties to our foreign currency contracts were considered by us to be substantial and creditworthy financial institutions that were recognized market makers at the time we entered into those contracts. We seek to control our credit exposure to these counterparties by diversifying across multiple counterparties, by setting counterparty credit limits based on long term credit ratings and other indicators of counterparty credit risk such as credit default swap spreads, and by monitoring the financial strength of these counterparties on a regular basis. We also enter into master netting agreements with counterparties when possible. By controlling and monitoring exposure to counterparties in this manner, we believe that we effectively manage the risk of loss due to nonperformance by a counterparty. However, the inability of a counterparty to fulfill its contractual obligations to us could have a material adverse effect on our liquidity, financial position or results of operations in the period in which it occurs.

Note 16. Fair Value Measurements

The following table presents information about assets and liabilities recorded at fair value on the Consolidated Balance Sheet at December 31:

	Total Carrying Value in the Consolidated Balance Sheet		Quoted Prices in Active Markets for Identical Assets/Liabilities (Level 1)		Significant Other Observable Inputs (Level 2)		Significant Unobservable Inputs (Level 3)	
(In millions)	2019	2018	2019	2018	2019	2018	2019	2018
Assets:								
Investments	$ 11	$ 10	$ 11	$ 10	$ —	$ —	$ —	$ —
Foreign Exchange Contracts	11	18	—	—	11	18	—	—
Total Assets at Fair Value	**$ 22**	**$ 28**	**$ 11**	**$ 10**	**$ 11**	**$ 18**	**$ —**	**$ —**
Liabilities:								
Foreign Exchange Contracts	$ 19	$ 7	$ —	$ —	$ 19	$ 7	$ —	$ —
Total Liabilities at Fair Value	**$ 19**	**$ 7**	**$ —**	**$ —**	**$ 19**	**$ 7**	**$ —**	**$ —**

The following table presents supplemental fair value information about long term fixed rate and variable rate debt, excluding finance leases, at December 31:

(In millions)	December 31, 2019	December 31, 2018
Fixed Rate Debt[(1)]:		
Carrying amount — liability	$ 3,434	$ 3,609
Fair value — liability	3,558	3,443
Variable Rate Debt[(1)]:		
Carrying amount — liability	$ 1,632	$ 1,707
Fair value — liability	1,632	1,689

(1) Excludes Notes Payable and Overdrafts of $348 million and $410 million at December 31, 2019 and 2018, respectively, of which $143 million and $230 million, respectively, are at fixed rates and $205 million and $180 million, respectively, are at variable rates. The carrying value of Notes Payable and Overdrafts approximates fair value due to the short term nature of the facilities.

Long term debt with fair values of $3,808 million and $3,496 million at December 31, 2019 and 2018, respectively, were estimated using quoted Level 1 market prices. The carrying value of the remaining long term debt approximates fair value since the terms of the financing arrangements are similar to terms that could be obtained under current lending market conditions.

Note 17. Pension, Other Postretirement Benefits and Savings Plans

We provide employees with defined benefit pension or defined contribution savings plans. Our hourly U.S. pension plans are frozen and provide benefits based on length of service. The principal salaried U.S. pension plans are frozen and provide benefits based on final five-year average earnings formulas. Salaried employees who made voluntary contributions to these plans receive higher benefits. We also provide certain U.S. employees and employees at certain non-U.S. subsidiaries with health care benefits or life insurance benefits upon retirement. Substantial portions of the health care benefits for U.S. salaried retirees are not insured and are funded from operations.

During 2019, we recognized settlement charges of $6 million in Other (Income) Expense primarily related to certain of our U.S. pension plans. The settlement charges resulted from total lump sum payments exceeding annual service and interest cost of the applicable plans. During 2019, we also recognized curtailment and special termination benefit charges of $5 million in Rationalizations, primarily related to the acceptance of voluntary buy-outs at our tire manufacturing facility in Gadsden, Alabama.

During 2018, we recognized settlement charges of $13 million in Other (Income) Expense for our frozen U.K. pension plan. These settlement charges related primarily to an offer of lump sum payments over a limited time during 2018 to non-retiree participants of the plan. Lump sum payments of $103 million, primarily related to this offer, were made from existing plan assets in 2018. As a result, total lump sum payments related to this plan exceeded annual interest cost for 2018.

During 2018, we recognized settlement charges of $8 million in Other (Income) Expense related to certain of our U.S. pension plans. The settlement charges resulted from total lump sum payments exceeding annual service and interest cost for the applicable plans.

During 2018, we increased the obligation for our U.K. pension plan by $13 million to recognize the estimated impact to our plan from an October 2018 court ruling, involving a plan with similar features to ours that was sponsored by another company, that required equal guaranteed minimum pension benefits for males and females. The increase was recognized in AOCL as prior service cost from plan amendments. The actual impact to our U.K. pension plan is still subject to the finalization of plan amendments in response to the court ruling and potential future judicial decisions.

During 2018, the Brazil pension regulator approved our plan to replace certain benefits in our Brazil retiree medical plan with an increase in benefits in our Brazil pension plan. The changes were effective in the fourth quarter of 2019 and resulted in an increase to our pension obligation of $16 million and a decrease in our other postretirement benefits obligation of $14 million at December 31, 2018. The increase to the pension obligation and decrease to the other postretirement benefits obligation were recognized in AOCL as prior service cost and prior service credit, respectively.

During 2017, we recognized settlement charges of $32 million, primarily related to our frozen salaried U.S. pension plan. The settlement charges resulted from total lump sum benefit payments exceeding annual interest cost. Of the total settlement charges, $19 million was recorded in Other (Income) Expense and $13 million was included in Rationalizations for employees who terminated service as a result of ongoing rationalization plans.

Total benefits cost (credit) and amounts recognized in other comprehensive (income) loss follows:

	Pension Plans								
	U.S.			Non-U.S.			Other Postretirement Benefits		
(In millions)	**2019**	**2018**	**2017**	**2019**	**2018**	**2017**	**2019**	**2018**	**2017**
Benefits cost (credit):									
Service cost	$ 3	$ 4	$ 4	$ 26	$ 28	$ 31	$ 2	$ 3	$ 4
Interest cost	173	157	160	69	69	71	11	12	13
Expected return on plan assets	(223)	(219)	(241)	(59)	(70)	(80)	—	—	(1)
Amortization of prior service cost (credit)	—	—	—	2	—	—	(9)	(8)	(29)
Amortization of net losses	112	112	111	29	29	32	3	4	6
Net periodic cost (credit)	**$ 65**	**$ 54**	**$ 34**	**$ 67**	**$ 56**	**$ 54**	**$ 7**	**$ 11**	**$ (7)**
Net curtailments/settlements/termination benefits	8	8	29	3	13	3	—	—	—
Total benefits cost (credit)	**$ 73**	**$ 62**	**$ 63**	**$ 70**	**$ 69**	**$ 57**	**$ 7**	**$ 11**	**$ (7)**
Recognized in other comprehensive (income) loss before tax and minority:									
Prior service cost (credit) from plan amendments	$ —	$ —	$ —	$ (2)	$ 31	$ 3	$ —	$ (16)	$ 3
Increase (decrease) in net actuarial losses	4	14	128	201	(18)	25	6	(14)	(15)
Amortization of prior service (cost) credit in net periodic cost	—	—	—	(2)	—	—	9	8	29
Amortization of net losses in net periodic cost	(112)	(112)	(111)	(29)	(30)	(29)	(3)	(5)	(6)
Immediate recognition of prior service cost and unrecognized gains and losses due to curtailments, settlements, and divestitures	(5)	(11)	(29)	(3)	(14)	(12)	2	—	—
Total recognized in other comprehensive (income) loss before tax and minority	**(113)**	**(109)**	**(12)**	**165**	**(31)**	**(13)**	**14**	**(27)**	**11**
Total recognized in total benefits cost (credit) and other comprehensive (income) loss before tax and minority	**$ (40)**	**$ (47)**	**$ 51**	**$ 235**	**$ 38**	**$ 44**	**$ 21**	**$ (16)**	**$ 4**

Service cost is recorded in CGS or SAG. Other components of net periodic cost (credit) are recorded in Other (Income) Expense. Net curtailments, settlements and termination benefits are recorded in Other (Income) Expense or Rationalizations if related to a rationalization plan.

We use the fair value of pension assets in the calculation of pension expense for all plans.

Total benefits cost (credit) for our other postretirement benefits was $3 million, $4 million and $(17) million for our U.S. plans in 2019, 2018 and 2017, respectively, and $4 million, $7 million and $10 million for our non-U.S. plans in 2019, 2018 and 2017, respectively.

The estimated net actuarial loss and prior service cost for the defined benefit pension plans that will be amortized from AOCL into benefits cost in 2020 is approximately $110 million and $0 million, respectively, for our U.S. plans and approximately $38 million and $2 million, respectively, for our non-U.S. plans.

The estimated prior service credit and net actuarial loss for the other postretirement benefit plans that will be amortized from AOCL into benefits cost in 2020 are a benefit of $9 million and expense of $4 million, respectively.

The Medicare Prescription Drug Improvement and Modernization Act provides plan sponsors a federal subsidy for certain qualifying prescription drug benefits covered under the sponsor's postretirement health care plans. Our other postretirement benefits cost is presented net of this subsidy, which is less than $1 million annually.

The change in benefit obligation and plan assets for 2019 and 2018 and the amounts recognized in our Consolidated Balance Sheet at December 31, 2019 and 2018 are as follows:

	Pension Plans					
	U.S.		Non-U.S.		Other Postretirement Benefits	
(In millions)	2019	2018	2019	2018	2019	2018
Change in benefit obligation:						
Beginning balance	**$ (4,734)**	**$ (5,331)**	**$ (2,774)**	**$ (3,109)**	**$ (234)**	**$ (286)**
Newly adopted plans	—	—	(19)	—	—	—
Service cost — benefits earned	(3)	(4)	(26)	(28)	(2)	(3)
Interest cost	(173)	(157)	(69)	(69)	(11)	(12)
Plan amendments	—	—	2	(29)	—	14
Actuarial (loss) gain	(477)	315	(381)	40	(6)	19
Participant contributions	—	—	(2)	(2)	(12)	(13)
Curtailments/settlements/termination benefits	12	25	5	113	(2)	—
Foreign currency translation	—	—	(62)	177	(5)	15
Benefit payments	366	418	131	133	31	32
Ending balance	**$ (5,009)**	**$ (4,734)**	**$ (3,195)**	**$ (2,774)**	**$ (241)**	**$ (234)**
Change in plan assets:						
Beginning balance	**$ 4,445**	**$ 4,978**	**$ 2,464**	**$ 2,806**	**$ 3**	**$ 4**
Newly adopted plans	—	—	19	—	—	—
Actual return on plan assets	696	(110)	252	4	—	—
Company contributions to plan assets	—	—	39	36	—	2
Cash funding of direct participant payments	20	17	20	21	16	16
Participant contributions	—	—	2	2	12	13
Settlements	(15)	(22)	(5)	(112)	—	—
Foreign currency translation	—	—	80	(160)	—	—
Benefit payments	(366)	(418)	(131)	(133)	(31)	(32)
Ending balance	**$ 4,780**	**$ 4,445**	**$ 2,740**	**$ 2,464**	**$ —**	**$ 3**
Funded status at end of year	**$ (229)**	**$ (289)**	**$ (455)**	**$ (310)**	**$ (241)**	**$ (231)**

Other postretirement benefits unfunded status was $106 million and $112 million for our U.S. plans at December 31, 2019 and 2018, respectively, and $135 million and $119 million for our non-U.S. plans at December 31, 2019 and 2018, respectively.

The funded status recognized in the Consolidated Balance Sheets consists of:

	Pension Plans				Other Postretirement Benefits	
	U.S.		Non-U.S.			
(In millions)	2019	2018	2019	2018	2019	2018
Noncurrent assets	$ —	$ —	$ 237	$ 325	$ —	$ —
Current liabilities	(16)	(20)	(20)	(20)	(16)	(17)
Noncurrent liabilities	(213)	(269)	(672)	(615)	(225)	(214)
Net amount recognized	**$ (229)**	**$ (289)**	**$ (455)**	**$ (310)**	**$ (241)**	**$ (231)**

The amounts recognized in AOCL, net of tax, consist of:

	Pension Plans				Other Postretirement Benefits	
	U.S.		Non-U.S.			
(In millions)	2019	2018	2019	2018	2019	2018
Prior service (credit) cost	$ (3)	$ (3)	$ 25	$ 31	$ (23)	$ (32)
Net actuarial loss	2,380	2,493	782	611	30	25
Gross amount recognized	**2,377**	**2,490**	**807**	**642**	**7**	**(7)**
Deferred income taxes	(50)	(77)	(135)	(105)	(22)	(19)
Minority shareholders' equity	—	—	(1)	(1)	—	—
Net amount recognized	**$ 2,327**	**$ 2,413**	**$ 671**	**$ 536**	**$ (15)**	**$ (26)**

The following table presents significant weighted average assumptions used to determine benefit obligations at December 31:

	Pension Plans		Other Postretirement Benefits	
	2019	2018	2019	2018
Discount rate:				
— U.S.	3.22%	4.24%	3.14%	4.16%
— Non-U.S.	1.98	2.69	4.39	5.03
Rate of compensation increase:				
— U.S.	N/A	N/A	N/A	N/A
— Non-U.S.	2.92	2.91	N/A	N/A

The following table presents significant weighted average assumptions used to determine benefits cost for the years ended December 31:

	Pension Plans			Other Postretirement Benefits		
	2019	2018	2017	2019	2018	2017
Discount rate for determining interest cost:						
— U.S.	3.85%	3.09%	3.18%	3.79%	2.99%	3.02%
— Non-U.S.	2.84	2.56	2.70	6.25	6.13	5.98
Expected long term return on plan assets:						
— U.S.	5.25	4.58	5.08	N/A	N/A	N/A
— Non-U.S.	2.95	3.02	3.12	N/A	N/A	N/A
Rate of compensation increase:						
— U.S.	N/A	N/A	N/A	N/A	N/A	N/A
— Non-U.S.	2.91	2.91	3.18	N/A	N/A	N/A

For 2019, a weighted average discount rate of 3.85% was used to determine interest cost for the U.S. pension plans. This rate was derived from spot rates along a yield curve developed from a portfolio of bonds from issuers rated AA or higher by established rating agencies as of December 31, 2018, applied to our expected benefit payment cash flows. For our non-U.S. locations, a weighted average discount rate of 2.84% was used. This rate was developed based on the nature of the liabilities and local environments, using available bond indices, yield curves, projected cash flows, and long term inflation.

For 2019, an assumed weighted average long term rate of return of 5.25% was used for the U.S. pension plans. In developing the long term rate of return, we evaluated input from our pension fund consultant on asset class return expectations, including determining the appropriate rate of return for our plans, which are primarily invested in fixed income securities. For our non-U.S. locations, an assumed weighted average long term rate of return of 2.95% was used. Input from local pension fund consultants concerning asset class return expectations and long term inflation form the basis of this assumption.

The U.S. pension plan mortality assumption is based on our actual historical experience and expected future mortality improvements based on published actuarial tables. For our non-U.S. locations, mortality assumptions are based on published actuarial tables which include projections of future mortality improvements.

The following table presents estimated future benefit payments from the plans as of December 31, 2019. Benefit payments for other postretirement benefits are presented net of retiree contributions and Medicare Part D Subsidy Receipts:

	Pension Plans		Other Postretirement Benefits
(In millions)	U.S.	Non-U.S.	
2020	$ 437	$ 133	$ 17
2021	390	124	17
2022	373	128	16
2023	359	130	16
2024	346	138	15
2025-2029	1,623	721	72

The following table presents selected information on our pension plans:

	U.S.		Non-U.S.	
(In millions)	2019	2018	2019	2018
All plans:				
Accumulated benefit obligation	$ 4,994	$ 4,725	$ 3,097	$ 2,688
Plans not fully-funded:				
Projected benefit obligation	$ 5,009	$ 4,732	$ 1,059	$ 908
Accumulated benefit obligation	4,994	4,723	991	852
Fair value of plan assets	4,780	4,443	370	281

Certain non-U.S. subsidiaries maintain unfunded pension plans consistent with local practices and requirements. At December 31, 2019, these plans accounted for $247 million of our accumulated pension benefit obligation, $277 million of our projected pension benefit obligation, and $82 million of our AOCL adjustment. At December 31, 2018, these plans accounted for $218 million of our accumulated pension benefit obligation, $244 million of our projected pension benefit obligation, and $59 million of our AOCL adjustment.

We expect to contribute approximately $25 million to $50 million to our funded non-U.S. pension plans in 2020.

Assumed health care cost trend rates at December 31 follow:

	2019	2018
Health care cost trend rate assumed for the next year	6.3%	6.5%
Rate to which the cost trend rate is assumed to decline (the ultimate trend rate)	5.0	5.0
Year that the rate reaches the ultimate trend rate	2025	2025

A 1% change in the assumed health care cost trend would have increased (decreased) the accumulated other postretirement benefits obligation at December 31, 2019 and the aggregate service and interest cost for the year then ended as follows:

(In millions)	1% Increase	1% Decrease
Accumulated other postretirement benefits obligation	$ 13	$ (10)
Aggregate service and interest cost	1	(1)

Our pension plan weighted average investment allocation at December 31, by asset category, follows:

	U.S.		Non-U.S.	
	2019	2018	2019	2018
Cash and short term securities	2%	2%	1%	1%
Equity securities	6	6	3	4
Debt securities	92	92	96	94
Alternatives	—	—	—	1
Total	**100%**	**100%**	**100%**	**100%**

Our pension investment policy recognizes the long term nature of pension liabilities, and is primarily designed to offset the future impact of discount rate movements on the funded status for our plans. All assets are managed externally according to target asset allocation guidelines we have established. Manager guidelines prohibit the use of any type of investment derivative without our prior approval. Portfolio risk is controlled by having managers comply with guidelines, establishing the maximum size of any single holding in their portfolios, and using managers with different investment styles. We periodically undertake asset and liability modeling studies to determine the appropriateness of the investments.

The portfolio of our U.S. pension plan assets includes holdings of global high quality and high yield fixed income securities, short term interest bearing deposits, and private equities. The target asset allocation of our U.S. pension plans is 94% in duration-matched fixed income securities and 6% in equity securities. Actual U.S. pension fund asset allocations are reviewed on a periodic basis and the pension funds are rebalanced to target ranges on an as needed basis.

The portfolios of our non-U.S. pension plans include holdings of U.S. and non-U.S. equities, global high quality and high yield fixed income securities, hedge funds, currency derivatives, insurance contracts, repurchase agreements, and short term interest bearing deposits. The weighted average target asset allocation of the non-U.S. pension funds is approximately 95% fixed income and 5% equities.

The fair values of our pension plan assets at December 31, 2019, by asset category are as follows:

	U.S.				Non-U.S.			
(In millions)	Total	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Other Unobservable Inputs (Level 3)	Total	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Other Unobservable Inputs (Level 3)
Cash and Short Term Securities	$ 47	$ 47	$ —	$ —	$ 33	$ 29	$ 4	$ —
Equity Securities								
Common and Preferred Stock	—	—	—	—	24	24	—	—
Commingled Funds	—	—	—	—	36	36	—	—
Mutual Funds	—	—	—	—	5	5	—	—
Debt Securities								
Corporate Bonds	2,577	—	2,576	1	190	10	180	—
Government Bonds	1,120	—	1,120	—	2,271	60	2,211	—
Repurchase Agreements	—	—	—	—	(511)	—	(511)	—
Asset Backed Securities	283	—	282	1	74	5	69	—
Mutual Funds	—	—	—	—	19	9	10	—
Alternatives								
Insurance Contracts	2	—	—	2	22	—	—	22
Other Investments	2	—	2	—	(4)	—	(5)	1
Total Investments in the Fair Value Hierarchy	**4,031**	**$ 47**	**$ 3,980**	**$ 4**	**2,159**	**$ 178**	**$ 1,958**	**$ 23**
Investments Measured at Net Asset Value, as Practical Expedient:								
Equity Securities								
Commingled Funds	9				69			
Mutual Funds	—				11			
Partnership Interests	267				—			
Debt Securities								
Mutual Funds	141				7			
Commingled Funds	310				604			
Short Term Securities								
Commingled Funds	67				4			
Alternatives								
Commingled Funds	—				6			
Total Investments	**4,825**				**2,860**			
Other	(45)				(120)			
Total Plan Assets	**$ 4,780**				**$ 2,740**			

The fair values of our pension plan assets at December 31, 2018, by asset category are as follows:

	U.S.				Non-U.S.			
(In millions)	Total	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Other Unobservable Inputs (Level 3)	Total	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Other Unobservable Inputs (Level 3)
Cash and Short Term Securities	$ 48	$ 48	$ —	$ —	$ 29	$ 26	$ 3	$ —
Equity Securities								
Common and Preferred Stock	—	—	—	—	19	19	—	—
Commingled Funds	—	—	—	—	14	14	—	—
Mutual Funds	—	—	—	—	4	4	—	—
Debt Securities								
Corporate Bonds	2,344	—	2,344	—	171	17	154	—
Government Bonds	968	—	968	—	2,158	62	2,096	—
Repurchase Agreements	—	—	—	—	(641)	—	(641)	—
Asset Backed Securities	63	—	63	—	67	5	62	—
Mutual Funds	—	—	—	—	18	8	10	—
Alternatives								
Insurance Contracts	2	—	—	2	19	—	—	19
Other Investments	—	—	—	—	6	—	4	2
Total Investments in the Fair Value Hierarchy	**3,425**	**$ 48**	**$ 3,375**	**$ 2**	**1,864**	**$ 155**	**$ 1,688**	**$ 21**
Investments Measured at Net Asset Value, as Practical Expedient:								
Equity Securities								
Commingled Funds	11				56			
Mutual Funds	—				7			
Partnership Interests	247				—			
Debt Securities								
Mutual Funds	90				7			
Commingled Funds	603				638			
Short Term Securities								
Commingled Funds	59				7			
Alternatives								
Commingled Funds	—				5			
Total Investments	**4,435**				**2,584**			
Other	10				(120)			
Total Plan Assets	**$ 4,445**				**$ 2,464**			

At December 31, 2019 and 2018, the Plans did not directly hold any of our common stock.

The classification of fair value measurements within the hierarchy is based upon the lowest level of input that is significant to the measurement. Investments that are measured at Net Asset Value ("NAV") as a practical expedient to estimate fair value are not classified in the fair value hierarchy. Under the practical expedient approach, the NAV is based on the fair value of the underlying investments held by each fund less its liabilities. This practical expedient would not be used when it is determined to be probable that the fund will sell the investment for an amount different than the reported NAV. The fair value amounts presented in this table are intended to permit reconciliation of the fair value hierarchy to total plan assets. Valuation methodologies used for assets and liabilities measured at fair value are as follows:

- *Cash and Short Term Securities:* Cash and cash equivalents consist of U.S. and foreign currencies. Foreign currencies are reported in U.S. dollars based on currency exchange rates readily available in active markets. Short term securities held in commingled funds are valued at the NAV of units held at year end, as determined by the investment manager.
- *Equity Securities:* Common and preferred stock, which are held in non-U.S. companies, are valued at the closing price reported on the active market on which the individual securities are traded. Commingled funds are valued at the NAV of units held at year end, as determined by a pricing vendor or the fund family. Mutual funds are valued at the NAV of shares held at year end, as determined by the closing price reported on the active market on which the individual securities

are traded, or a pricing vendor or the fund family if an active market is not available. Partnership interests are priced based on valuations using the partnership's available financial statements coinciding with our year end and the plan's percent ownership, adjusted for any cash transactions which occurred between the date of those financial statements and our year end.

- *Debt Securities:* Corporate and government bonds, including asset backed securities, are valued at the closing price reported on the active market on which the individual securities are traded, or based on institutional bid evaluations using proprietary models if an active market is not available. Repurchase agreements are valued at the contract price plus accrued interest. These secured borrowings are collateralized by government bonds held by the non-U.S. plans and have maturities less than one year. Commingled funds are valued at the NAV of units held at year end, as determined by a pricing vendor or the fund family. Mutual funds are valued at the NAV of shares held at year end, as determined by the closing price reported on the active market on which the individual securities are traded, or a pricing vendor or the fund family if an active market is not available.
- *Alternatives:* Commingled funds are valued based on the NAV as determined by the fund manager using the most recent financial information available. Other investments primarily include derivative financial instruments, which are valued using independent pricing sources which utilize industry standard derivative valuation models. Directed insurance contracts are valued as reported by the issuer.

The methods described above may produce a fair value calculation that may not be indicative of net realizable value or reflective of future fair values. Furthermore, while the Company believes its valuation methods are appropriate and consistent with other market participants, the use of different methodologies or assumptions to determine the fair value of certain financial instruments could result in a different fair value measurement at the reporting date.

The following table sets forth a summary of changes in fair value of the pension plan investments classified as Level 3 for the year ended December 31, 2019:

	Non-U.S.	
(In millions)	Insurance Contracts	Other
Balance, beginning of year	**$ 19**	**$ 2**
Unrealized (losses) gains relating to instruments still held at the reporting date	1	—
Purchases, sales, issuances and settlements (net)	2	(1)
Balance, end of year	**$ 22**	**$ 1**

The following table sets forth a summary of changes in fair value of the pension plan investments classified as Level 3 for the year ended December 31, 2018:

	Non-U.S.			
(In millions)	Insurance Contracts	Real Estate	Equity Securities - Commingled Funds	Other
Balance, beginning of year	**$ 18**	**$ 4**	**$ 131**	**$ 3**
Realized gains (losses)	—	—	(1)	—
Purchases, sales, issuances and settlements (net)	2	(4)	(128)	(1)
Foreign currency translation	(1)	—	(2)	—
Balance, end of year	**$ 19**	**$ —**	**$ —**	**$ 2**

Other postretirement benefits plan assets at December 31, 2018, which relate to a non-U.S. plan, are invested primarily in mutual funds, which are traded on an active market, and are considered a Level 1 investment.

Savings Plans

Substantially all employees in the U.S. and employees of certain non-U.S. locations are eligible to participate in a defined contribution savings plan. Expenses recognized for contributions to these plans were $110 million, $111 million and $111 million for 2019, 2018 and 2017, respectively.

Note 18. Stock Compensation Plans

Our stock compensation plans (collectively, the "Plans") permit the grant of stock options, stock appreciation rights ("SARs"), performance share units, restricted stock, restricted stock units and other stock-based awards to employees and directors. Our current stock compensation plan, the 2017 Performance Plan, was adopted on April 10, 2017 and expires on April 9, 2027. A total of 18 million shares of our common stock may be issued in respect of grants made under the 2017 Performance Plan. Any shares of common stock that are subject to awards of stock options or SARs will be counted as one share for each share granted for purposes of the aggregate share limit and any shares of common stock that are subject to any other awards will be counted as 2 shares for each share granted for purposes of the aggregate share limit. In addition, shares of common stock that are subject to awards issued under the 2017 Performance Plan or certain prior stock compensation plans that expire according to their terms or are forfeited, terminated, canceled or surrendered or are settled, or can be paid, only in cash, or are surrendered in payment of taxes associated with such awards (other than stock options or SARs) will be available for issuance pursuant to a new award under the 2017 Performance Plan. Shares issued under our stock compensation plans are usually issued from shares of our common stock held in treasury.

Stock Options

Grants of stock options and SARs (collectively referred to as "options") under the Plans generally have a graded vesting period of four years whereby one-fourth of the awards vest on each of the first four anniversaries of the grant date, an exercise price equal to the fair market value of one share of our common stock on the date of grant (i.e., the closing market price on that date) and a contractual term of ten years. The exercise of tandem SARs cancels an equivalent number of stock options and, conversely, the exercise of stock options cancels an equivalent number of tandem SARs. Option grants are cancelled on, or 90 days following, termination of employment unless termination is due to retirement, death or disability under certain circumstances, in which case, all outstanding options vest fully and remain outstanding for a term set forth in the related grant agreement.

The following table summarizes the activity related to options during 2019:

	Options	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term (Years)	Aggregate Intrinsic Value (In millions)
Outstanding at January 1	**5,580,452**	**$ 20.14**		
Options granted	—	—		
Options exercised	(240,237)	8.07		$ 3
Options expired	(73,556)	12.08		
Options cancelled	(268,638)	24.11		
Outstanding at December 31	**4,998,021**	**20.61**	**3.7**	**7**
Vested and expected to vest at December 31	4,966,300	20.53	3.7	6
Exercisable at December 31	4,709,647	19.83	3.5	7
Available for grant at December 31	12,305,582			

In addition, the aggregate intrinsic value of options exercised in 2018 and 2017 was $9 million and $18 million, respectively.

Significant option groups outstanding at December 31, 2019 and related weighted average exercise price and remaining contractual term information follows:

Grant Date	Options Outstanding	Options Exercisable	Exercise Price	Remaining Contractual Term (Years)
2/27/2017	564,976	378,284	$ 35.26	7.2
2/22/2016	549,546	459,160	29.90	6.2
2/23/2015	493,730	493,730	27.16	5.2
2/24/2014	381,617	381,617	26.44	4.2
2/28/2013	913,705	913,705	12.98	3.2
2/27/2012	729,530	729,530	12.94	2.2
2/22/2011	530,288	530,288	13.91	1.1
2/23/2010	322,387	322,387	12.74	0.1
All Other	512,242	500,946	(1)	(1)
	4,998,021	**4,709,647**		

(1) Options in the “All other” category had exercise prices ranging from $9.54 to $32.72. The weighted average exercise price for options outstanding and exercisable in that category was $20.27 and $20.00, respectively, while the remaining weighted average contractual term was 3.7 and 3.6, respectively.

Weighted average grant date fair values of stock options and the assumptions used in estimating those fair values are as follows:

	2017
Weighted average grant date fair value	$ 12.05
Black-Scholes model assumptions[(1)]:	
Expected term (years)	7.20
Interest rate	2.13%
Volatility	33.63%
Dividend yield	1.13%

(1) We review the assumptions used in our Black-Scholes model in conjunction with estimating the grant date fair value of grants of options by our Board of Directors. There were no stock options granted during 2019 or 2018.

Performance Share Units

Performance share units granted under the Plans are earned over a three-year period beginning January 1 of the year of grant. Total units earned for grants made in 2019, 2018 and 2017 may vary between 0% and 200% of the units granted based on the attainment of performance targets during the related three-year period and continued service. The performance targets are established by the Board of Directors. All of the units earned will be settled through the issuance of an equivalent number of shares of our common stock and are equity classified.

The following table summarizes the activity related to performance share units during 2019:

	Units	Weighted Average Grant Date Fair Value
Unvested at January 1	**333,196**	**$ 32.30**
Units granted	453,795	18.01
Units vested	(123,681)	36.78
Units forfeited	(75,310)	27.24
Unvested at December 31	**588,000**	**20.98**

We measure the fair value of grants of performance share units based primarily on the closing market price of a share of our common stock on the date of the grant, modified as appropriate to take into account the features of such grants.

Restricted Stock Units

Restricted stock units granted under the Plans typically vest over a three-year period beginning on the date of grant. Restricted stock units will be settled through the issuance of an equivalent number of shares of our common stock and are equity classified.

The following table summarizes the activity related to restricted stock units during 2019:

	Units	Weighted Average Grant Date Fair Value
Unvested at January 1	**1,388,433**	**$ 29.81**
Units granted	1,883,570	19.05
Units vested and settled	(280,593)	29.64
Units forfeited	(256,935)	25.49
Unvested at December 31	**2,734,475**	**23.21**

We measure the fair value of grants of restricted stock units based on the closing market price of a share of our common stock on the date of the grant.

Other Information

Stock-based compensation expense, cash payments made to settle SARs and cash received from the exercise of stock options follows:

(In millions)	2019	2018	2017
Stock-based compensation expense recognized	$ 27	$ 16	$ 22
Tax benefit	(7)	(4)	(6)
After-tax stock-based compensation expense	$ 20	$ 12	$ 16
Cash payments to settle SARs	$ —	$ 1	$ 1
Cash received from stock option exercises	$ 2	$ 9	$ 19

As of December 31, 2019, unearned compensation cost related to the unvested portion of all stock-based awards was approximately $36 million and is expected to be recognized over the remaining vesting period of the respective grants, through the fourth quarter of 2022.

Note 19. Commitments and Contingent Liabilities

Environmental Matters

We have recorded liabilities totaling $48 million and $45 million at December 31, 2019 and 2018, respectively, for anticipated costs related to various environmental matters, primarily the remediation of numerous waste disposal sites and certain properties sold by us. Of these amounts, $13 million and $10 million was included in Other Current Liabilities at December 31, 2019 and 2018, respectively. The costs include legal and consulting fees, site studies, the design and implementation of remediation plans, post-remediation monitoring and related activities, and will be paid over several years. The amount of our ultimate liability in respect of these matters may be affected by several uncertainties, primarily the ultimate cost of required remediation and the extent to which other responsible parties contribute. We have limited potential insurance coverage for future environmental claims.

Since many of the remediation activities related to environmental matters vary substantially in duration and cost from site to site and the associated costs for each vary depending on the mix of unique site characteristics, in some cases we cannot reasonably estimate a range of possible losses. Although it is not possible to estimate with certainty the outcome of all of our environmental matters, management believes that potential losses in excess of current reserves for environmental matters, individually and in the aggregate, will not have a material adverse effect on our financial position, cash flows or results of operations.

Workers' Compensation

We have recorded liabilities, on a discounted basis, totaling $198 million and $224 million for anticipated costs related to workers' compensation at December 31, 2019 and 2018, respectively. Of these amounts, $39 million and $42 million were included in Current Liabilities as part of Compensation and Benefits at December 31, 2019 and 2018, respectively. The costs include an estimate of expected settlements on pending claims, defense costs and a provision for claims incurred but not reported. These estimates are based on our assessment of potential liability using an analysis of available information with respect to pending claims, historical experience, and current cost trends. The amount of our ultimate liability in respect of these matters may differ from these estimates. We periodically, and at least annually, update our loss development factors based on actuarial analyses. At

December 31, 2019 and 2018, the liability was discounted using a risk-free rate of return. At December 31, 2019, we estimate that it is reasonably possible that the liability could exceed our recorded amounts by approximately $25 million.

General and Product Liability and Other Litigation

We have recorded liabilities totaling $293 million and $322 million, including related legal fees expected to be incurred, for potential product liability and other tort claims, including asbestos claims, at December 31, 2019 and 2018, respectively. Of these amounts, $43 million and $57 million were included in Other Current Liabilities at December 31, 2019 and 2018, respectively. The amounts recorded were estimated based on an assessment of potential liability using an analysis of available information with respect to pending claims, historical experience and, where available, recent and current trends. Based upon that assessment, at December 31, 2019, we do not believe that estimated reasonably possible losses associated with general and product liability claims in excess of the amounts recorded will have a material adverse effect on our financial position, cash flows or results of operations. However, the amount of our ultimate liability in respect of these matters may differ from these estimates.

We have recorded an indemnification asset within Accounts Receivable of $3 million and within Other Assets of $22 million for Sumitomo Rubber Industries, Ltd.'s ("SRI") obligation to indemnify us for certain product liability claims related to products manufactured by a formerly consolidated joint venture entity, subject to certain caps and restrictions.

Asbestos. We are a defendant in numerous lawsuits alleging various asbestos-related personal injuries purported to result from alleged exposure to asbestos in certain products manufactured by us or present in certain of our facilities. Typically, these lawsuits have been brought against multiple defendants in state and federal courts. To date, we have disposed of approximately 152,200 claims by defending, obtaining a dismissal thereof, or entering into a settlement. The sum of our accrued asbestos-related liability and gross payments to date, including legal costs, by us and our insurers totaled approximately $554 million and $545 million through December 31, 2019 and 2018, respectively.

A summary of recent approximate asbestos claims activity follows. Because claims are often filed and disposed of by dismissal or settlement in large numbers, the amount and timing of settlements and the number of open claims during a particular period can fluctuate significantly.

(Dollars in millions)	2019	2018	2017
Pending claims, beginning of year	**43,100**	**54,300**	**64,400**
New claims filed during the year	1,500	1,300	1,900
Claims settled/dismissed	(5,000)	(12,500)	(12,000)
Pending claims, end of year	**39,600**	**43,100**	**54,300**
Payments[(1)]	$ 22	$ 18	$ 16

(1) Represents cash payments made during the period by us and our insurers on asbestos litigation defense and claim resolution.

We periodically, and at least annually, review our existing reserves for pending claims, including a reasonable estimate of the liability associated with unasserted asbestos claims, and estimate our receivables from probable insurance recoveries. We recorded gross liabilities for both asserted and unasserted claims, inclusive of defense costs, totaling $153 million and $166 million at December 31, 2019 and 2018, respectively. In determining the estimate of our asbestos liability, we evaluated claims over the next ten-year period. Due to the difficulties in making these estimates, analysis based on new data and/or a change in circumstances arising in the future may result in an increase in the recorded obligation, and that increase could be significant.

We maintain certain primary and excess insurance coverage under coverage-in-place agreements, and also have additional excess liability insurance with respect to asbestos liabilities. After consultation with our outside legal counsel and giving consideration to agreements with certain of our insurance carriers, the financial viability and legal obligations of our insurance carriers and other relevant factors, we determine an amount we expect is probable of recovery from such carriers. We record a receivable with respect to such policies when we determine that recovery is probable and we can reasonably estimate the amount of a particular recovery.

We recorded an insurance receivable related to asbestos claims of $95 million and $108 million at December 31, 2019 and 2018, respectively. We expect that approximately 60% of asbestos claim related losses would be recoverable through insurance during the ten-year period covered by the estimated liability. Of these amounts, $13 million was included in Current Assets as part of Accounts Receivable at both December 31, 2019 and 2018. The recorded receivable consists of an amount we expect to collect under coverage-in-place agreements with certain primary and excess insurance carriers as well as an amount we believe is probable of recovery from certain of our other excess insurance carriers.

We believe that, at December 31, 2019, we had approximately $555 million in excess level policy limits applicable to indemnity and defense costs for asbestos products claims under coverage-in-place agreements. We also had additional unsettled excess level policy limits potentially applicable to such costs. In addition, we had coverage under certain primary policies for indemnity and defense costs for asbestos products claims under remaining aggregate limits pursuant to a coverage-in-place agreement, as well as coverage for indemnity and defense costs for asbestos premises claims pursuant to coverage-in-place agreements.

We believe that our reserve for asbestos claims, and the receivable for recoveries from insurance carriers recorded in respect of these claims, reflects reasonable and probable estimates of these amounts. The estimate of the liabilities and assets related to pending and expected future asbestos claims and insurance recoveries is subject to numerous uncertainties, including, but not limited to, changes in:

- the litigation environment,
- federal and state law governing the compensation of asbestos claimants,
- recoverability of receivables due to potential insolvency of insurance carriers,
- our approach to defending and resolving claims, and
- the level of payments made to claimants from other sources, including other defendants and 524(g) trusts.

As a result, with respect to both asserted and unasserted claims, it is reasonably possible that we may incur a material amount of cost in excess of the current reserve; however, such amounts cannot be reasonably estimated. Coverage under insurance policies is subject to varying characteristics of asbestos claims including, but not limited to, the type of claim (premise vs. product exposure), alleged date of first exposure to our products or premises and disease alleged. Recoveries may also be limited by insurer insolvencies or financial difficulties. Depending upon the nature of these characteristics or events, as well as the resolution of certain legal issues, some portion of the insurance may not be accessible by us.

Amiens Labor Claims

Approximately 850 former employees of the closed Amiens, France manufacturing facility have asserted wrongful termination or other claims totaling €140 million ($157 million) against Goodyear France SAS (formerly known as Goodyear Dunlop Tires France). We intend to vigorously defend ourselves against these claims, and any additional claims that may be asserted against us, and cannot estimate the amounts, if any, that we may ultimately pay in respect of such claims.

Other Actions

We are currently a party to various claims, indirect tax assessments and legal proceedings in addition to those noted above. If management believes that a loss arising from these matters is probable and can reasonably be estimated, we record the amount of the loss, or the minimum estimated liability when the loss is estimated using a range and no point within the range is more probable than another. As additional information becomes available, any potential liability related to these matters is assessed and the estimates are revised, if necessary. Based on currently available information, management believes that the ultimate outcome of these matters, individually and in the aggregate, will not have a material adverse effect on our financial position or overall trends in results of operations.

Our recorded liabilities and estimates of reasonably possible losses for the contingent liabilities described above are based on our assessment of potential liability using the information available to us at the time and, where applicable, any past experience and recent and current trends with respect to similar matters. Our contingent liabilities are subject to inherent uncertainties, and unfavorable judicial or administrative decisions could occur which we did not anticipate. Such an unfavorable decision could include monetary damages, fines or other penalties or an injunction prohibiting us from taking certain actions or selling certain products. If such an unfavorable decision were to occur, it could result in a material adverse impact on our financial position and results of operations in the period in which the decision occurs or in future periods.

Income Tax Matters

The calculation of our tax liabilities involves dealing with uncertainties in the application of complex tax regulations. We recognize liabilities for anticipated tax audit issues based on our estimate of whether, and the extent to which, additional taxes will be due. If we ultimately determine that payment of these amounts is unnecessary, we reverse the liability and recognize a tax benefit during the period in which we determine that the liability is no longer necessary. We also recognize income tax benefits to the extent that it is more likely than not that our positions will be sustained when challenged by the taxing authorities. We derecognize income tax benefits when based on new information we determine that it is no longer more likely than not that our position will be sustained. To the extent we prevail in matters for which liabilities have been established, or determine we need to derecognize tax benefits recorded in prior periods, our results of operations and effective tax rate in a given period could be materially affected. An unfavorable tax settlement would require use of our cash, and lead to recognition of expense to the extent the settlement amount exceeds recorded liabilities and, in the case of an income tax settlement, result in an increase in our effective tax rate in the period of resolution. A favorable tax settlement would be recognized as a reduction of expense to the extent the settlement amount is lower than recorded liabilities and, in the case of an income tax settlement, would result in a reduction in our effective tax rate in the period of resolution.

While the Company applies consistent transfer pricing policies and practices globally, supports transfer prices through economic studies, seeks advance pricing agreements and joint audits to the extent possible and believes its transfer prices to be appropriate, such transfer prices, and related interpretations of tax laws, are occasionally challenged by various taxing authorities globally. We have received various tax assessments challenging our interpretations of applicable tax laws in various jurisdictions. Although we believe we have complied with applicable tax laws, have strong positions and defenses and have historically been successful in defending such claims, our results of operations could be materially adversely affected in the case we are unsuccessful in the defense of existing or future claims.

Binding Commitments and Guarantees

At December 31, 2019, we had binding commitments for raw materials, capital expenditures, utilities and various other types of contracts. Total commitments on contracts that extend beyond 2020 are expected to total approximately $1,600 million. In addition, we have other contractual commitments, the amounts of which cannot be estimated, pursuant to certain long term agreements under which we will purchase varying amounts of certain raw materials and finished goods at agreed upon base prices that may be subject to periodic adjustments for changes in raw material costs and market price adjustments, or in quantities that may be subject to periodic adjustments for changes in our or our suppliers' production levels.

We have off-balance sheet financial guarantees and other commitments totaling approximately $74 million and $73 million at December 31, 2019 and 2018, respectively. We issue guarantees to financial institutions or other entities on behalf of certain of our affiliates, lessors or customers. We generally do not receive a separate premium as consideration for, and do not require collateral in connection with, the issuance of these guarantees.

In 2017, we issued a guarantee of approximately PLN 165 million ($47 million) in connection with an indirect tax assessment in EMEA. As of December 31, 2019, this guarantee amount has been increased to PLN 181 million ($48 million). We have concluded our performance under this guarantee is not probable and, therefore, have not recorded a liability for this guarantee. In 2015, as a result of the dissolution of the global alliance with SRI, we issued a guarantee of approximately $46 million to an insurance company related to SRI's obligation to pay certain outstanding workers' compensation claims of a formerly consolidated joint venture entity. As of December 31, 2019, this guarantee amount has been reduced to $26 million. We have concluded the probability of our performance to be remote and, therefore, have not recorded a liability for this guarantee. While there is no fixed duration of this guarantee, we expect the amount of this guarantee to continue to decrease over time as the formerly consolidated joint venture entity pays its outstanding claims. If our performance under these guarantees is triggered by non-payment or another specified event, we would be obligated to make payment to the financial institution or the other entity, and would typically have recourse to the affiliate, lessor, customer, or SRI. Except for the workers' compensation guarantee described above, the guarantees expire at various times through 2021. We are unable to estimate the extent to which our affiliates’, lessors’, customers’, or SRI's assets would be adequate to recover any payments made by us under the related guarantees.

At December 31, 2019, we had an agreement to provide a revolving loan commitment to TireHub of $50 million. No amounts were drawn on that commitment as of December 31, 2019.

Indemnifications

At December 31, 2019, we were a party to various agreements under which we had assumed obligations to indemnify the counterparties from certain potential claims and losses. These agreements typically involve standard commercial activities undertaken by us in the normal course of business; the sale of assets by us; the formation or dissolution of joint venture businesses to which we had contributed assets in exchange for ownership interests; and other financial transactions. Indemnifications provided by us pursuant to these agreements relate to various matters including, among other things, environmental, tax and shareholder matters; intellectual property rights; government regulations; employment-related matters; and dealer, supplier and other commercial matters.

Certain indemnifications expire from time to time, and certain other indemnifications are not subject to an expiration date. In addition, our potential liability under certain indemnifications is subject to maximum caps, while other indemnifications are not subject to caps. Although we have been subject to indemnification claims in the past, we cannot reasonably estimate the number, type and size of indemnification claims that may arise in the future. Due to these and other uncertainties associated with the indemnifications, our maximum exposure to loss under these agreements cannot be estimated.

We have determined that there are no indemnifications or guarantees other than liabilities for which amounts are already recorded or reserved in our consolidated financial statements under which it is probable that we have incurred a liability.

Warranty

We recorded $22 million and $18 million for potential claims under warranties offered by us at December 31, 2019 and 2018, respectively, the majority of which are recorded in Other Current Liabilities.

The following table presents changes in the warranty reserve during 2019 and 2018:

(In millions)	2019	2018
Balance at January 1	**$ 18**	**$ 17**
Payments made during the period	(25)	(26)
Expense recorded during the period	29	28
Translation adjustment	—	(1)
Balance at December 31	**$ 22**	**$ 18**

Note 20. Capital Stock

Dividends

During 2019, 2018 and 2017 we paid cash dividends of $148 million, $138 million and $110 million, respectively, on our common stock. This amount excludes dividends earned on stock based compensation plans of $2 million for 2019 and $1 million for 2018. On January 14, 2020, the Company’s Board of Directors (or a duly authorized committee thereof) declared cash dividends of $0.16 per share on our common stock, or approximately $37 million in the aggregate. The cash dividend will be paid on March 2, 2020 to stockholders of record as of the close of business on February 3, 2020. Future quarterly dividends are subject to Board approval.

Common Stock Repurchases

On September 18, 2013, the Board of Directors approved our common stock repurchase program and, from time to time, approved increases in the amount authorized to be purchased under that program. The program expired on December 31, 2019. During 2019, we did not repurchase any shares under this program. Since 2013, we repurchased 52,905,959 shares at an average price, including commissions, of $28.99 per share, or $1,534 million in the aggregate.

In addition, we may repurchase shares delivered to us by employees as payment for the exercise price of stock options and the withholding taxes due upon the exercise of stock options or the vesting or payment of stock awards. During 2019, we did not repurchase any shares from employees.

Note 21. Reclassifications out of Accumulated Other Comprehensive Loss

The following table presents changes in AOCL by component, for the years ended December 31, 2019, 2018 and 2017, after tax and minority interest:

(In millions) Income (Loss)	Foreign Currency Translation Adjustment	Unrecognized Net Actuarial Losses and Prior Service Costs	Deferred Derivative Gains (Losses)	Total
Balance at December 31, 2016	**$ (1,155)**	**$ (3,053)**	**$ 10**	**$ (4,198)**
Other comprehensive income (loss) before reclassifications	240	(103)	(20)	117
Amounts reclassified from accumulated other comprehensive loss	—	104	1	105
Balance at December 31, 2017	**$ (915)**	**$ (3,052)**	**$ (9)**	**$ (3,976)**
Other comprehensive income (loss) before reclassifications	(245)	4	9	(232)
Amounts reclassified from accumulated other comprehensive loss	—	125	7	132
Balance at December 31, 2018	**$ (1,160)**	**$ (2,923)**	**$ 7**	**$ (4,076)**
Other comprehensive income (loss) before reclassifications(1)	4	(168)	10	(154)
Amounts reclassified from accumulated other comprehensive loss	—	108	(14)	94
Balance at December 31, 2019	**$ (1,156)**	**$ (2,983)**	**$ 3**	**$ (4,136)**

(1) Includes an increase to AOCL of $32 million in 2019 to adjust the 2018 obligation of our frozen U.K. pension plan.

The following table presents reclassifications out of AOCL for the years ended December 31, 2019, 2018 and 2017:

(In millions) (Income) Expense	Year Ended December 31, 2019	2018	2017	
Component of AOCL	**Amount Reclassified from AOCL**			**Affected Line Item in the Consolidated Statements of Operations**
Amortization of prior service cost and unrecognized gains and losses	$ 137	$ 139	$ 117	Other (Income) Expense
Immediate recognition of prior service cost and unrecognized gains and losses due to curtailments, settlements and divestitures	6	25	41	Other (Income) Expense / Rationalizations
Unrecognized Net Actuarial Losses and Prior Service Costs, before tax	$ 143	$ 164	$ 158	
Tax effect	(35)	(39)	(54)	United States and Foreign Taxes
Net of tax	$ 108	$ 125	$ 104	Goodyear Net Income (Loss)
Deferred Derivative (Gains) Losses, before tax	$ (14)	$ 7	$ 2	Cost of Goods Sold
Tax effect	—	—	(1)	United States and Foreign Taxes
Net of tax	$ (14)	$ 7	$ 1	Goodyear Net Income (Loss)
Total reclassifications	**$ 94**	**$ 132**	**$ 105**	Goodyear Net Income (Loss)

Note 22. Consolidating Financial Information

Certain of our subsidiaries have guaranteed our obligations under the $282 million outstanding principal amount of 8.75% notes due 2020, the $1.0 billion outstanding principal amount of 5.125% senior notes due 2023, the $900 million outstanding principal amount of 5% senior notes due 2026 and the $700 million outstanding principal amount of 4.875% senior notes due 2027 (collectively, the “notes”). The following presents the condensed consolidating financial information separately for:

(i) The Goodyear Tire & Rubber Company (the “Parent Company”), the issuer of the guaranteed obligations;

(ii) Guarantor subsidiaries, on a combined basis, as specified in the indentures related to Goodyear’s obligations under the notes;

(iii) Non-guarantor subsidiaries, on a combined basis;

(iv) Consolidating entries and eliminations representing adjustments to (a) eliminate intercompany transactions between or among the Parent Company, the guarantor subsidiaries and the non-guarantor subsidiaries, (b) eliminate the investments in our subsidiaries, and (c) record consolidating entries; and

(v) The Goodyear Tire & Rubber Company and Subsidiaries on a consolidated basis.

Each guarantor subsidiary is 100% owned by the Parent Company at the date of each balance sheet presented. The notes are fully and unconditionally guaranteed on a joint and several basis by each guarantor subsidiary. The guarantees of the guarantor subsidiaries are subject to release in limited circumstances only upon the occurrence of certain customary conditions. Each entity in the consolidating financial information follows the same accounting policies as described in the consolidated financial statements, except for the use by the Parent Company and guarantor subsidiaries of the equity method of accounting to reflect ownership interests in subsidiaries which are eliminated upon consolidation. Changes in intercompany receivables and payables related to operations, such as intercompany sales or service charges, are included in cash flows from operating activities. Intercompany transactions reported as investing or financing activities include the sale of capital stock, loans and other capital transactions between members of the consolidated group.

Certain non-guarantor subsidiaries of the Parent Company are limited in their ability to remit funds to it by means of dividends, advances or loans due to required foreign government and/or currency exchange board approvals or limitations in credit agreements or other debt instruments of those subsidiaries.

	Condensed Consolidating Balance Sheet				
	December 31, 2019				
(In millions)	**Parent Company**	**Guarantor Subsidiaries**	**Non-Guarantor Subsidiaries**	**Consolidating Entries and Eliminations**	**Consolidated**
Assets:					
Current Assets:					
Cash and Cash Equivalents	$ 165	$ 46	$ 697	$ —	$ 908
Accounts Receivable, net	644	105	1,192	—	1,941
Accounts Receivable From Affiliates	2,176	—	—	(2,176)	—
Inventories	1,425	59	1,398	(31)	2,851
Prepaid Expenses and Other Current Assets	74	321	332	(493)	234
Total Current Assets	**4,484**	**531**	**3,619**	**(2,700)**	**5,934**
Goodwill	24	—	418	123	565
Intangible Assets	116	1	20	—	137
Deferred Income Taxes	1,736	19	272	(500)	1,527
Other Assets	468	56	2,376	(1,941)	959
Investments in Subsidiaries	3,564	393	—	(3,957)	—
Operating Lease Right-of-Use Assets	534	11	310	—	855
Property, Plant and Equipment	2,428	443	4,358	(21)	7,208
Total Assets	**$ 13,354**	**$ 1,454**	**$ 11,373**	**$ (8,996)**	**$ 17,185**
Liabilities:					
Current Liabilities:					
Accounts Payable — Trade	$ 943	$ 134	$ 1,831	$ —	$ 2,908
Accounts Payable to Affiliates	—	24	2,152	(2,176)	—
Compensation and Benefits	326	14	196	—	536
Other Current Liabilities	857	6	365	(494)	734
Notes Payable and Overdrafts	—	—	348	—	348
Operating Lease Liabilities due Within One Year	107	5	87	—	199
Long Term Debt and Finance Leases Due Within One Year	283	—	279	—	562
Total Current Liabilities	**2,516**	**183**	**5,258**	**(2,670)**	**5,287**
Operating Lease Liabilities	437	7	224	—	668
Long Term Debt and Finance Leases	3,313	167	1,273	—	4,753
Compensation and Benefits	485	98	751	—	1,334
Deferred Income Taxes	—	—	90	—	90
Other Long Term Liabilities	2,252	7	174	(1,925)	508
Total Liabilities	**9,003**	**462**	**7,770**	**(4,595)**	**12,640**
Commitments and Contingent Liabilities					
Shareholders' Equity:					
Goodyear Shareholders' Equity:					
Common Stock	233	—	—	—	233
Other Equity	4,118	992	3,409	(4,401)	4,118
Goodyear Shareholders' Equity	**4,351**	**992**	**3,409**	**(4,401)**	**4,351**
Minority Shareholders' Equity — Nonredeemable	—	—	194	—	194
Total Shareholders' Equity	**4,351**	**992**	**3,603**	**(4,401)**	**4,545**
Total Liabilities and Shareholders' Equity	**$ 13,354**	**$ 1,454**	**$ 11,373**	**$ (8,996)**	**$ 17,185**

	Condensed Consolidating Balance Sheet December 31, 2018				
(In millions)	Parent Company	Guarantor Subsidiaries	Non-Guarantor Subsidiaries	Consolidating Entries and Eliminations	Consolidated
Assets:					
Current Assets:					
Cash and Cash Equivalents	$ 127	$ 30	$ 644	$ —	$ 801
Accounts Receivable, net	672	110	1,248	—	2,030
Accounts Receivable From Affiliates	294	280	—	(574)	—
Inventories	1,425	71	1,387	(27)	2,856
Prepaid Expenses and Other Current Assets	76	3	155	4	238
Total Current Assets	**2,594**	**494**	**3,434**	**(597)**	**5,925**
Goodwill	24	1	420	124	569
Intangible Assets	117	—	19	—	136
Deferred Income Taxes	1,422	27	395	3	1,847
Other Assets	524	48	564	—	1,136
Investments in Subsidiaries	3,758	445	—	(4,203)	—
Operating Lease Right-of-Use Assets	—	—	—	—	—
Property, Plant and Equipment	2,482	430	4,371	(24)	7,259
Total Assets	**$ 10,921**	**$ 1,445**	**$ 9,203**	**$ (4,697)**	**$ 16,872**
Liabilities:					
Current Liabilities:					
Accounts Payable — Trade	$ 960	$ 131	$ 1,829	$ —	$ 2,920
Accounts Payable to Affiliates	—	—	574	(574)	—
Compensation and Benefits	286	14	171	—	471
Other Current Liabilities	310	(4)	431	—	737
Notes Payable and Overdrafts	25	—	385	—	410
Operating Lease Liabilities due Within One Year	—	—	—	—	—
Long Term Debt and Finance Leases Due Within One Year	2	—	241	—	243
Total Current Liabilities	**1,583**	**141**	**3,631**	**(574)**	**4,781**
Operating Lease Liabilities	—	—	—	—	—
Long Term Debt and Finance Leases	3,550	167	1,393	—	5,110
Compensation and Benefits	569	93	683	—	1,345
Deferred Income Taxes	—	—	95	—	95
Other Long Term Liabilities	355	8	108	—	471
Total Liabilities	**6,057**	**409**	**5,910**	**(574)**	**11,802**
Commitments and Contingent Liabilities					
Shareholders' Equity:					
Goodyear Shareholders' Equity:					
Common Stock	232	—	—	—	232
Other Equity	4,632	1,036	3,087	(4,123)	4,632
Goodyear Shareholders' Equity	**4,864**	**1,036**	**3,087**	**(4,123)**	**4,864**
Minority Shareholders' Equity — Nonredeemable	—	—	206	—	206
Total Shareholders' Equity	**4,864**	**1,036**	**3,293**	**(4,123)**	**5,070**
Total Liabilities and Shareholders' Equity	**$ 10,921**	**$ 1,445**	**$ 9,203**	**$ (4,697)**	**$ 16,872**

	Consolidating Statements of Operations				
	Year Ended December 31, 2019				
(In millions)	**Parent Company**	**Guarantor Subsidiaries**	**Non-Guarantor Subsidiaries**	**Consolidating Entries and Eliminations**	**Consolidated**
Net Sales	$ 7,165	$ 1,403	$ 9,178	$ (3,001)	$ 14,745
Cost of Goods Sold	5,765	1,303	7,565	(3,031)	11,602
Selling, Administrative and General Expense	1,101	34	1,189	(1)	2,323
Rationalizations	86	—	119	—	205
Interest Expense	222	28	129	(39)	340
Other (Income) Expense	29	15	(18)	72	98
Income (Loss) before Income Taxes and Equity in Earnings of Subsidiaries	(38)	23	194	(2)	177
United States and Foreign Taxes	(289)	6	254	503	474
Equity in Earnings of Subsidiaries	(562)	(28)	—	590	—
Net Income (Loss)	(311)	(11)	(60)	85	(297)
Less: Minority Shareholders' Net Income (Loss)	—	—	14	—	14
Goodyear Net Income (Loss)	**$ (311)**	**$ (11)**	**$ (74)**	**$ 85**	**$ (311)**
Comprehensive Income (Loss)	**$ (371)**	**$ (43)**	**$ (193)**	**$ 251**	**$ (356)**
Less: Comprehensive Income (Loss) Attributable to Minority Shareholders	—	—	15	—	15
Goodyear Comprehensive Income (Loss)	**$ (371)**	**$ (43)**	**$ (208)**	**$ 251**	**$ (371)**

	Consolidating Statements of Operations Year Ended December 31, 2018				
(In millions)	**Parent Company**	**Guarantor Subsidiaries**	**Non-Guarantor Subsidiaries**	**Consolidating Entries and Eliminations**	**Consolidated**
Net Sales	$ 7,382	$ 1,320	$ 9,567	$ (2,794)	$ 15,475
Cost of Goods Sold	5,947	1,270	7,616	(2,872)	11,961
Selling, Administrative and General Expense	1,042	35	1,235	—	2,312
Rationalizations	3	1	40	—	44
Interest Expense	221	23	105	(28)	321
Other (Income) Expense	(320)	12	30	104	(174)
Income (Loss) before Income Taxes and Equity in Earnings of Subsidiaries	489	(21)	541	2	1,011
United States and Foreign Taxes	129	(6)	179	1	303
Equity in Earnings of Subsidiaries	333	47	—	(380)	—
Net Income (Loss)	693	32	362	(379)	708
Less: Minority Shareholders' Net Income (Loss)	—	—	15	—	15
Goodyear Net Income (Loss)	**$ 693**	**$ 32**	**$ 347**	**$ (379)**	**$ 693**
Comprehensive Income (Loss)	**$ 593**	**$ 28**	**$ 143**	**$ (175)**	**$ 589**
Less: Comprehensive Income (Loss) Attributable to Minority Shareholders	—	—	(4)	—	(4)
Goodyear Comprehensive Income (Loss)	**$ 593**	**$ 28**	**$ 147**	**$ (175)**	**$ 593**

	Consolidating Statements of Operations				
	Year Ended December 31, 2017				
(In millions)	**Parent Company**	**Guarantor Subsidiaries**	**Non-Guarantor Subsidiaries**	**Consolidating Entries and Eliminations**	**Consolidated**
Net Sales	$ 7,378	$ 1,186	$ 9,499	$ (2,686)	$ 15,377
Cost of Goods Sold	5,774	1,125	7,537	(2,756)	11,680
Selling, Administrative and General Expense	980	34	1,265	—	2,279
Rationalizations	20	1	114	—	135
Interest Expense	254	10	122	(51)	335
Other (Income) Expense	(60)	12	(12)	130	70
Income (Loss) before Income Taxes and Equity in Earnings of Subsidiaries	410	4	473	(9)	878
United States and Foreign Taxes	417	(2)	101	(3)	513
Equity in Earnings of Subsidiaries	353	39	—	(392)	—
Net Income (Loss)	346	45	372	(398)	365
Less: Minority Shareholders' Net Income (Loss)	—	—	19	—	19
Goodyear Net Income (Loss)	**$ 346**	**$ 45**	**$ 353**	**$ (398)**	**$ 346**
Comprehensive Income (Loss)	**$ 568**	**$ 62**	**$ 656**	**$ (683)**	**$ 603**
Less: Comprehensive Income (Loss) Attributable to Minority Shareholders	—	—	35	—	35
Goodyear Comprehensive Income (Loss)	**$ 568**	**$ 62**	**$ 621**	**$ (683)**	**$ 568**

	Condensed Consolidating Statement of Cash Flows Year Ended December 31, 2019				
(In millions)	Parent Company	Guarantor Subsidiaries	Non-Guarantor Subsidiaries	Consolidating Entries and Eliminations	Consolidated
Cash Flows from Operating Activities:					
Total Cash Flows from Operating Activities	**$ 3,541**	**$ (273)**	**$ 82**	**$ (2,143)**	**$ 1,207**
Cash Flows from Investing Activities:					
Capital Expenditures	(288)	(40)	(442)	—	(770)
Asset Dispositions	—	—	12	—	12
Short Term Securities Acquired	—	—	(113)	—	(113)
Short Term Securities Redeemed	—	—	106	—	106
Capital Contributions and Loans Incurred	(3,286)	—	(320)	3,606	—
Capital Redemptions and Loans Paid	269	—	—	(269)	—
Notes Receivable	(7)	—	—	—	(7)
Other Transactions	(18)	—	(2,110)	2,100	(28)
Total Cash Flows from Investing Activities	**(3,330)**	**(40)**	**(2,867)**	**5,437**	**(800)**
Cash Flows from Financing Activities:					
Short Term Debt and Overdrafts Incurred	398	—	1,482	—	1,880
Short Term Debt and Overdrafts Paid	(423)	—	(1,510)	—	(1,933)
Long Term Debt Incurred	2,981	—	2,961	—	5,942
Long Term Debt Paid	(2,983)	—	(3,025)	—	(6,008)
Common Stock Issued	1	—	—	—	1
Common Stock Repurchased	—	—	—	—	—
Common Stock Dividends Paid	(148)	—	—	—	(148)
Capital Contributions and Loans Incurred	—	388	3,218	(3,606)	—
Capital Redemptions and Loans Paid	—	(57)	(212)	269	—
Intercompany Dividends Paid	—	(3)	(40)	43	—
Transactions with Minority Interests in Subsidiaries	—	—	(26)	—	(26)
Debt Related Costs and Other Transactions	(1)	—	(14)	—	(15)
Total Cash Flows from Financing Activities	**(175)**	**328**	**2,834**	**(3,294)**	**(307)**
Effect of Exchange Rate Changes on Cash, Cash Equivalents and Restricted Cash	—	1	—	—	1
Net Change in Cash, Cash Equivalents and Restricted Cash	**36**	**16**	**49**	**—**	**101**
Cash, Cash Equivalents and Restricted Cash at Beginning of the Year	168	30	675	—	873
Cash, Cash Equivalents and Restricted Cash at End of the Year	**$ 204**	**$ 46**	**$ 724**	**$ —**	**$ 974**

Condensed Consolidating Statement of Cash Flows

Year Ended December 31, 2018

(In millions)	Parent Company	Guarantor Subsidiaries	Non-Guarantor Subsidiaries	Consolidating Entries and Eliminations	Consolidated
Cash Flows from Operating Activities:					
Total Cash Flows from Operating Activities	**$ 1,771**	**$ 32**	**$ (279)**	**$ (608)**	**$ 916**
Cash Flows from Investing Activities:					
Capital Expenditures	(307)	(61)	(443)	—	(811)
Asset Dispositions	—	2	—	—	2
Short Term Securities Acquired	—	—	(68)	—	(68)
Short Term Securities Redeemed	—	—	68	—	68
Capital Contributions and Loans Incurred	(1,205)	—	(283)	1,488	—
Capital Redemptions and Loans Paid	282	88	430	(800)	—
Notes Receivable	(55)	—	—	—	(55)
Other Transactions	1	—	(4)	—	(3)
Total Cash Flows from Investing Activities	**(1,284)**	**29**	**(300)**	**688**	**(867)**
Cash Flows from Financing Activities:					
Short Term Debt and Overdrafts Incurred	965	—	979	—	1,944
Short Term Debt and Overdrafts Paid	(940)	—	(855)	—	(1,795)
Long Term Debt Incurred	3,200	15	3,240	—	6,455
Long Term Debt Paid	(3,260)	—	(3,209)	—	(6,469)
Common Stock Issued	4	—	—	—	4
Common Stock Repurchased	(220)	—	—	—	(220)
Common Stock Dividends Paid	(138)	—	—	—	(138)
Capital Contributions and Loans Incurred	283	67	1,138	(1,488)	—
Capital Redemptions and Loans Paid	(430)	(77)	(293)	800	—
Intercompany Dividends Paid	—	(65)	(543)	608	—
Transactions with Minority Interests in Subsidiaries	—	—	(31)	—	(31)
Debt Related Costs and Other Transactions	16	—	(9)	—	7
Total Cash Flows from Financing Activities	**(520)**	**(60)**	**417**	**(80)**	**(243)**
Effect of Exchange Rate Changes on Cash, Cash Equivalents and Restricted Cash	—	(3)	(40)	—	(43)
Net Change in Cash, Cash Equivalents and Restricted Cash	**(33)**	**(2)**	**(202)**	**—**	**(237)**
Cash, Cash Equivalents and Restricted Cash at Beginning of the Year	201	32	877	—	1,110
Cash, Cash Equivalents and Restricted Cash at End of the Year	**$ 168**	**$ 30**	**$ 675**	**$ —**	**$ 873**

	Condensed Consolidating Statement of Cash Flows				
	Year Ended December 31, 2017				
(In millions)	Parent Company	Guarantor Subsidiaries	Non-Guarantor Subsidiaries	Consolidating Entries and Eliminations	Consolidated
Cash Flows from Operating Activities:					
Total Cash Flows from Operating Activities	**$ 1,192**	**$ 67**	**$ 577**	**$ (678)**	**$ 1,158**
Cash Flows from Investing Activities:					
Capital Expenditures	(305)	(136)	(442)	2	(881)
Asset Dispositions	1	1	10	—	12
Short Term Securities Acquired	—	—	(83)	—	(83)
Short Term Securities Redeemed	—	—	83	—	83
Capital Contributions and Loans Incurred	(79)	—	(292)	371	—
Capital Redemptions and Loans Paid	76	—	563	(639)	—
Notes Receivable	—	—	—	—	—
Other Transactions	(3)	—	(7)	—	(10)
Total Cash Flows from Investing Activities	**(310)**	**(135)**	**(168)**	**(266)**	**(879)**
Cash Flows from Financing Activities:					
Short Term Debt and Overdrafts Incurred	420	—	634	—	1,054
Short Term Debt and Overdrafts Paid	(420)	—	(626)	—	(1,046)
Long Term Debt Incurred	3,062	204	3,197	—	6,463
Long Term Debt Paid	(3,151)	(52)	(3,139)	—	(6,342)
Common Stock Issued	14	—	—	—	14
Common Stock Repurchased	(400)	—	—	—	(400)
Common Stock Dividends Paid	(110)	—	—	—	(110)
Capital Contributions and Loans Incurred	292	66	13	(371)	—
Capital Redemptions and Loans Paid	(563)	(48)	(28)	639	—
Intercompany Dividends Paid	—	(128)	(548)	676	—
Transactions with Minority Interests in Subsidiaries	—	—	(7)	—	(7)
Debt Related Costs and Other Transactions	(35)	—	(6)	—	(41)
Total Cash Flows from Financing Activities	**(891)**	**42**	**(510)**	**944**	**(415)**
Effect of Exchange Rate Changes on Cash, Cash Equivalents and Restricted Cash	—	3	54	—	57
Net Change in Cash, Cash Equivalents and Restricted Cash	**(9)**	**(23)**	**(47)**	**—**	**(79)**
Cash, Cash Equivalents and Restricted Cash at Beginning of the Year	210	55	924	—	1,189
Cash, Cash Equivalents and Restricted Cash at End of the Year	**$ 201**	**$ 32**	**$ 877**	**$ —**	**$ 1,110**

Supplementary Data
(Unaudited)

Quarterly Data

(In millions, except per share amounts)	Quarter First	Quarter Second	Quarter Third	Quarter Fourth	Year
2019					
Net Sales	$ 3,598	$ 3,632	$ 3,802	$ 3,713	$ 14,745
Gross Profit	719	777	837	810	3,143
Net Income (Loss)	(44)	56	90	(399)	(297)
Less: Minority Shareholders' Net Income (Loss)	17	2	2	(7)	14
Goodyear Net Income (Loss)	**$ (61)**	**$ 54**	**$ 88**	**$ (392)**	**$ (311)**
Goodyear Net Income (Loss) - Per Share of Common Stock:*					
— Basic	$ (0.26)	$ 0.23	$ 0.38	$ (1.68)	$ (1.33)
— Diluted	$ (0.26)	$ 0.23	$ 0.38	$ (1.68)	$ (1.33)
Weighted Average Shares Outstanding — Basic	232	233	233	234	233
— Diluted	232	234	234	234	233
Dividends Declared per Share of Common Stock	$ 0.16	$ 0.16	$ 0.16	$ 0.16	$ 0.64
Selected Balance Sheet Items at Quarter-End:					
Total Assets	$ 18,273	$ 18,470	$ 18,299	$ 17,185	
Total Debt and Finance Leases	6,506	6,737	6,676	5,663	
Goodyear Shareholders' Equity	4,808	4,847	4,835	4,351	
Total Shareholders' Equity	5,031	5,049	5,035	4,545	

* Due to the anti-dilutive impact of potentially dilutive securities on periods with a Goodyear net loss, as well as weighted average shares changing throughout the year, the quarterly earnings per share amounts may not add to the full year.

All numbers presented below are after-tax and minority.

The first quarter of 2019 included rationalization charges of $85 million, net charges of $17 million related to indirect tax items, net discrete tax charges of $6 million, and legal claims related to discontinued operations of $4 million. The first quarter of 2019 also included net gains on asset sales of $4 million and a gain of $2 million for hurricane-related net insurance recoveries.

The second quarter of 2019 included net discrete tax charges of $6 million, rationalization charges of $3 million, and accelerated depreciation of $1 million. The second quarter of 2019 also included favorable indirect tax items of $6 million.

The third quarter of 2019 included rationalization charges of $17 million, charges of $5 million related to flooding at our Beaumont, Texas chemical facility, and accelerated depreciation of $1 million. The third quarter of 2019 also included a net discrete tax benefit of $6 million.

The fourth quarter of 2019 included net discrete tax charges of $380 million, rationalization charges of $60 million, charges of $20 million related to flooding at our Beaumont, Texas chemical facility, accelerated depreciation of $10 million, and pension settlement charges of $4 million. The fourth quarter of 2019 also included favorable indirect tax items of $24 million, net gains on asset sales of $11 million, and a gain related to an acquisition of $2 million.

(In millions, except per share amounts)	Quarter First	Second	Third	Fourth	Year
2018					
Net Sales	$ 3,830	$ 3,841	$ 3,928	$ 3,876	$ 15,475
Gross Profit	854	892	900	868	3,514
Net Income	80	164	354	110	708
Less: Minority Shareholders' Net Income	5	7	3	—	15
Goodyear Net Income	**$ 75**	**$ 157**	**$ 351**	**$ 110**	**$ 693**
Goodyear Net Income - Per Share of Common Stock:*					
— Basic	$ 0.31	$ 0.66	$ 1.49	$ 0.47	$ 2.92
— Diluted	$ 0.31	$ 0.65	$ 1.48	$ 0.47	$ 2.89
Weighted Average Shares Outstanding — Basic	240	239	236	233	237
— Diluted	244	241	238	235	239
Dividends Declared per Share of Common Stock	$ 0.14	$ 0.14	$ 0.14	$ 0.16	$ 0.58
Selected Balance Sheet Items at Quarter-End:					
Total Assets	$ 17,580	$ 17,355	$ 17,591	$ 16,872	
Total Debt and Capital Leases	6,259	6,347	6,520	5,763	
Goodyear Shareholders' Equity	4,737	4,637	4,800	4,864	
Total Shareholders' Equity	4,962	4,844	5,000	5,070	

* Due to the anti-dilutive impact of potentially dilutive securities on periods with a Goodyear net loss, as well as weighted average shares changing throughout the year, the quarterly earnings per share amounts may not add to the full year.

All numbers presented below are after-tax and minority.

The first quarter of 2018 included rationalization charges of $26 million, net discrete tax charges of $7 million, a charge of $7 million related to a one-time expense from the adoption of the new accounting standards update which no longer allows non-service related pension and other postretirement benefits cost to be capitalized in inventory, costs of $3 million related to the TireHub transaction, charges of $3 million for hurricane-related expenses, and accelerated depreciation of $1 million.

The second quarter of 2018 included net discrete tax benefits of $28 million, a benefit of $1 million related to the recovery of past costs from one of our asbestos insurers, and net gains on asset sales of $1 million. The second quarter of 2018 also included costs of $8 million related to the TireHub transaction, charges of $8 million for hurricane-related expenses, losses of $5 million as a result of the national transportation strike in Brazil, and pension settlement charges of $2 million.

The third quarter of 2018 included a net gain of $219 million on the TireHub transaction and a benefit of $17 million related to a favorable indirect tax settlement in Brazil. The third quarter of 2018 also included net discrete income tax charges of $31 million, pension settlement charges of $8 million, rationalization charges of $4 million, legal claims related to discontinued operations of $3 million, and charges of $2 million for hurricane-related expenses.

The fourth quarter of 2018 included benefits of $56 million related to favorable indirect tax items. The fourth quarter of 2018 also included discrete income tax charges of $55 million, pension settlement charges of $7 million, rationalization charges of $2 million, and accelerated depreciation of $2 million.

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

None.

ITEM 9A. CONTROLS AND PROCEDURES.

Management's Evaluation of Disclosure Controls and Procedures

We maintain "disclosure controls and procedures" that, consistent with Rule 13a-15(e) under the Securities Exchange Act of 1934, we define to mean controls and other procedures that are designed to ensure that information required to be disclosed by us in the reports that we file or submit under the Securities Exchange Act of 1934 is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms, and to ensure that such information is accumulated and communicated to our management, including our principal executive and financial officers, as appropriate, to allow timely decisions regarding required disclosure.

Our management, with the participation of our principal executive and financial officers, has evaluated the effectiveness of our disclosure controls and procedures. Based on such evaluation, our principal executive and financial officers have concluded that such disclosure controls and procedures were effective as of December 31, 2019 (the end of the period covered by this Annual Report on Form 10-K).

Assessment of Internal Control Over Financial Reporting

Management's report on our internal control over financial reporting is presented on page 45 of this Annual Report on Form 10-K. The report of PricewaterhouseCoopers LLP relating to the consolidated financial statements, financial statement schedule, and the effectiveness of internal control over financial reporting is presented on page 46 of this Annual Report on Form 10-K.

Changes in Internal Control Over Financial Reporting

We implemented new internal controls during the first quarter of 2019 to ensure we adequately evaluated our contracts and properly assessed the impact of the new accounting standard related to leases on our financial statements as a result of its adoption on January 1, 2019. There have been no other changes in our internal control over financial reporting during the year ended December 31, 2019 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 required by this item about Goodyear's executive officers is included in Part I, "Item 1. Business" of this Annual Report on Form 10-K under the caption "Information About Our Executive Officers." All other information required by this item is incorporated herein by reference from the registrant's definitive Proxy Statement for the Annual Meeting of Shareholders to be held April 6, 2020 to be filed with the SEC pursuant to Regulation 14A (the "Proxy Statement").

Code of Business Conduct and Code of Ethics

Goodyear has adopted a code of business conduct and ethics for directors, officers and employees, known as the Business Conduct Manual. Goodyear also has adopted a conflict of interest policy applicable to directors and executive officers. Both of these documents are available on Goodyear's website at https://corporate.goodyear.com/en-US/investors/governance/documents-charters.html. Shareholders may request a free copy of these documents from:

The Goodyear Tire & Rubber Company
Attention: Investor Relations
200 Innovation Way
Akron, Ohio 44316-0001
(330) 796-3751

Goodyear's Code of Ethics for the Chief Executive Officer and Senior Financial Officers (the "Code of Ethics") is also posted on Goodyear's website. Amendments to and waivers of the Code of Ethics will be disclosed on the website.

Corporate Governance Guidelines and Certain Committee Charters

Goodyear has adopted Corporate Governance Guidelines as well as charters for its Audit, Compensation and Governance Committees. These documents are available on Goodyear's website at https://corporate.goodyear.com/en-US/investors/governance/documents-charters.html. Shareholders may request a free copy of any of these documents from the address and phone number set forth above under "Code of Business Conduct and Code of Ethics."

The information on our website is not incorporated by reference in or considered to be a part of this Annual Report on Form 10-K.

ITEM 11. EXECUTIVE COMPENSATION.

The information required by this item is incorporated herein by reference from the Proxy Statement.

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

See Part II, Item 5 for information regarding our equity compensation plans. The other information required by this item is incorporated herein by reference from the Proxy Statement.

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

The information required by this item is incorporated herein by reference from the Proxy Statement.

ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES.

The information required by this item is incorporated herein by reference from the Proxy Statement.

PART IV.

ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES.

LIST OF DOCUMENTS FILED AS PART OF THIS REPORT:

(1) **Financial Statements**: See Index to Consolidated Financial Statements on page 44 of this Annual Report.

(2) **Financial Statement Schedules**: See Index to Financial Statement Schedules attached to this Annual Report at page FS-1. The Financial Statement Schedule at page FS-2 is incorporated into and made a part of this Annual Report.

(3) **Exhibits required to be filed by Item 601 of Regulation S-K**: See the Index of Exhibits at pages X-1 through X-5 inclusive, which is attached to and incorporated into and made a part of this Annual Report.

ITEM 16. FORM 10-K SUMMARY.

None.

FINANCIAL STATEMENT SCHEDULES
ITEMS 8 AND 15(a)(2) OF FORM 10-K
FOR THE COMPANY'S
ANNUAL REPORT ON FORM 10-K
FOR THE YEAR ENDED DECEMBER 31, 2019

INDEX TO FINANCIAL STATEMENT SCHEDULES

Financial Statement Schedules:

	Schedule No.	Page Number
Valuation and Qualifying Accounts	II	FS-2

All other schedules are omitted because they are not applicable or the required information is shown in the financial statements or notes thereto.

Financial statements relating to 50 percent or less owned companies, the investments in which are accounted for by the equity method, have been omitted as permitted because these companies would not constitute a significant subsidiary.

SCHEDULE II — VALUATION AND QUALIFYING ACCOUNTS

Year Ended December 31,

(In millions)

Description	Balance at beginning of period	Additions: Charged (credited) to income	Additions: Charged (credited) to AOCL	Deductions from reserves	Translation adjustment during period	Balance at end of period
2019						
Allowance for doubtful accounts	$ 113	$ 13	$ —	$ (14) (a)	$ (1)	$ 111
Valuation allowance — deferred tax assets	317	661	4	—	—	982
2018						
Allowance for doubtful accounts	$ 116	$ 21	$ —	$ (19) (a)	$ (5)	$ 113
Valuation allowance — deferred tax assets	318	18	(1)	—	(18)	317
2017						
Allowance for doubtful accounts	$ 101	$ 12	$ —	$ (6) (a)	$ 9	$ 116
Valuation allowance — deferred tax assets	326	(19)	—	—	11	318

Note: (a) Accounts receivable charged off.

THE GOODYEAR TIRE & RUBBER COMPANY

Annual Report on Form 10-K
For the Year Ended December 31, 2019

INDEX OF EXHIBITS

Exhibit Table Item No.	Description of Exhibit	Exhibit Number
3	**Articles of Incorporation and By-Laws**	
(a)	Certificate of Amended Articles of Incorporation of The Goodyear Tire & Rubber Company, dated December 20, 1954, Certificate of Amendment to Amended Articles of Incorporation of the Company, dated April 6, 1993, Certificate of Amendment to Amended Articles of Incorporation of the Company, dated June 4, 1996, Certificate of Amendment to Amended Articles of Incorporation of the Company, dated April 18, 2006, Certificate of Amendment to Amended Articles of Incorporation of the Company, dated April 22, 2009, Certificate of Amendment to Amended Articles of Incorporation of the Company, dated March 30, 2011, and Certificate of Amendment to Amended Articles of Incorporation of the Company, dated April 16, 2015, together comprising the Company's Articles of Incorporation, as amended (incorporated by reference, filed as Exhibit 3.1 to the Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 2015, File No. 1-1927).	
(b)	Code of Regulations of The Goodyear Tire & Rubber Company, adopted November 22, 1955, and as most recently amended on February 28, 2017 (incorporated by reference, filed as Exhibit 3.1 to the Company's Current Report on Form 8-K, filed March 6, 2017, File No. 1-1927).	
4	**Instruments Defining the Rights of Security Holders, Including Indentures**	
(a)	Specimen Nondenominational Certificate for Shares of the Common Stock, Without Par Value, of the Company (incorporated by reference, filed as Exhibit 4.1 to the Company's Current Report on Form 8-K, filed May 9, 2007, File No. 1-1927).	
(b)	Indenture, dated as of March 15, 1996, between the Company and Chemical Bank (now Wells Fargo Bank, N.A.), as Trustee, as supplemented on March 16, 1998, in respect of the Company's 7% Notes due 2028 (incorporated by reference, filed as Exhibit 4.1 to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 1998, File No. 1-1927).	
(c)	Indenture, dated as of March 1, 1999, between the Company and The Chase Manhattan Bank (now Wells Fargo Bank, N.A.), as Trustee (incorporated by reference, filed as Exhibit 4.1 to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2000, File No. 1-1927), as supplemented by the First Supplemental Indenture thereto, dated as of March 5, 2010, in respect of the Company's 8.75% Notes due 2020 (incorporated by reference, filed as Exhibit 4.1 to the Company's Current Report on Form 8-K, filed March 8, 2010, File No. 1-1927).	
(d)	Indenture, dated as of August 13, 2010, among the Company, the subsidiary guarantors party thereto and Wells Fargo Bank, N.A., as Trustee (incorporated by reference, filed as Exhibit 4.1 to the Company's Current Report on Form 8-K, filed August 13, 2010, File No. 1-1927), as supplemented by the Fourth Supplemental Indenture thereto, dated as of November 5, 2015, in respect of the Company's 5.125% Senior Notes due 2023 (incorporated by reference, filed as Exhibit 4.2 to the Company's Current Report on Form 8-K, filed November 5, 2015, File No. 1-1927), as supplemented by the Fifth Supplemental Indenture thereto, dated as of May 13, 2016, in respect of the Company's 5% Senior Notes due 2026 (incorporated by reference, filed as Exhibit 4.2 to the Company's Current Report on Form 8-K, filed May 13, 2016, File No. 1-1927), and as supplemented by the Sixth Supplemental Indenture thereto, dated as of March 7, 2017, in respect of the Company's 4.875% Senior Notes due 2027 (incorporated by reference, filed as Exhibit 4.2 to the Company's Current Report on Form 8-K, filed March 7, 2017, File No. 1-1927).	

Exhibit Table Item No.	Description of Exhibit	Exhibit Number
(e)	Indenture, dated as of December 15, 2015, among Goodyear Dunlop Tires Europe B.V., as Issuer, the Company, as Parent Guarantor, the subsidiary guarantors party thereto, Deutsche Trustee Company Limited, as Trustee, Deutsche Bank AG, London Branch, as Principal Paying Agent and Transfer Agent, and Deutsche Bank Luxembourg S.A., as Registar and Luxembourg Paying Agent and Transfer Agent, in respect of GDTE's 3.75% Senior Notes due 2023 (incorporated by reference, filed as Exhibit 4.1 to the Company's Annual Report on Form 10-K for the year ended December 31, 2015, File No. 1-1927).	
(f)	Description of Common Stock	4.1
	In accordance with Item 601(b)(4)(iii) of Regulation S-K, certain instruments defining the rights of holders of long term debt of the Company and its consolidated subsidiaries pursuant to which the total amount of securities authorized thereunder does not exceed 10% of the total assets of the Company and its subsidiaries on a consolidated basis are not filed herewith. The Company hereby agrees to furnish a copy of any such instrument to the SEC upon request.	
10	**Material Contracts**	
(a)	Amended and Restated First Lien Credit Agreement, dated as of April 7, 2016, among the Company, the lenders, issuing banks, syndication agents, documentation agents, senior managing agents, joint lead arrangers and joint bookrunners party thereto, and JPMorgan Chase Bank, N.A., as Administrative Agent and Collateral Agent (incorporated by reference, filed as Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2016, File No. 1-1927).	
(b)	First Amendment, dated as of July 13, 2018, to the Amended and Restated First Lien Credit Agreement, dated as of April 7, 2016, among the Company, the lenders party thereto, the issuing banks party thereto, and JPMorgan Chase Bank, N.A., as Administrative Agent and Collateral Agent (incorporated by reference, filed as Exhibit 10.1 to the Company’s Quarterly Report on Form 10-Q for the quarter ended September 30, 2018, File No. 1-1927).	
(c)	Amended and Restated Second Lien Credit Agreement, dated as of March 7, 2018, among the Company, the lenders, documentation agents, syndication agent, joint lead arrangers and joint bookrunners party thereto, Deutsche Bank Trust Company Americas, as Collateral Agent, and JPMorgan Chase Bank, N.A., as Administrative Agent (incorporated by reference, filed as Exhibit 10.1 to the Company’s Quarterly Report on Form 10-Q for the quarter ended March 31, 2018, File No. 1-1927).	
(d)	First Lien Guarantee and Collateral Agreement, dated as of April 8, 2005, as amended and restated as of April 7, 2016, among the Company, the subsidiaries of the Company identified therein and JPMorgan Chase Bank, N.A., as Collateral Agent (incorporated by reference, filed as Exhibit 10.2 to the Company’s Quarterly Report on Form 10-Q for the quarter ended March 31, 2016, File No. 1-1927).	
(e)	Reaffirmation of Second Lien Guarantee and Collateral Agreement, dated as of March 7, 2017, among the Company, the subsidiaries of the Company identified therein, Deutsche Bank Trust Company Americas, as Collateral Agent, and JPMorgan Chase Bank, N.A., as Administrative Agent (incorporated by reference, filed as Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2017, File No. 1-1927).	
(f)	Amended and Restated Lenders Lien Subordination and Intercreditor Agreement, dated as of April 19, 2012, among JPMorgan Chase Bank, N.A., as Collateral Agent for the First Lien Secured Parties referred to therein, Deutsche Bank Trust Company Americas, as Collateral Agent for the Second Lien Secured Parties referred to therein, the Company, and the subsidiaries of the Company named therein (incorporated by reference, filed as Exhibit 10.5 to the Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 2012, File No. 1-1927).	
(g)	Amended and Restated Revolving Credit Agreement, dated as of March 27, 2019, among the Company, Goodyear Europe B.V., Goodyear Dunlop Tires Germany GmbH, Goodyear Dunlop Tires Operations S.A., the lenders party thereto, J.P. Morgan Europe Limited, as Administrative Agent, JPMorgan Chase Bank, N.A., as Collateral Agent, BGL BNP Paribas S.A., as Syndication Agent, and the documentation agents, joint bookrunners and joint lead arrangers identified therein (incorporated by reference, filed as Exhibit 10.1 to the Company’s Quarterly Report on Form 10-Q for the quarter ended March 31, 2019, File No. 1-1927).	

Exhibit Table Item No.	Description of Exhibit	Exhibit Number
(h)	Amendment and Restatement Agreement, dated as of March 27, 2019, among the Company, Goodyear Europe B.V., Goodyear Dunlop Tires Germany GmbH, Goodyear Dunlop Tires Operations S.A., J.P. Morgan Europe Limited, as Administrative Agent, JPMorgan Chase Bank, N.A., as Collateral Agent, and the issuing banks, subsidiary guarantors and lenders party thereto (incorporated by reference, filed as Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2019, File No. 1-1927).	
(i)	Master Guarantee and Collateral Agreement, dated as of March 31, 2003, as amended and restated as of February 20, 2004, and as further amended and restated as of April 8, 2005, among the Company, Goodyear Dunlop Tires Europe B.V. (now known as Goodyear Europe B.V.), the other subsidiaries of the Company identified therein and JPMorgan Chase Bank, N.A., as Collateral Agent (incorporated by reference, filed as Exhibit 4.7 to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2005, File No. 1-1927), as amended by the Amendment and Restatement Agreement, dated as of April 20, 2007 (incorporated by reference, filed as Exhibit 4.6 to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2007, File No. 1-1927), as amended by the Amendment and Restatement Agreement, dated as of April 20, 2011 (incorporated by reference, filed as Exhibit 10.1 to the Company's Annual Report on Form 10-K for the year ended December 31, 2011, File No. 1-1927), as amended by the Amendment and Restatement Agreement, dated as of May 12, 2015 (incorporated by reference, filed as Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 2015, File No. 1-1927), and as amended by the Amendment and Restatement Agreement, dated as of March 27, 2019 (incorporated by reference, filed as Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2019, File No. 1-1927).	
(j)	Amended and Restated General Master Purchase Agreement dated December 10, 2004, as last amended and restated on September 26, 2018, between Ester Finance Titrisation, as Purchaser, Credit Agricole Leasing & Factoring, as Agent, Credit Agricole Corporate and Investment Bank, as Joint Lead Arranger and as Calculation Agent, Natixis, as Joint Lead Arranger, Dunlop Tyres Limited, as Centralising Unit, and the Sellers listed therein (incorporated by reference, filed as Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q for the quarter ended September 30, 2018, File No. 1-1927).	
(k)*	2017 Performance Plan of the Company (incorporated by reference, filed as Exhibit 10.1 to the Company's Current Report on Form 8-K, filed April 13, 2017, File No. 1-1927).	
(l)*	Form of Non-Qualified Stock Option Grant Agreement (incorporated by reference, filed as Exhibit 10.1 to the Company's Current Report on Form 8-K, filed June 8, 2017, File No. 1-1927).	
(m)*	Form of Non-Qualified Stock Option with Tandem Stock Appreciation Right Grant Agreement (incorporated by reference, filed as Exhibit 10.2 to the Company's Current Report on Form 8-K, filed June 8, 2017, File No. 1-1927).	
(n)*	Form of Incentive Stock Option Grant Agreement (incorporated by reference, filed as Exhibit 10.3 to the Company's Current Report on Form 8-K, filed June 8, 2017, File No. 1-1927).	
(o)*	Form of Performance Share Grant Agreement (incorporated by reference, filed as Exhibit 10.4 to the Company's Current Report on Form 8-K, filed June 8, 2017, File No. 1-1927).	
(p)*	Form of Executive Performance Unit Grant Agreement (incorporated by reference, filed as Exhibit 10.5 to the Company's Current Report on Form 8-K, filed June 8, 2017, File No. 1-1927).	
(q)*	Form of Restricted Stock Unit Retention Grant Agreement (incorporated by reference, filed as Exhibit 10.6 to the Company's Current Report on Form 8-K, filed June 8, 2017, File No. 1-1927).	
(r)*	Form of Restricted Stock Unit Annual Grant Agreement (incorporated by reference, filed as Exhibit 10.7 to the Company's Current Report on Form 8-K, filed June 8, 2017, File No. 1-1927).	
(s)*	2013 Performance Plan of the Company (incorporated by reference, filed as Exhibit 10.1 to the Company's Current Report on Form 8-K, filed April 19, 2013, File No. 1-1927).	
(t)*	2008 Performance Plan of the Company (incorporated by reference, filed as Exhibit 10.2 to the Company's Annual Report on Form 10-K for the year ended December 31, 2010, File No. 1-1927).	
(u)*	The Goodyear Tire & Rubber Company Management Incentive Plan, effective January 1, 2009, as amended June 5, 2018 (incorporated by reference, filed as Exhibit 10.1 to the Company's Annual Report on Form 10-K for the year ended December 31, 2018, File No. 1-1927).	

Exhibit Table Item No.	Description of Exhibit	Exhibit Number
(v)*	The Goodyear Tire & Rubber Company Executive Annual Incentive Plan, effective as of January 1, 2019 (incorporated by reference, filed as Exhibit 10.1 to the Company's Current Report on Form 8-K, filed December 10, 2018, File No. 1-1927).	
(w)*	Goodyear Supplementary Pension Plan (October 7, 2008 Restatement) (incorporated by reference, filed as Exhibit 10.10 to the Company's Annual Report on Form 10-K for the year ended December 31, 2008, File No. 1-1927).	
(x)*	Defined Benefit Excess Benefit Plan of the Company, as amended and restated as of October 7, 2008, effective as of January 1, 2005 (incorporated by reference, filed as Exhibit 10.11 to the Company's Annual Report on Form 10-K for the year ended December 31, 2008, File No. 1-1927).	
(y)*	Defined Contribution Excess Benefit Plan of the Company, adopted October 7, 2008, effective as of January 1, 2005, as further amended September 7, 2012 (incorporated by reference, filed as Exhibit 10.1 to the Company's Annual Report on Form 10-K for the year ended December 31, 2012, File No. 1-1927).	
(z)*	Deferred Compensation Plan for Executives, as amended and restated effective September 1, 2016, dated April 19, 2017 (incorporated by reference, filed as Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 2017, File No. 1-1927).	
(aa)*	Outside Directors' Equity Participation Plan, as adopted February 2, 1996 and last amended as of October 8, 2019.	10.1
(bb)*	The Goodyear Tire & Rubber Company Executive Severance and Change in Control Plan, adopted February 28, 2013 (incorporated by reference, filed as Exhibit 10.1 to the Company's Current Report on Form 8-K, filed March 6, 2013, File No. 1-1927).	
(cc)*	Consulting Agreement, dated June 18, 2018, between the Company and Laura K. Thompson (incorporated by reference, filed as Exhibit 10.1 to the Company's Current Report on Form 8-K, filed June 22, 2018, File No. 1-1927).	
21	**Subsidiaries**	
(a)	List of Subsidiaries of the Company at December 31, 2019.	21.1
23	**Consents**	
(a)	Consent of PricewaterhouseCoopers LLP.	23.1
24	**Powers of Attorney**	
(a)	Powers of Attorney of Officers and Directors signing this report.	24.1
31	**Rule 13a-14(a) Certifications**	
(a)	Certificate of Chief Executive Officer pursuant to Rule 13a-14(a) under the Securities Exchange Act of 1934.	31.1
(b)	Certificate of Chief Financial Officer pursuant to Rule 13a-14(a) under the Securities Exchange Act of 1934.	31.2
32	**Section 1350 Certifications**	
(a)	Certificate of Chief Executive Officer and Chief Financial Officer pursuant to Rule 13a-14(b) under Securities Exchange Act of 1934.	32.1
101	**Interactive Data Files**	
	XBRL Instance Document - the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document.	101.INS
	Inline XBRL Taxonomy Extension Schema Document.	101.SCH
	Inline XBRL Taxonomy Extension Calculation Linkbase Document.	101.CAL
	Inline XBRL Taxonomy Extension Definition Linkbase Document.	101.DEF

Exhibit Table Item No.	Description of Exhibit	Exhibit Number
	Inline XBRL Taxonomy Extension Label Linkbase Document.	101.LAB
	Inline XBRL Taxonomy Extension Presentation Linkbase Document.	101.PRE
104	**Cover Page Interactive Data File** The cover page from the Company's Annual Report on Form10-K for the year ended December 31, 2019, formatted in Inline XBRL (included as Exhibit 101).	

* Indicates management contract or compensatory plan or arrangement

SIGNATURES

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

THE GOODYEAR TIRE & RUBBER COMPANY
(Registrant)

Date: February 11, 2020	/s/ RICHARD J. KRAMER Richard J. Kramer, Chairman of the Board, President and Chief Executive Officer

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

Date: February 11, 2020		/s/ RICHARD J. KRAMER Richard J. Kramer, Chairman of the Board, President, Chief Executive Officer and Director (Principal Executive Officer)
Date: February 11, 2020		/s/ DARREN R. WELLS Darren R. Wells, Executive Vice President and Chief Financial Officer (Principal Financial Officer)
Date: February 11, 2020		/s/ EVAN M. SCOCOS Evan M. Scocos, Vice President and Controller (Principal Accounting Officer)
Date: February 11, 2020	JAMES A. FIRESTONE, *Director* WERNER GEISSLER, *Director* PETER S. HELLMAN, *Director* LAURETTE T. KOELLNER, *Director* W. ALAN McCOLLOUGH, *Director* JOHN E. McGLADE, *Director* RODERICK A. PALMORE, *Director* STEPHANIE A. STREETER, *Director* THOMAS H. WEIDEMEYER, *Director* MICHAEL R. WESSEL, *Director* THOMAS L. WILLIAMS, *Director*	/s/ DARREN R. WELLS Darren R. Wells, Signing as Attorney-in-Fact for the Directors whose names appear opposite.

EXHIBIT 4.1

THE GOODYEAR TIRE & RUBBER COMPANY

DESCRIPTION OF COMMON STOCK

The common stock, without par value, of The Goodyear Tire & Rubber Company is the only class of our securities registered under Section 12 of the Securities Exchange Act of 1934. The following summary of our common stock is based on and qualified by our Amended Articles of Incorporation, as amended (the "Amended Articles of Incorporation"), our Code of Regulations, as amended (the "Code of Regulations"), and applicable provisions of Ohio law. This summary is not complete. For a complete description of the terms and provisions of our common stock, refer to the Amended Articles of Incorporation and Code of Regulations, both of which are filed as exhibits to our Annual Report on Form 10-K.

Voting Rights

Each share of our common stock is entitled to one vote per share on each matter voted upon by shareholders, subject to the rights of the holders of shares of preferred stock, if any, that may be outstanding. No shares of preferred stock are currently outstanding.

Except as may otherwise be required by the Amended Articles of Incorporation, Code of Regulations or Ohio law in respect of certain matters, the affirmative vote of at least a majority of the shares of common stock outstanding on the record date is required for any proposal to be adopted. Various matters, including the approval of certain amendments to the Amended Articles of Incorporation, require the affirmative vote of the holders of two-thirds of the shares of common stock outstanding.

In voting for the election of directors, each share is entitled to one vote for each director to be elected. In an uncontested election, all candidates for directorships to be filled must receive more votes "for" their election than "against" their election in order to be elected. If the election is contested, the candidates for directorships to be filled receiving the most votes shall be elected, up to the number of directors to be elected. An election shall be considered contested if there are more nominees for election than director positions to be filled in that election.

Under Ohio law, an incumbent director who is not re-elected will continue in office as a "holdover" director until his or her successor is elected by a subsequent shareholder vote, or his or her earlier resignation, removal from office or death. In order to address "holdover" terms for any incumbent directors who fail to be re-elected under our majority vote standard, our corporate governance guidelines provide that if a director nominee does not receive a majority affirmative vote, he or she will promptly offer his or her resignation as a director to the board of directors.

Dividend Rights

The holders of shares of our common stock are entitled to receive dividends and other distributions if, as and when declared by our board of directors out of funds legally available for that purpose. These rights are subject to any preferential rights and any sinking fund, redemption or repurchase rights of any outstanding shares of preferred stock. We are not permitted to pay dividends to holders of our common stock if we have not paid or provided for the dividends, if any, fixed with respect to any outstanding shares of preferred stock.

Liability for Calls and Assessments

The outstanding shares of our common stock are fully paid and non-assessable.

Preemptive Rights

Holders of shares of our common stock do not have preemptive rights as to additional issuances of shares of our common stock or of securities convertible into, or entitling the holder to purchase, shares of our common stock.

Liquidation Rights

If we were voluntarily or involuntarily liquidated, dissolved or wound up, the holders of our outstanding shares of common stock would be entitled to share in the distribution of all assets remaining after payment of all of our liabilities and after satisfaction of prior distribution rights and payment of any distributions owing to holders of any outstanding shares of preferred stock.

Other Information

Holders of shares of our common stock have no conversion, redemption or call rights related to their shares. We may, pursuant to action authorized by our board of directors, offer to repurchase or otherwise reacquire shares of our common stock, but we may not redeem issued and outstanding shares.

Certain Provisions of Ohio Law and the Amended Articles of Incorporation and Code of Regulations

There are statutory provisions of Ohio law and provisions in the Amended Articles of Incorporation and Code of Regulations that may have the effect of deterring hostile takeovers or delaying or preventing changes in control or changes in management with respect to us, including transactions in which our shareholders might otherwise receive a premium over the then current market prices for their shares.

Amended Articles of Incorporation and Code of Regulations

The Amended Articles of Incorporation and Code of Regulations contain various provisions that may have the effect, either alone or in combination with each other, of making more difficult or discouraging a business combination or an attempt to obtain control of us that is not approved by the board of directors. These provisions include:

- the right of our board of directors to issue authorized and unissued shares of common stock without shareholder approval; and
- the right of our board of directors to issue shares of preferred stock in one or more series and to designate the number of shares of those series and certain terms, rights and preferences of those series, including redemption terms and prices and conversion rights, without shareholder approval.

Ohio Law Provisions

Various laws may affect the legal or practical ability of shareholders to dispose of our shares. Such laws include the Ohio statutory provisions described below.

Chapter 1704 of the Ohio Revised Code prohibits an interested shareholder (defined in Section 1704.01 of the Ohio Revised Code) or any affiliate or associate of an interested shareholder (as defined in Section 1704.01 of the Ohio Revised Code) from engaging in certain transactions with the corporation during the three-year period after the interested shareholder’s share acquisition date.

The prohibited transactions include, among other things: mergers, consolidations, majority share acquisitions, certain purchases, leases and sales of assets, certain issuances or transfers of shares (or rights to acquire shares), dissolutions, certain reclassifications, recapitalizations or other transactions that would increase the proportion of shares held by the interested shareholder or its affiliates or associates, and the provision of certain benefits (including loans, advances and other financial assistance) by the corporation to the interested shareholder or its affiliates or associates.

After the expiration of the three-year period, the corporation may participate in such a transaction with an interested shareholder only if, among other things:

- the transaction receives the approval of the holders of at least two-thirds of all the voting shares of the corporation and is also approved by the holders of at least a majority of the disinterested voting shares (defined as those shares not held by the interested shareholder or its affiliates or associates); or
- the transaction meets certain criteria designed to ensure that the remaining shareholders receive fair consideration for their shares.

The prohibitions do not apply if, before the interested shareholder becomes an interested shareholder, the board of directors of the corporation approves either the interested shareholder’s acquisition of shares or the otherwise prohibited transaction. The restrictions also do not apply if a person was an interested shareholder prior to the adoption of the statute on April 11, 1990, unless, subject to certain exceptions, the interested shareholder increases his, her or its proportionate voting power on or after April 11, 1990 or if a person inadvertently becomes an interested shareholder, provided that, as soon as practicable, they divest the voting shares that resulted in them becoming an interested shareholder.

Pursuant to Ohio Revised Code Section 1707.043, an Ohio publicly traded corporation may recover profits made from any disposition of the corporation's equity securities by a person who, within eighteen months before such disposition made a proposal, or publicly disclosed the intention or possibility of making a proposal, to acquire control of the corporation. The corporation may not, however, recover from a person who proves in a court of competent jurisdiction either of the following:

- such person's sole purpose in making the proposal or public disclosure was to succeed in acquiring control of the corporation and that there were reasonable grounds to believe that such person would acquire control of the corporation; or
- such person's public disclosure concerning the intention or possibility of making a proposal to acquire control of the corporation were not effected with a purpose of affecting market trading and thereby increasing any profit or decreasing any loss from the disposition of the equity securities, and the public disclosure did not have a material effect on the market price or trading volume of the corporation's equity securities.

Also, before the corporation may obtain any recovery, the aggregate amount of the profit realized by such person, directly or indirectly, must exceed $250,000. Section 1707.043 does not apply to equity securities acquired more than eighteen months before the date on which the proposal or public disclosure was made. Any shareholder may bring an action on behalf of the corporation if a corporation fails or refuses to bring an action to recover these profits within sixty days of a written request by a holder of any equity security. The party bringing such an action may recover attorneys' fees if the court having jurisdiction over such action orders the recovery of any profits.

EXHIBIT 10.1

THE GOODYEAR TIRE & RUBBER COMPANY
OUTSIDE DIRECTORS' EQUITY PARTICIPATION PLAN
(As Adopted February 2, 1996 and last Amended as of October 8, 2019)

1. Purpose. The purpose of the Plan is to enable The Goodyear Tire & Rubber Company (the "Company") to (a) attract and retain outstanding individuals to serve as non-employee directors of the Company, (b) further align the interests of non-employee directors with the interests of the other shareholders of the Company by making the amount of the compensation of non-employee directors dependent in part on the value and appreciation over time of the Common Stock of the Company, and (c) permit each non-employee director to defer receipt of all or a portion of his or her annual retainer until after retirement from the Board of Directors of the Company.

2. Definitions. As used in the Plan, the following words and phrases shall have the meanings specified below:

"Account" means any of, and "Accounts" means all of, the Equity Participation Accounts and the Retainer Deferral Accounts maintained in the records of the Company for Participants.

"Accrual" means any dollar amount credited to an Account, including Special Accruals, Quarterly Accruals, Retainer Deferral Accruals, Dividend Equivalents and Interest Equivalents.

"Beneficiary" means the person or persons designated by a Participant pursuant to Section 12.

"Board" means the Board of Directors of the Company.

"Committee" means the Compensation Committee of the Board.

"Common Stock" means the Common Stock, without par value, of the Company.

"Conversion Date" means, with respect to each Account of each Retired Outside Director, the later of (i) the first business day of the seventh month following the month during which such Retired Outside Director terminated his or her service as a member of the Board, or (ii) the fifth business day of the calendar year following the calendar year during which such Retired Outside Director terminated his or her service as a member of the Board. For all balances that are earned and vested after December 31, 2004, the term “termination of service” means a separation from service as defined in Section 409A of the Code.

"Dividend Equivalent" means, with respect to each dividend payment date for the Common Stock, an amount equal to the cash dividend per share of Common Stock which is payable on such dividend payment date.

“Equity Grant Amount” means for each calendar quarter of service from October 1, 2008 through September 30, 2010, $23,750; for service from October 1, 2010 through December 31, 2011, $27,500; for service from January 1, 2012 through December 31, 2012, $28,750; for service from January 1, 2013 through December 31, 2013, $30,000; for service from January 1, 2014 through September 30, 2015, $31,250; for service from October 1, 2015 through June 30, 2017, $35,000; and for service on or after July 1, 2017, $36,250.

"Equity Participation Account" means a bookkeeping account maintained by the Company for a Participant to which Quarterly Accruals and Dividend Equivalents are credited in respect of Outside Directors through the Conversion Date (and, with respect to each Outside Director serving as a Director on February 2, 1996, a Special Accrual will be credited) and Interest Equivalents are credited on dollar-denominated amounts subsequent to the Conversion Date, which Account shall be denominated in Units until the Conversion Date and, thereafter, for Units granted prior to January 1, 2009 shall be denominated in dollars and for Units granted after December 31, 2008 (for service on or after October 1, 2008) shall be denominated in shares of Common Stock except any remaining fractional Unit shall be denominated in dollars.

"Fair Market Value of the Common Stock" means, in respect of any date on or as of which a determination thereof is being or to be made, the closing market price of the Common Stock reported on the primary exchange on which the Common Stock is then listed for trading on such date, or, if the Common Stock was not traded on such date, on the next preceding day on which sales of shares of the Common Stock were reported on the primary exchange on which the Common Stock is then listed for trading.

"Interest Equivalent" has the meaning assigned in Section 11(C).

"Outside Director" means and includes each person who, at the time any determination thereof is being made, is a member of the Board and who is not and never has been an employee of the Company or any subsidiary or affiliate of the Company.

"Participant" means and includes, at the time any determination thereof is being made, each Outside Director and each Retired Outside Director who has a balance in his or her Accounts.

“Restricted Stock Unit” means the Units issued pursuant to a Restricted Stock Grant under Section 8 of the Company’s 2008 Performance Plan, or any successor equity compensation plan, so long as such Units remains subject to the restrictions and conditions specified in this Plan pursuant to which such Restricted Stock Grant is made.

"Retainer" means with respect to each Outside Director the retainer fee payable to such Outside Director by the Company, plus all meeting attendance fees payable by the Company to such Outside Director, in respect of a calendar quarter.

"Retainer Deferral Account" means a bookkeeping account maintained by the Company for a Participant to which Retainer Deferral Accruals and Dividend Equivalents are credited through the Conversion Date and Interest Equivalents on dollar-denominated amounts are credited subsequent to the Conversion Date, which Account shall be denominated in Units until the Conversion Date and, thereafter, for Units created prior to January 1, 2011 shall be denominated in dollars and for Units created after December 31, 2010 shall be denominated in shares of Common Stock except any remaining fractional Unit shall be denominated in dollars.

"Retired Outside Director" means an Outside Director who has terminated his or her service as a member of the Board and is entitled to receive distributions in respect of his or her Account or Accounts as provided in Section 10.

"Plan" means The Goodyear Tire & Rubber Company Outside Directors' Equity Participation Plan, the provisions of which are set forth herein.

"Quarterly Accrual" has the meaning assigned in Section 7.

"Retainer Deferral Accrual" has the meaning assigned in Section 8.

"Special Accrual" has the meaning assigned in Section 7.

"Unit" means an equivalent to a hypothetical share of Common Stock which is the denomination into which all dollar Accruals (other than Interest Equivalents) to any Account are to be translated. Upon the Accrual of any dollar amount to any Account on or prior to the Conversion Date thereof, such dollar amount shall be translated into Units by dividing the dollar amount of such Accrual by the Fair Market Value of the Common Stock on the day on or as of which such Accrual to the Account is made or, if not made on a day on which the primary exchange on which the Common Stock is then listed for trading is open for trading, on the trading day next following the date of the Accrual. Additionally, each Restricted Stock Unit granted is equal to one Unit. Units, and the translation thereof from dollars, shall be calculated and recorded in the Accounts rounded to the sixth decimal place.

"Year of Service" means, with respect to each Outside Director, the twelve month period commencing with the date of the individuals' election as an Outside Director or any anniversary thereof.

3. Effective Date. The Plan is adopted on, and is effective on and after, February 2, 1996.

4. Eligibility. Each person who serves as an Outside Director at any time subsequent to February 1, 1996 is eligible to participate in the Plan.

5. Administration. Except with respect to matters expressly reserved for action by the Board pursuant to the provisions of the Plan, the Plan shall be administered by the Committee, which shall have the exclusive authority except as aforesaid to take any action necessary or appropriate for the proper administration of the Plan, including the full power and authority to interpret the Plan and to adopt such rules, regulations and procedures consistent with the terms of the Plan

as the Committee deems necessary or appropriate. The Committee's interpretation of the Plan, and all actions taken within the scope of its authority, shall be final and binding on the Company and the Participants.

6. Equity Participation Accounts. There shall be established and maintained by the Company an Equity Participation Account with respect to each Outside Director to which Accruals or Grants of Restricted Stock Units shall be made from time to time in accordance with the provisions of the Plan.

7. (A) Quarterly Accruals. On the first day of each calendar quarter, commencing April 1, 2007 and ending on October 1, 2008 for service through September 30, 2008, the Company shall credit $23,750 ($20,000 in respect of each quarter during the period beginning July 1, 2005 and ended on December 31, 2006, $17,500 in respect of each quarter during the period beginning July 1, 2004 and ended on June 30, 2005, $7,500 in respect of each quarter during the period beginning January 1, 2003 and ended on June 30, 2004, $2,500 in respect of each quarter during the period beginning July 1, 1998 and ended on December 31, 2002 and $2,000 in respect of each quarter during the period beginning April 1, 1996 and ended on June 30, 1998) to the Equity Participation Account of each Outside Director who is then a member of the Board of Directors and served as a member of the Board for the entire calendar quarter ended immediately prior to such day (each a "Quarterly Accrual").

(B) (1) Special Accruals. The Company shall credit to the Equity Participation Account of each Outside Director who was an Outside Director on January 1, 2007, a $3,750 accrual as of April 2, 2007.

(B) (2) Special Accruals. On April 13, 2004, the Company shall credit to the Equity Participation Account of each Outside Director eligible to receive a quarterly accrual as of April 1, 2004, an additional credit in the amount of $20,000.

(B) (3) Special Accruals. On February 2, 1996, the Company shall credit to the Equity Participation Account of each Outside Director then serving as a member of the Board of Directors a special, one-time credit (a "Special Accrual"), the amount of which shall be determined in accordance with the following formula:

N

$$SP = [FRPA - FQC] / 1.01943$$

where,

SP is the dollar amount of the Special Accrual in respect of a participating Outside Director at February 2, 1996.

FRPA is the future value of an annuity at age 70 under the Retirement Plan for Outside Directors (as provided by Watson Wyatt and based on the UP-1984 mortality table) that would be needed to provide a lifetime annuity at age 70 assuming the benefit increases 3% per year starting in 1997.

FQC is the future value of quarterly accruals, calculated on the value at age 70 of $1,000 quarterly accruals to the Equity Participation Account of the participating Outside Director starting April 1, 1996, assuming a compound annual growth rate of 8%.

N is the number of quarters until the Outside Director retires having attained age 70.

(C) Restricted Stock Units Grant. Effective for service on or after October 1, 2008 to be granted January 1, 2009 and on the first day of each succeeding calendar quarter, each Outside Director who is then a member of the Board of Directors and served as a member of the Board for any portion of the calendar quarter ended immediately prior to such day, will be granted the number of Restricted Stock Units that will be equal to the applicable Equity Grant Amount (or the pro-rata amount based on the number of days of service in the quarter if the Outside Director did not serve the whole quarter) divided by the Fair Market Value of the Common Stock for such grant date, or if the primary exchange on which the Common Stock is then listed for trading is not open for trading on such date, the grant date shall be the next following trading date. For the last quarterly grant with respect to the last quarter of Board service, any fractional amount of the applicable Equity Grant Amount (or the pro-rata amount based on the number of days of service in the quarter if the Outside Director did not serve the whole quarter) that is not utilized in converting the grant into whole Restricted Stock Units when added to any outstanding fractional Restricted Stock Unit shall be paid in cash when the shares are distributed pursuant to 10.(C). Effective for grants made in respect of service on or after October 1, 2010, the Restricted Stock Units are further restricted by only ratably vesting over three years, subject to accelerated full vesting upon becoming a Retired Outside Director.

(D) Translation of Accruals into Units. Each Accrual (other than Interest Equivalents) to an Equity Participation Account shall be translated into Units by dividing the dollar amount thereof by the Fair Market Value of the Common Stock on the day as of which such Accrual is made, or, if the date on or as of which such Accrual is made is not a day on which the primary exchange on which the Common Stock is then listed for trading is open for trading, on the next following trading day. Upon such translation of an Accrual into Units, the resulting number of Units shall be credited to the relevant Equity Participation Account (in lieu of the dollar amount of such Accrual) and such Accrual shall continue to be denominated in such number of Units until the Conversion Date for such Account, when those Units derived from Accruals (as compared to Units from Restricted Stock Unit Grants) will be converted into a dollar amount equal to the product of (i) the number of Units credited to such Account on such Conversion Date, multiplied by (ii) the Fair Market Value of the Common Stock on such Conversion Date.

8. Retainer Deferral Accounts. Each Outside Director may, at his or her sole election, defer receipt of 25%, 50%, 75% or 100% of his or her Retainer payable in respect of and during any calendar year by electing to have such amount credited to his or her Retainer Deferral Account (herein referred to as a "Retainer Deferral Accrual"). Each deferral election, if any, shall be made by an Outside Director annually, must be in respect of an entire calendar year and shall be made not later than, and shall become irrevocable as of, December 31 of the calendar year prior to the calendar year in respect of which such election is being made. The dollar amount of each Retainer Deferral Accrual shall be translated (in the manner specified in Section 7(D)) into Units on the date such Retainer Deferral Accrual is credited to the relevant Retainer Deferral Account, which shall be the day on which the payment of such portion of the Retainer would have been made absent the election of the Outside Director to defer the payment of all or a portion thereof. Upon such translation into Units, the resulting number of Units shall be credited to the relevant Retainer Deferral Account (in lieu of the dollar amount of such Accrual) and such Accrual shall continue to be denominated in such number of Units until the Conversion Date, when for Units in respect of deferrals elected prior to January 1, 2011 applicable to plan years through December 31, 2010, the Units will be converted into a dollar amount equal to

the product of (i) the number of Units credited to such Retainer Deferral Account on such Conversion Date, multiplied by (ii) the Fair Market Value of the Common Stock on such Conversion Date. For Units relating to deferrals effective on or after January 1, 2011, each Unit will be converted to a share of Common Stock and all such shares of Common Stock will be delivered on the fifth business day of the calendar quarter following the quarter of his or her separation from Board service with any remaining fractional Unit paid in cash at that time.

9. Dividend Equivalents. With respect to each Account and Restricted Stock Unit, from time to time through the relevant Conversion Date each Unit in such Account and Restricted Stock Unit shall be credited with a Dividend Equivalent at the same time as cash dividends are paid on shares of the Common Stock. Dividend Equivalents credited to each Account and Restricted Stock Unit shall be automatically translated into Units or Restricted Stock Units by dividing the dollar amount of such Dividend Equivalents by the Fair Market Value of the Common Stock on the date the relevant Dividend Equivalent is accrued to such Account and Restricted Stock Unit. The number of Units or Restricted Stock Units resulting shall be credited to such Account and Restricted Stock Unit (in lieu of the dollar amount of such Accrual) and such Accrual shall be denominated in Units until the Conversion Date.

10. Eligibility For Benefits. (A) Equity Participation Accounts. (1) For all balances that were earned and vested prior to January 1, 2005, each Retired Outside Director shall be entitled to receive the balance of his or her Equity Participation Account in accordance with the provisions of Section 11 of the Plan, unless the Board of Directors acts to reduce the amount of, or to deny the payment of, the Equity Participation Account of such Retired Outside Director; provided, however, that the Board of Directors shall not have the authority to reduce the amount of, or to deny the payment of, the Equity Participation Account of any Outside Director who terminates his or her service on the Board of Directors if (i) prior to such termination of service, the Retired Outside Director either (x) had five or more years of service and had attained age 70, or (y) had ten or more years of service and had attained age 65, or (ii) such termination was due to the death of the Outside Director. Notwithstanding the foregoing, the Board may at any time deny the payment of, or reduce the amount of, the Equity Participation Account of any Participant if, in the opinion of the Board, such Participant was engaged in an act of misconduct or otherwise engaged in conduct contrary to the best interest of the Company. (2) For all balances that are earned or vested after December 31, 2004, each Retired Outside Director shall be entitled to receive the balance of his or her Equity Participation Account in accordance with the provisions of Section 11 of the Plan for Units that are to be paid in dollars (Units granted from Accruals prior to January 1, 2009). Notwithstanding the foregoing, the Board may at any time deny the payment of, or reduce the amount of, the Equity Participation Account of any Participant if, in the opinion of the Board, such Participant was engaged in an act of misconduct or otherwise engaged in conduct detrimental to the Company.

(B) Retainer Deferral Accounts. Each Retired Outside Director shall be entitled to receive the balance, if any, of his or her Retainer Deferral Account in accordance with the provisions of Section 11 of the Plan.

(C) Restricted Stock Units. Each Outside Director will receive shares of Common Stock for their Restricted Stock Units on the fifth business day of the calendar quarter following the quarter of his or her separation from Board service. Notwithstanding the foregoing, the Board may at any time deny the payment of, or reduce the amount of, the Restricted Stock

Units of any Participant if, in the opinion of the Board, such Participant was engaged in an act of misconduct or otherwise engaged in conduct detrimental to the Company.

11. Payment of Accounts. (A) All distributions of Equity Participation Accounts and Retainer Deferral Accounts to Participants shall be made in cash or Common Stock pursuant to the terms of the Accrual, Grant or deferral according to the provisions of the Plan.

(B) In the case of each Retired Outside Director, the Units credited to his or her Equity Participation Account and Retainer Deferral Account, respectively, shall, on the Conversion Date for such Retired Outside Director, be converted to a dollar-denominated amount by multiplying the number of Units that are to be paid in dollars in each of the Accounts by the Fair Market Value of the Common Stock on such Conversion Date and for Units that are to be paid in Common Stock, each Unit is equal to one share.

(C) For all balances that were earned and vested prior to January 1, 2005, from and after the Conversion Date until paid, the balance (expressed in dollars) of the Equity Participation Account, and, if any, of the Retainer Deferral Account, of each Retired Outside Director shall be credited monthly until paid with "Interest Equivalents", which shall be equal to one-twelfth (1/12th) of the product of (x) the dollar balance of such Account, multiplied by (y) the sum (expressed as a decimal to six places) of the rate equivalent to the prevailing annual yield of United States Treasury obligations having a maturity of ten years (or, if not exactly ten years, as close to ten years as possible without exceeding ten years) at the Conversion Date, plus one percent (1%).

(D) (1) For all balances that were earned and vested prior to January 1, 2005, the Accounts of each Retired Outside Director will be paid in ten (10) annual installments commencing on the fifth business day following the Conversion Date with respect to such Accounts, and thereafter on each anniversary of such Conversion Date; each installment to be in an amount equal to the total dollar balance of such Accounts on the fifth business day prior to the date such annual installment is due and payable divided by the number of installments remaining (including the annual installment then being calculated for payment) to be paid.

(D) (2) For all balances that are earned or vested after December 31, 2004, the payment of such balance for Units that are to be paid in dollars (Units created from Accruals prior to January 1, 2009) shall be made in a lump sum payment on the fifth business day following the Conversion Date in respect of such Retired Outside Director. For Units relating to deferrals effective on or after January 1, 2011, each Unit will be converted to a share of Common Stock and all such shares of Common Stock will be delivered on the fifth business day of the calendar quarter following the quarter of his or her separation from Board service with any remaining fractional Unit paid in cash at that time.

(E) For all balances that were earned and vested prior to January 1, 2005, the Committee may, in its sole discretion, elect to pay the Equity Participation Account or the Retainer Deferral Account, or both, of any Retired Outside Director in a lump sum or in fewer than ten installments. In the event that the Committee shall elect to make a lump sum payment of an Account of any Retired Outside Director (or to make payment thereof in fewer than ten annual installments), the payment of such lump sum shall be made (or such installments shall commence) on the fifth business day following the Conversion Date in respect of such Retired Outside Director.

(F) In the event of the death of an Outside Director, the entire balance of his or her Accounts shall be eligible for payment which shall be made in a lump sum on the Conversion Date for his or her Accounts.

(G) In the event of the death of a Retired Outside Director, the entire balance of his or her Accounts(s) shall be paid on the Conversion Date for his or her Accounts (if it has not occurred) or on the next occurring anniversary thereof.

12. Designation of Beneficiary. A Participant may designate a person or persons (the "Beneficiary") to receive, after the Participant's death, any remaining benefits payable under the Plan. Such designation shall be made by the Participant on a form prescribed by the Committee. The Participant may at any time change or revise such designation by filing a new form with the Committee. The person or persons named as beneficiary in the designation of beneficiary form duly completed and filed with the Company bearing the most recent date will be the Beneficiary. All payments due under the Plan after the death of a Participant shall be made to his or her Beneficiary, except that (i) if the Participant does not designate a Beneficiary or the Beneficiary predeceases the Participant, any remaining benefits payable under the Plan after the Participant's death shall be paid to the Participant's estate, and (ii) if the Beneficiary survives the Participant but dies prior to receiving the benefits payable under the Plan, the benefits under the Plan shall be paid to the Beneficiary's estate.

13. Amendment and Termination. The Board may at any time, or from time to time, amend or terminate the Plan; *provided, however*, that no such amendment or termination shall reduce Plan benefits which accrued prior to such amendment or termination without the prior written consent of each person entitled to receive benefits under the Plan who is adversely affected by such action; and, *provided further*, that the Plan shall not be amended more frequently than once every six months, other than to comply with changes in the Internal Revenue Code, the Employee Retirement Income Security Act, or the rules promulgated thereunder.

Notwithstanding the foregoing, no termination or amendment of this Plan may accelerate payment of post-2004 benefits to any Participant except under the following conditions:

(1) The Company may terminate and liquidate the Plan within 12 months of a corporate dissolution taxed under section 331 of the Internal Revenue Code, or with the approval of a bankruptcy court pursuant to 11 U.S.C. §503(b)(1)(A), provided that the amounts deferred under the Plan are included in the Participants' gross incomes in the latest of the following years (or, if earlier the taxable year in which the amount is actually or constructively received): (a) the calendar year in which the Plan termination and liquidation occurs; (b) the first calendar year in which the amount is no longer subject to a substantial risk of forfeiture; or (c) the first calendar year in which the payment is administratively practicable.

(2) The Company may terminate and liquidate the Plan pursuant to irrevocable action taken by the Board of Directors within the 30 days preceding or the 12 months following a change in control event (as defined in Treasury Regulation §1.409A-3(i)(5)), provided that this paragraph will only apply to a payment under a plan if all agreements, methods, programs,

and other arrangements sponsored by the Company immediately after the time of the change in control event with respect to which deferrals of compensation are treated as having been deferred under a single plan under Treasury Regulation §1.409A-1(c)(2) are terminated and liquidated with respect to each Participant that experienced the change in control event, so that under the terms of the termination and liquidation all such participants are required to receive all amounts of compensation deferred under the terminated agreements, methods, programs and other arrangements within 12 months of the date the Company irrevocably takes all necessary action to terminate and liquidate the agreements, methods, programs, and other arrangements.

(3) The Company may terminate and liquidate the Plan, provided that (a) the termination and liquidation does not occur proximate to a downturn in the financial health of the Company; (b) the Company terminates and liquidates all agreements, methods, programs, and other arrangements sponsored by the Company that would be aggregated with any terminated and liquidated agreements, methods, programs, and other arrangements under Treasury Regulation §1.409-1(c) if any Participant had deferrals of compensation under all of the agreements, methods, programs, and other arrangements that are terminated and liquidated; (c) no payments in liquidation of the Plan are made within 12 months of the date the Company takes all necessary action to irrevocably terminate and liquidate the Plan other than payments that would be payable under the terms of the Plan if the action to terminate and liquidate the Plan had not occurred; (d) all payments are made within 24 months of the date the Company takes all necessary action to irrevocably terminate and liquidate the Plan; and (e) the Company does not adopt a new plan that would be aggregated with any terminated and liquidated plan under Treasury Regulation §1.409A-1(c) if the same service provider participated in both plans, at any time within three years following the date the service recipient takes all necessary action to irrevocably terminate and liquidate the Plan.

14. Plan Unfunded, Rights Unsecured. With respect to the Equity Participation Account and the Retainer Deferral Account, the Plan is unfunded. Each Account under the plan represents only a general contractual conditional obligation of the Company to pay in cash or shares of Common Stock the balance thereof in accordance with the provisions of the Plan. All Restricted Stock Units or shares of Common Stock granted or payable under the Plan will be made from and pursuant to the Company’s 2008 Performance Plan, or any successor equity compensation plan.

15. Assignability. All payments under the Plan shall be made only to the Participant or his or her duly designated Beneficiary (in the event of his or her death). Except pursuant to Section 12 or the laws of descent and distribution and except as may be required by law, the right to receive payments under the Plan may not be assigned or transferred by, and are not subject to the claims of creditors of, any Participant or his or her Beneficiary during his or her lifetime.

16. Change in the Common Stock. In the event of any stock dividend, stock split, recapitalization, merger, split-up or other change affecting the Common Stock of the Company, the Units in each Account shall be adjusted in the same manner and proportion as the change to the Common Stock.

17. Quarterly Statements of Accounts - Valuation. Each calendar quarter the Company will prepare and send to each Participant a statement reporting the status of his or her Account or Accounts

and Restricted Stock Units as of the close of business on the last business day of the prior calendar quarter. To the extent an Account is denominated in Units, the value of the Units and Restricted Stock Units will be reported at the Fair Market Value of the Common Stock on the relevant valuation date.

18. No Other Rights. Neither the establishment of the Plan, nor any action taken thereunder, shall in any way obligate the Company to nominate an Outside Director for re-election or continue to retain an Outside Director on the Board or confer upon any Outside Director any other rights in respect of the Company.

19. Successors of the Company. The Plan shall be binding upon any successor to the Company, whether by merger, acquisition, consolidation or otherwise.

20. Law Governing. The Plan shall be governed by the laws of the State of Ohio.

EXHIBIT 21.1

SUBSIDIARIES OF THE REGISTRANT (1) (2) (3)

The subsidiary companies of The Goodyear Tire & Rubber Company at December 31, 2019, and the places of incorporation or organization thereof, are:

NAME OF SUBSIDIARY	PLACE OF INCORPORATION OR ORGANIZATION
UNITED STATES	
Celeron Corporation	Delaware
Divested Atomic Corporation	Delaware
Divested Companies Holding Company	Delaware
Divested Litchfield Park Properties, Inc.	Arizona
Goodyear Export Inc.	Delaware
Goodyear Farms, Inc.	Arizona
Goodyear International Corporation	Delaware
Goodyear Western Hemisphere Corporation	Delaware
Laurelwood Properties, Inc.	Delaware
Raben Tire Co., LLC	Indiana
Retreading L, Inc.	Delaware
Retreading L, Inc. of Oregon	Oregon
T&WA, Inc.	Kentucky
Wingfoot Corporation	Delaware

NAME OF SUBSIDIARY	PLACE OF INCORPORATION OR ORGANIZATION
INTERNATIONAL	
Airship Comercio de Produtos de Borracha e Participacoes Societarias Ltda	Brazil
C.A. Goodyear de Venezuela	Venezuela
+Compania Goodyear del Peru, S.A.	Peru
+DNA (Housemarks) Limited	England
Dunglaide Limited	England
Dunlop Grund und Service Verwaltungs GmbH	Germany
Dunlop Tyres Limited	England
Fonds de Pension Goodyear ASBL	Luxembourg
GD Handelssysteme GmbH	Germany
GD Versicherungsservice GmbH	Germany
G.I.E. Goodyear Mireval	France
Goodyear Australia Pty Limited	Australia
Goodyear Baltic OU	Estonia
Goodyear Belgium N.V./SA	Belgium
Goodyear Canada Inc.	Canada
Goodyear Czech s.r.o.	Czech Republic
Goodyear Dalian Tire Company Ltd.	China
Goodyear Danmark A/S	Denmark
Goodyear de Chile S.A.I.C.	Chile
Goodyear de Colombia S.A.	Colombia
Goodyear do Brasil Produtos de Borracha Ltda	Brazil
Goodyear & Dunlop Tyres (Australia) Pty Ltd	Australia
Goodyear & Dunlop Tyres (NZ)	New Zealand
Goodyear Dunlop Sava Tires d.o.o.	Slovenia
Goodyear Dunlop Tires Amiens Sud SAS	France
Goodyear Dunlop Tires Austria GmbH	Austria
Goodyear Dunlop Tires Germany GmbH	Germany
Goodyear Dunlop Tires Ireland (Pension Trustees) Ltd.	Ireland
Goodyear Dunlop Tires Manufacturing GmbH & Co. KG	Germany
Goodyear Dunlop Tires Operations S.A.	Luxembourg
+Goodyear Dunlop Tires Operations Romania S.r.L.	Romania
Goodyear Dunlop Tires Polska Sp. z.o.o.	Poland
Goodyear Dunlop Tires Suisse S.A.	Switzerland
Goodyear Dunlop Tires Ukraine	Ukraine
Goodyear Dunlop Tyres UK (Pension Trustees) Limited	England
Goodyear Earthmover Pty Ltd	Australia
Goodyear Europe B.V.	Netherlands
Goodyear Finland OY	Finland
Goodyear France SAS	France
Goodyear Hellas S.A.I.C.	Greece
Goodyear Holdings Sarl	Luxembourg
Goodyear Hungary Kft.	Hungary
+Goodyear India Ltd	India

NAME OF SUBSIDIARY	PLACE OF INCORPORATION OR ORGANIZATION
Goodyear Industrial Rubber Products Ltd	England
Goodyear Italiana S.p.A.	Italy
+Goodyear Jamaica Limited	Jamaica
Goodyear Korea Company	South Korea
+Goodyear Lastikleri TAS	Turkey
+Goodyear Malaysia Berhad	Malaysia
Goodyear Maroc S.A.	Morocco
Goodyear Middle East FZE	Dubai
Goodyear Nederland B.V.	Netherlands
Goodyear Norge A/S	Norway
Goodyear Orient Company Private Limited	Singapore
+Goodyear Philippines, Inc.	Philippines
Goodyear Portugal Unipessoal, Ltda	Portugal
Goodyear Regional Business Services Inc.	Philippines
Goodyear Romania S.r.L.	Romania
Goodyear Russia LLC	Russia
Goodyear S.A.	Luxembourg
Goodyear Servicios y Asistencia Tecnica S. de R.L. de C.V.	Mexico
Goodyear Servicios Comerciales S. de R.L. de C.V.	Mexico
Goodyear (Shanghai) Trading Company Limited	China
Goodyear Slovakia s.r.o.	Slovakia
Goodyear-SLP, S. de R.L. de C.V.	Mexico
Goodyear South Africa (Pty) Ltd	South Africa
Goodyear South Asia Tyres Private Limited	India
Goodyear Sverige A.B.	Sweden
+Goodyear Taiwan Limited	Taiwan
+Goodyear (Thailand) Public Company Limited	Thailand
Goodyear Tire Management Company (Shanghai) Ltd.	China
Goodyear Tires Espana S.A.	Spain
Goodyear Tires Italia SpA	Italy
Goodyear Tyre and Rubber Holdings (Pty) Ltd	South Africa
Goodyear Tyres Ireland Ltd	Ireland
Goodyear Tyres Pty Ltd	Australia
Goodyear Tyres UK Limited	England
Goodyear Tyres Vietnam LLC	Vietnam
Goodyear Ventech GmbH	Germany
GY Tire Kitakanto Kabushiki Kaisha	Japan
Hi-Q Automotive (Pty) Ltd	South Africa
Kabushiki Kaisha Goodyear Aviation Japan	Japan
Kabushiki Kaisha Tohoku GY	Japan
Kelly-Springfield Tyre Company Ltd	England
Kettering Tyres Ltd	England
Luxembourg Mounting Center S.A.	Luxembourg
Mercury Participacoes Ltda	Brazil

NAME OF SUBSIDIARY	PLACE OF INCORPORATION OR ORGANIZATION
Motorway Tyres & Accessories (UK) Limited	England
Neumaticos Goodyear S.r.L.	Argentina
Nippon Giant Tyre Kabushiki Kaisha	Japan
Nippon Goodyear Kabushiki Kaisha	Japan
+P.T. Goodyear Indonesia Tbk	Indonesia
Rossal No 103 (Pty) Ltd	South Africa
SACRT Trading Pty Ltd	Australia
Saudi Goodyear Management Consulting Co.	Saudi Arabia
Sava Trade d.o.o.	Croatia
Snella Auto SAS	France
SP Brand Holding EEIG	Belgium
+Tire Company Debica S.A.	Poland
Tredcor (Kenya) Limited	Kenya
Tren Tyre Holdings (Pty) Ltd	South Africa
+Trentyre (Lesotho) (Pty) Ltd	Lesotho
+Trentyre (Pty) Ltd	South Africa
Tyre Services Great Britain Limited	England
Vulcan Participacoes Ltda	Brazil
Vulco Developpement	France
Vulco Truck Services	France
Weeting Tyres Limited	England
Wingfoot Insurance Company Limited	Bermuda
WTL Suffolk Limited	England
4 Fleet Group GmbH	Germany

(1) Each of the subsidiaries named in the foregoing list conducts its business under its corporate name and, in a few instances, under a shortened form of its corporate name or in combination with a trade name.

(2) Each of the subsidiaries named in the foregoing list is directly or indirectly wholly-owned by the Registrant, except that in respect of each of the following subsidiaries (marked by a plus preceding its name) the Registrant directly or indirectly owns the indicated percentage of such subsidiary's equity capital: Compania Goodyear del Peru, S.A., 99.44%; DNA (Housemarks) Limited, 98%; Goodyear Dunlop Tires Operations Romania S.r.L., 99.9%; Goodyear India Ltd., 74%; Goodyear Jamaica Limited, 60%; Goodyear Lastikleri TAS, 74.6%; Goodyear Malaysia Berhad, 51%; Goodyear Philippines, Inc., 88.54%; Goodyear Taiwan Limited, 94.22%; Goodyear (Thailand) Public Company Limited, 66.79%; P.T. Goodyear Indonesia Tbk, 85%; Tire Company Debica S.A., 87.25%; Trentyre (Lesotho) (Pty) Ltd, 69.93%; and Trentyre (Pty) Ltd, 69.93%.

(3) Except for C.A. Goodyear de Venezuela and Wingfoot Corporation, at December 31, 2019, the Registrant did not have any majority owned subsidiaries that were not consolidated.

EXHIBIT 23.1

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in the Registration Statements on Form S-8 (Nos. 333-219603, 333-190252, 333-177752, 333-150405, 333-141468, 333-126566, and 333-126565) of The Goodyear Tire & Rubber Company of our report dated February 11, 2020 relating to the financial statements and financial statement schedule and the effectiveness of internal control over financial reporting, which appears in this Form 10-K.

/s/ PricewaterhouseCoopers LLP
PricewaterhouseCoopers LLP
Cleveland, Ohio
February 11, 2020

THE GOODYEAR TIRE & RUBBER COMPANY

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS, that the undersigned directors of THE GOODYEAR TIRE & RUBBER COMPANY, a corporation organized and existing under the laws of the State of Ohio (the "Company"), hereby constitute and appoint DARREN R. WELLS, EVAN M. SCOCOS and DANIEL T. YOUNG, and each of them, their true and lawful attorneys-in-fact and agents, each one of them with full power and authority to sign the names of the undersigned directors to the Company's Annual Report to the Securities and Exchange Commission on Form 10-K for its fiscal year ended December 31, 2019, and to any and all amendments, supplements and exhibits thereto and any other instruments filed in connection therewith; provided, however, that said attorneys-in-fact shall not sign the name of any director unless and until the Annual Report shall have been duly executed by the officers of the Company then serving as the chief executive officer of the Company, the principal financial officer of the Company and the principal accounting officer of the Company; and each of the undersigned hereby ratifies and confirms all that the said attorneys-in-fact and agents, or any one or more of them, shall do or cause to be done by virtue hereof.

IN WITNESS WHEREOF, the undersigned have subscribed these presents this 3rd day of December, 2019.

/s/ James A. Firestone	/s/ Werner Geissler
James A. Firestone, Director	Werner Geissler, Director
/s/ Peter S. Hellman	/s/ Laurette T. Koellner
Peter S. Hellman, Director	Laurette T. Koellner, Director
/s/ Richard J. Kramer	/s/ W. Alan McCollough
Richard J. Kramer, Director	W. Alan McCollough, Director
/s/ John E. McGlade	/s/ Roderick A. Palmore
John E. McGlade, Director	Roderick A. Palmore, Director
/s/ Stephanie A. Streeter	/s/ Thomas H. Weidemeyer
Stephanie A. Streeter, Director	Thomas H. Weidemeyer, Director
/s/ Michael R. Wessel	/s/ Thomas L. Williams
Michael R. Wessel, Director	Thomas L. Williams, Director

EXHIBIT 31.1

CERTIFICATION

I, Richard J. Kramer, certify that:

1. I have reviewed this Annual Report on Form 10-K of The Goodyear Tire & Rubber Company;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

    a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

    b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

    c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

    d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

    a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

    b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 11, 2020

/s/ RICHARD J. KRAMER

Richard J. Kramer
Chairman of the Board, President and Chief Executive Officer
(Principal Executive Officer)

EXHIBIT 31.2

CERTIFICATION

I, Darren R. Wells, certify that:

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

Date: February 11, 2020

/s/ DARREN R. WELLS

Darren R. Wells
Executive Vice President and Chief Financial Officer
(Principal Financial Officer)

EXHIBIT 32.1

CERTIFICATION
Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
(Subsections (a) and (b) of Section 1350, Chapter 63 of Title 18, United States Code)

Pursuant to Section 1350, Chapter 63 of Title 18, United States Code, each of the undersigned officers of The Goodyear Tire & Rubber Company, an Ohio corporation (the "Company"), hereby certifies with respect to the Annual Report on Form 10-K of the Company for the year ended December 31, 2019 as filed with the Securities and Exchange Commission (the "10-K Report") that to his knowledge:

(1) the 10-K Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) the information contained in the 10-K Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Dated: February 11, 2020

/s/ RICHARD J. KRAMER

Richard J. Kramer
Chairman of the Board, President and Chief Executive Officer
The Goodyear Tire & Rubber Company

Dated: February 11, 2020

/s/ DARREN R. WELLS

Darren R. Wells
Executive Vice President and Chief Financial Officer
The Goodyear Tire & Rubber Company