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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, 2018

Commission File Number: 1-1927

THE GOODYEAR TIRE & RUBBER COMPANY

(Exact name of registrant as specified in its charter)

Ohio

(State or other jurisdiction of incorporation or organization)

200 Innovation Way, Akron, Ohio

34-0253240 (I.R.S. Employer Identification No.)

44316-0001 (Zip Code)

(Address of Principal Executive Offices)

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

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

Title of Each Class

Common Stock, Without Par Value

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.

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 🔽 Yes o

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 o

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 o

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. o

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):

Non-accelerated filer o

Large accelerated filer 🗵

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).

Accelerated filer o

No 🗹 Yes o

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 29, 2018, was approximately \$5.5 billion.

Shares of Common Stock, Without Par Value, outstanding at January 31, 2019:

232,197,396

DOCUMENTS INCORPORATED BY REFERENCE:

Portions of the Company's Proxy Statement for the Annual Meeting of Shareholders to be held on April 8, 2019 are incorporated by reference in Part III.

Name of Each Exchange

on Which Registered

The Nasdaq Stock Market LLC

Smaller reporting company o

Emerging growth company o

THE GOODYEAR TIRE & RUBBER COMPANY

Annual Report on Form 10-K

For the Fiscal Year Ended December 31, 2018

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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 2018, our net sales were \$15,475 million and Goodyear's net income was \$693 million. Together with our U.S. and international subsidiaries, 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 tire and auto service center outlets where we offer our products for retail sale and provide automotive 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 64,000 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, 2018, 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 2018, and 87% of our sales in 2017 and 2016 were for new tires. Sales of chemical products and natural rubber to unaffiliated customers were 4% in 2018, and 3% in 2017 and 2016, of our consolidated sales (7%, 6% and 5% of Americas total sales in 2018, 2017 and 2016, respectively). The percentages of each segment's sales attributable to new tires during the periods indicated were:

	Year Ended December 31,				
Sales of New Tires By	2018	2017	2016		
Americas	79%	81%	82%		
Europe, Middle East and Africa	94	94	94		
Asia Pacific	91	90	89		

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)	2018	2017	2016					
Americas	70.9	70.9	74.1					
Europe, Middle East and Africa	57.8	57.1	61.1					
Asia Pacific	30.5	31.2	30.9					
Goodyear worldwide tire units	159.2	159.2	166.1					

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

GOODYEAR'S ANNUAL TIRE UNIT SALES - REPLACEMENT AND OE

(In millions of tires)	2018	2017	2016
Replacement tire units	115.1	113.5	117.3
OE tire units	44.1	45.7	48.8
Goodyear worldwide tire units	159.2	159.2	166.1

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, 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 brand 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 for 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 highperformance segment; the Wrangler family of product lines for the sport utility vehicle and light truck segments; and the Ultra Grip family of winter tires. Additionally, we offer Dunlop brand radial tire lines including Signature HP, SP Sport and Direzza for the passenger and performance segment; 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, Edge AT and Safari TSR. Goodyear's 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 website, www.goodyear.com,
- 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 190 Company-owned 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 2018, Americas launched four new consumer tires under the Goodyear brand, the Goodyear Assurance MaxLife, Goodyear Assurance Outlast, Goodyear Cargo Marathon 2 and the Goodyear Eagle Enforcer. Americas also launched the Kelly Edge HT in the Kelly brand family. Americas commercial truck tire business launched eight new tires under the Goodyear Endurance, Goodyear Fuel Max, Goodyear Marathon, Goodyear Armor Max and Goodyear Urban Max lines to service our long haul, regional, mixed service and city service customers.

During the third quarter of 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)	2018 2017 2016				
Replacement tire units	53.8	53.5	55.0		
OE tire units	17.1	17.4	19.1		
Total tire units	70.9	70.9	74.1		

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, Pirelli, and imports from other regions, primarily Asia.

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

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, among other things, to

remedy tire safety defects without charge for five years and comply with revised and more rigorous tire testing standards. NHTSA is also in the process of establishing national tire labeling regulations, under which certain tires sold in the United States will be required to be rated for rolling resistance, traction and tread wear.

Our Brazilian operations are subject to a tire certification and labeling regulation which requires that consumers be informed about rolling resistance, wet grip braking and noise characteristics. The tire certification and labeling regulation applies to all radial passenger car, light truck and commercial truck tires sold in Brazil.

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 2018, EMEA launched a number of new consumer tires under the Goodyear, Dunlop, Debica, Sava and Fulda brands, including our new Goodyear Eagle F1 Asymmetric 3 SUV, Dunlop Sport Maxx RT2 SUV and Debica Frigo SUV2. EMEA also introduced a number of commercial truck tires including the KMax, Fuel Max Performance and Omnitrac.

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)	2018	2017	2016					
Replacement tire units	42.9	41.4	43.8					
OE tire units	14.9	15.7	17.3					
Total tire units	57.8	57.1	61.1					

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 50 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 2018, Asia Pacific released two new consumer tires under the Goodyear brand, the Goodyear Assurance TripleMax 2 for all markets and the Goodyear EfficientGrip Comfort for the Japanese market. In addition, Asia Pacific began importing the Eagle F1 Asymmetric 3 SUV and Assurance Weather Ready in SUV sizes into the Japanese all-season market. Asia Pacific also launched two commercial tires, the Goodyear S800 RFID for urban fleets and the Goodyear S206 Fuel Max targeting logistics fleets.

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)	2018	2017	2016			
Replacement tire units	18.4	18.6	18.5			
OE tire units	12.1	12.6	12.4			
Total tire units	30.5	31.2	30.9			

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 2019, 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 1,200 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 8,400 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, 2018, we employed approximately 64,000 full-time and temporary people throughout the world, including approximately 38,000 people covered under collective bargaining agreements. Approximately 7,000 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 15,000 of our employees outside of the United States are covered by union contracts that currently have expired or that will expire in 2019, primarily in Luxembourg, China, South Africa, France and Turkey. 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 \$40 million annually in 2019 and 2020.

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.

EXECUTIVE OFFICERS OF THE REGISTRANT

Set forth below are: (1) the names and ages of all executive officers of the Company at February 8, 2019, (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						
Richard J. Kramer Chairman of the Board, Chief Executive Officer and President						
Company. Mr. Kramer joined Goodyear in March	and President in April 2010 and Chairman in October 2010. He is the principal executive 2000 and has served as Executive Vice President and Chief Financial Officer (June 2004 to ry 2010) and Chief Operating Officer (June 2009 to April 2010).					
Darren R. Wells	Executive Vice President and Chief Financial Officer	53				
Mr. Wells was named Executive Vice President and Chief Financial Officer on September 19, 2018. He is Goodyear's principal financial officer. Mr. Well previously served as Goodyear's Executive Vice President and Chief Financial Officer from October 2008 to November 2013. He first joined Goodyear August 2002 and has also served as President, Europe, Middle East and Africa (December 2013 to December 2015). Prior to rejoining Goodyear, Mr. Well 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	53				
	in January 2016. He is the executive officer responsible for Goodyear's operations in Nor n 1988 and has served as President, North America (August 2011 to December 2015).	th, Central and				
Christopher R. Delaney	President, Europe, Middle East and Africa	57				
Europe, the Middle East and Africa. Mr. Delaney (January 2016 to September 2017). Prior to joinin	le East and Africa in September 2017. He is the executive officer responsible for Goodyear joined Goodyear as President-Elect, Asia Pacific in August 2015, and has served as Presiden og Goodyear, Mr. Delaney was Chief Executive Officer and Managing Director of Goodman d and the Asia Pacific region, from July 2011 until March 2015.	nt, Ásia Pacific				

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 Vice President, North America Consumer Operations and Customer Development (January 2012 to August 2014) and President, North America Consumer (September 2014 to September 2017).

Jonathan Bellissimo 63 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 June 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).

David L. Bialosky Senior Vice President, General Counsel and Secretary Mr. Bialosky joined Goodyear as Senior Vice President, General Counsel and Secretary in September 2009. He is Goodyear's chief legal officer.

Laura P. Duda

Ryan G. Patterson

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 Goodvear 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.

Senior Vice President, Global Communications

President, Asia Pacific

Senior Vice President, Global Operations and Technology

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Name	Position(s) Held	Age
Gary S. VanderLind	Senior Vice President, Global Human Resources	56
Mr. VanderLind was named Senior Vice Presid	dent, Global Human Resources effective February 1, 2019. He is Goodyear's chief human res	ources officer.
Mr. VanderLind joined Goodyear in October 1	985 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).

Christopher P. HelselVice President and Chief Technology Officer53Mr. Helsel was named Vice President and Chief Technology Officer in September 2017 and became an executive officer of Goodyear effective January 1,
2019. He is the executive officer responsible for Goodyear's global research and development activities. Mr. Helsel joined Goodyear in June 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).

Evan M. Scocos

Vice President and Controller

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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 Assistant Controller (May 2013 to March 2014) and 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 2018, 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, and volatility in emerging markets, including softening industry conditions in China. 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. We are also undertaking significant capital investments in building, expanding and modernizing manufacturing facilities around the world, including a new manufacturing facility in San Luis Potosi, Mexico that is expected to be fully operational by the end of 2019. The failure to implement successfully our important strategic initiatives may materially adversely affect our operating results, financial condition and liquidity.

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.

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. We plan to alleviate these constraints 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, 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 7,000 employees in the United States at December 31, 2018, and expires in July 2022. In addition, approximately 15,000 of our employees outside of the United States are covered by union contracts that have expired or are expiring in 2019, primarily in Luxembourg, China, South Africa, France and Turkey. 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, 2018, foreign currency translation unfavorably affected sales by \$139 million and unfavorably affected segment operating income by \$31 million compared to the year ended December 31, 2017. 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 2018, particularly in Americas 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 2018, 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 China, India, 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, 2018, our debt (including capital leases) on a consolidated basis was approximately \$5.8 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 our share repurchase program and 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 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, 2018, we had \$1,887 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 the Note to the Consolidated Financial Statements, No. 19, Commitments and Contingent Liabilities. 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. In addition, while we believe that our tires are free from design and manufacturing defects, 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 will preempt 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. 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.

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 87% during 2018 compared to approximately 84% in 2017 and 85% in 2016. 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 180 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, Leased Assets. 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.

ITEM 3. LEGAL PROCEEDINGS.

Asbestos Litigation

We are currently one of numerous defendants in legal proceedings in certain state and federal courts involving approximately 43,100 claimants at December 31, 2018 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 \$13 million during 2018. 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.

Amiens Labor Claims

Approximately 850 former employees of the closed Amiens, France manufacturing facility have asserted wrongful termination or other claims totaling €120 million (\$137 million) against 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 our current directors, our current 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.

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, 2018, there were 12,969 holders of record of the 232,171,043 shares of our common stock then outstanding.

On October 9, 2018, we increased the quarterly cash dividend on our common stock by \$0.02 per share, from \$0.14 per share to \$0.16 per share, beginning with the December 3, 2018 payment date.

The following table presents information with respect to repurchases of common stock made by us during the three months ended December 31, 2018.

Period	Total Number of Shares Purchased (1)	Average Price Paid Per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	Approximate Dollar Value of Shares that May Yet Be Purchased Under the Plans or Programs (2)
10/1/18-10/31/18	—	\$ —	—	\$ 586,495,842
11/1/18-11/30/18	561,737	22.29	561,737	573,973,355
12/1/18-12/31/18	334,981	22.32	334,981	566,495,842
Total	896,718	\$ 22.30	896,718	566,495,842

(1) Total number of shares purchased as part of our common stock repurchase program and 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.

(2) On September 18, 2013, the Board of Directors approved our common stock repurchase program. From time to time, the Board of Directors has approved increases in the amount authorized to be purchased under that program. On February 2, 2017, the Board of Directors approved a further increase in that authorization to \$2.1 billion. This program expires on December 31, 2019, and is intended to be used, subject to our cash flow, to repurchase shares of common stock in open market transactions in order to offset new shares issued under equity compensation programs and to provide for additional shareholder returns. During the three month period ended December 31, 2018, we repurchased 896,718 shares at an average price, including commissions, of \$22.30 per share, or \$20 million in the aggregate. 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.

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, 2018.

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	5,580,452	\$ 20.14	16,211,852 ⁽¹⁾
Equity compensation plans not approved by shareholders	—	—	
Total	5,580,452	\$ 20.14	16,211,852

(1) Under our equity-based compensation plans, up to a maximum of 987,566 performance shares in respect of performance periods ending on or subsequent to December 31, 2018, 103,492 shares of time-vested restricted stock and 1,388,433 restricted stock units have been awarded. In addition, up to 6,787 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.

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ITEM 6. SELECTED FINANCIAL DATA.

	Year Ended December 31, ⁽¹⁾								
(In millions, except per share amounts)		2018 ⁽²⁾		2017 ⁽³⁾		2016 ⁽⁴⁾	 2015 ⁽⁵⁾		2014(6)
Net Sales	\$	15,475	\$	15,377	\$	15,158	\$ 16,443	\$	18,138
Net Income		708		365		1,284	376		2,521
Less: Minority Shareholders' Net Income		15		19		20	69		69
Goodyear Net Income	\$	693	\$	346	\$	1,264	\$ 307	\$	2,452
Less: Preferred Stock Dividends		—		—		—	—		7
Goodyear Net Income available to Common Shareholders	\$	693	\$	346	\$	1,264	\$ 307	\$	2,445
Goodyear Net Income available to Common Shareholders — Per Share of Common Stock:	2								
Basic	\$	2.92	\$	1.39	\$	4.81	\$ 1.14	\$	9.13
Diluted	\$	2.89	\$	1.37	\$	4.74	\$ 1.12	\$	8.78
Cash Dividends Declared per Common Share	\$	0.58	\$	0.44	\$	0.31	\$ 0.25	\$	0.22
Total Assets	\$	16,872	\$	17,064	\$	16,511	\$ 16,391	\$	18,000
Long Term Debt and Capital Leases Due Within One Year		243		391		436	585		148
Long Term Debt and Capital Leases		5,110		5,076		4,798	5,074		6,172
Goodyear Shareholders' Equity		4,864		4,603		4,507	3,920		3,610
Total Shareholders' Equity		5,070		4,850		4,725	4,142		3,845

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

- (2) Goodyear net income in 2018 included net gains after-tax and minority of \$283 million resulting from the TireHub transaction, net of transaction costs; net favorable indirect tax settlements; insurance recoveries for claims related to discontinued operations; and net gains on asset sales. Goodyear net income in 2018 also included net charges after-tax and minority of \$145 million resulting from net discrete income tax items; rationalization charges, including accelerated depreciation and asset write-offs; settlement charges related to pension plans; negative impacts related to hurricanes in the U.S.; the impacts of the adoption of new accounting standards; impacts of the national transportation strike in Brazil; and legal claims related to discontinued operations.
- (3) Goodyear net income in 2017 included net charges after-tax and minority of \$460 million resulting from net discrete income tax items; rationalization charges, including accelerated depreciation and asset write-offs; charges related to the early repayment of debt; negative impacts related to hurricanes in the U.S.; and settlement charges related to pension plans. Goodyear net income in 2017 also included net gains after-tax and minority of \$16 million resulting from net gains on asset sales; and insurance recoveries for claims related to discontinued products.
- (4) Goodyear net income in 2016 included net gains after-tax and minority of \$499 million resulting from net discrete income tax items; net gains on asset sales; and insurance recoveries for claims related to discontinued products. Goodyear net income in 2016 also included net charges after-tax and minority of \$301 million due to rationalization charges, including accelerated depreciation and asset write-offs; charges related to the early repayment of debt; settlement charges related to pension plans in EMEA; an out of period adjustment in Americas related to the elimination of intracompany profit; and legal claims unrelated to operations.
- (5) Goodyear net income in 2015 included net charges after-tax and minority of \$794 million due to the loss on the deconsolidation of our Venezuelan subsidiary; rationalization charges, including accelerated depreciation and asset write-offs; settlement charges related to pension plans in Americas; charges related to the early repayment of debt; and charges related to labor claims with respect to a previously closed facility in Greece. Goodyear net income in 2015 also included net gains after-tax and minority of \$195 million resulting from royalty income related to the termination of a licensing agreement; the net gain on the dissolution of the global alliance with Sumitomo Rubber Industries, Ltd. ("SRI"); the net gain on the sale of our investment in SRI's shares; net discrete income tax items; insurance recoveries for claims related to discontinued products; and the net settlement of certain indirect tax claims in Americas.

(6) Goodyear net income in 2014 included net gains after-tax and minority of \$1,985 million resulting from net discrete income tax items, including the release of substantially all of the valuation allowance on our net deferred U.S. tax assets; and net gains on asset sales. Goodyear net income in 2014 also included net charges after-tax and minority of \$323 million due to changes in the exchange rate of the Venezuelan bolivar fuerte against the U.S. dollar; rationalization charges, including accelerated depreciation and asset write-offs; curtailment and settlement losses related to pension plans in the U.S. and the U.K.; charges related to labor claims with respect to a previously closed facility in Greece; charges related to a government investigation in Africa; and the settlement of certain indirect tax claims in Americas.

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.

During the third quarter of 2018, we formed a 50/50 joint venture with Bridgestone that combined our company-owned wholesale distribution business and Bridgestone's tire wholesale warehouse business to create TireHub, a national tire distributor in the United States. TireHub provides U.S. tire dealers and retailers with a comprehensive range of passenger and light truck tires from two of the world's leading tire companies, with an emphasis on satisfying the rapidly growing demand for larger rim diameter premium tires. TireHub is now our sole authorized national tire distributor in the United States.

TireHub has distribution and warehouse locations throughout the United States and is expected to have the scale to reach the vast majority of retail locations in the U.S. daily. TireHub is also expected to provide a superior, fully integrated distribution, warehousing, sales and delivery solution that is expected to provide enhanced fill rates and turnaround times — enabling dealers to quickly access the products they need and manage the growing complexity in the tire business driven by SKU proliferation.

Results of Operations

In 2018, we experienced challenging global industry conditions, including higher raw material costs, foreign currency headwinds due to a strong U.S. dollar, and volatility in emerging markets, including softening industry conditions in China. We experienced a recovery in demand for consumer replacement tires in the United States and Europe, driven by our sales of 17-inch and above rim size tires that outperformed the industry.

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.

We also announced an increase in the quarterly cash dividend on our common stock, from \$0.14 per share to \$0.16 per share, beginning with the December 3, 2018 payment date.

Our tire unit shipments in 2018 were consistent with 2017. In 2018, we realized approximately \$301 million of cost savings, including raw material cost saving measures of approximately \$80 million, which exceeded the impact of general inflation. Our raw material costs, including cost saving measures, increased by approximately 4% in 2018 compared to 2017.

Net sales were \$15,475 million in 2018, compared to \$15,377 million in 2017. Net sales increased in 2018 primarily due to an increase in price and product mix, partially offset by unfavorable foreign currency translation, primarily in Americas.

Goodyear net income in 2018 was \$693 million, or \$2.89 per diluted share, compared to \$346 million, or \$1.37 per diluted share, in 2017. The increase in Goodyear net income in 2018 was driven by the net gain recognized in relation to the TireHub transaction, a decrease in income tax expense, primarily due to the recognition of discrete tax charges in 2017 in connection with changes in U.S. income tax law, and lower rationalization charges. These increases were partially offset by lower segment operating income, primarily in Americas and Asia Pacific.

Our total segment operating income for 2018 was \$1,274 million, compared to \$1,556 million in 2017. The \$282 million, or 18.1%, decrease in segment operating income was primarily due to the impact of higher raw material costs, lower income in other tire-related businesses, higher selling, administrative and general expense ("SAG"), unfavorable foreign currency translation, primarily in Americas, and decreases in price and product mix, primarily in Americas. These impacts were partially offset by lower conversion costs. Refer to "Results of Operations — Segment Information" for additional information.

Liquidity

At December 31, 2018, we had \$801 million in Cash and cash equivalents as well as \$3,151 million of unused availability under our various credit agreements, compared to \$1,043 million and \$3,196 million, respectively, at December 31, 2017. Cash flows from operating activities of \$916 million, which are driven by the profitability of our SBUs, together with net borrowings of \$135 million were used to fund capital expenditures of \$811 million, common stock repurchases of \$220 million and dividends paid on our common stock of \$138 million. Refer to "Liquidity and Capital Resources" for additional information.

Outlook

We expect to continue to experience challenging global industry conditions, including higher raw material costs, foreign currency headwinds and volatility in emerging markets, in 2019. We expect to see benefits from the ramp-up of our new Americas manufacturing facility and TireHub, pricing actions that we implemented in 2018, and continued strong performance in our sales of 17-inch and above consumer replacement tires.

For the full year of 2019, we expect our raw material costs will be up approximately \$300 million compared to 2018, excluding raw material cost saving measures. Natural and synthetic rubber prices and other commodity prices historically have experienced significant volatility, 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.

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).

2018 Compared to 2017

Goodyear net income in 2018 was \$693 million, or \$2.89 per share, compared to \$346 million, or \$1.37 per share, in 2017. The increase in Goodyear net income in 2018 was driven by the net gain recognized in relation to the TireHub transaction, a decrease in income tax expense, primarily due to the recognition of discrete tax charges in 2017 in connection with changes in U.S. income tax law, and lower rationalization charges. These increases were partially offset by lower segment operating income, primarily in Americas and Asia Pacific.

Net Sales

Net sales in 2018 of \$15,475 million increased \$98 million, or 0.6%, compared to \$15,377 million in 2017, primarily due to an increase in price and product mix of \$217 million, partially offset by unfavorable foreign currency translation of \$139 million, primarily in Americas. Goodyear worldwide tire unit net sales were \$13,197 million and \$12,958 million in 2018 and 2017, respectively. Consumer and commercial net sales were \$9,167 million and \$3,002 million, respectively, in 2018. Consumer and commercial net sales were \$9,285 million and \$2,928 million, respectively, in 2017.

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

	Year Ended December 31,			
(In millions of tires)	2018	2017	% Change	
Replacement Units				
United States	38.9	38.3	1.6 %	
International	76.2	75.2	1.3 %	
Total	115.1	113.5	1.5 %	
OE Units				
United States	13.2	13.7	(3.6)%	
International	30.9	32.0	(3.4)%	
Total	44.1	45.7	(3.6)%	
Goodyear worldwide tire units	159.2	159.2	— %	

Worldwide tire unit sales in 2018 were consistent with 2017 at 159.2 million units. Replacement tire units increased 1.6 million units, or 1.5%, primarily in EMEA. OE tire units decreased 1.6 million units, or 3.6%, in EMEA, Asia Pacific and Americas. Consumer and commercial unit sales in 2018 were 145.5 million and 11.8 million, respectively. Consumer and commercial unit sales in 2017 were 145.9 million and 11.5 million, respectively.

Cost of Goods Sold

Cost of goods sold ("CGS") was \$11,961 million in 2018, increasing \$281 million, or 2.4%, from \$11,680 million in 2017. CGS was 77.3% of sales in 2018 compared to 76.0% of sales in 2017. CGS in 2018 increased due to higher costs related to product mix of \$238 million, higher raw material costs of \$186 million, higher costs in other tire-related businesses of \$50 million, driven by an increase in raw material prices related to third-party chemical sales in Americas, higher transportation costs of \$18 million, and higher research and development costs of \$14 million. These increases were partially offset by foreign currency translation of \$104 million, primarily in Americas, favorable indirect tax settlements in Brazil of \$53 million, of which \$51 million (\$39 million after-tax and minority) is related to prior years, and lower conversion costs of \$42 million, primarily in EMEA and Americas. CGS in 2018 included pension expense of \$15 million compared to \$16 million in 2017. CGS in 2018 and 2017 also included incremental savings from rationalization plans of \$41 million and \$49 million, respectively.

CGS in 2018 included accelerated depreciation and asset write-offs of \$4 million (\$3 million after-tax and minority). CGS in 2017 included accelerated depreciation and asset write-offs of \$40 million (\$28 million after-tax and minority), primarily related to the closure of our manufacturing facility in Philippsburg, Germany.

Selling, Administrative and General Expense

SAG was \$2,312 million in 2018, increasing \$33 million, or 1.4%, from \$2,279 million in 2017. SAG was 14.9% of sales in 2018 compared to 14.8% of sales in 2017. The increase in SAG was primarily due to inflation, higher advertising costs of \$19 million, and higher product liability costs of \$14 million. These increases were partially offset by lower wages and benefits of \$48 million, primarily related to lower incentive compensation and savings from rationalization plans. SAG in 2018 included pension expense of \$17 million compared to \$19 million in 2017. SAG in 2018 and 2017 also included incremental savings from rationalization plans of \$34 million, respectively.

Rationalizations

We recorded net rationalization charges of \$44 million (\$32 million after-tax and minority) in 2018. Net rationalization charges include charges of \$31 million related to global plans to reduce SAG headcount, \$13 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 included reversals of \$19 million for actions no longer needed for their originally intended purposes.

We recorded net rationalization charges of \$135 million (\$93 million after-tax and minority) in 2017. Net rationalization charges include charges of \$46 million related to plans to reduce manufacturing headcount in EMEA, \$35 million related to the closure of our tire manufacturing facility in Philippsburg, Germany, \$32 million related to global plans to reduce SAG headcount, and \$20 million related to a separate plan to reduce SAG headcount in EMEA.

Upon completion of the 2018 plans, we estimate that annual segment operating income will improve by approximately \$38 million (\$28 million SAG and \$10 million CGS), primarily related to our global plans to reduce SAG headcount. The savings realized in 2018 from rationalization plans totaled \$75 million (\$41 million CGS and \$34 million SAG).

For further information, refer to the Note to the Consolidated Financial Statements No. 3, Costs Associated with Rationalization Programs.

Interest Expense

Interest expense was \$321 million in 2018, decreasing \$14 million from \$335 million in 2017. The decrease was due primarily to a decrease in the average interest rate to 5.16% in 2018 compared to 5.58% in 2017. This decrease was partially offset by higher average debt balances of \$6,218 million in 2018 compared to \$6,001 million in 2017. Interest expense in 2017 included \$6 million (\$4 million after-tax and minority) of expense related to the write-off of deferred financing fees and unamortized discounts related to the redemption of our \$700 million 7% senior notes due 2022.

Other (Income) Expense

Other (Income) Expense in 2018 was income of \$174 million, compared to expense of \$70 million in 2017. The \$244 million change in Other (Income) Expense was primarily due to the net gain recognized on the TireHub transaction, net of transaction costs, of \$272 million (\$206 million after-tax and minority) and interest income on favorable indirect tax settlements in Brazil of \$38 million (\$29 million after-tax and minority). These gains were partially offset by an increase in non-service related pension and other postretirement benefits expense of \$59 million, driven by lower expected returns on pension plan assets of \$32 million.

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. Non-service related pension and other postretirement charges of \$19 million (\$13 million after-tax and minority).

Financing fees and financial instruments expense in 2017 includes a premium of \$25 million (\$15 million after-tax and minority) related to the redemption of our \$700 million 7% senior notes due 2022.

General and product liability (income) expense - discontinued products in 2018 includes a benefit of \$3 million (\$3 million after-tax and minority) as compared to a benefit in 2017 of \$5 million (\$3 million after-tax and minority) for the recovery of past costs from certain asbestos insurers.

Net (gains) losses on asset sales were a gain of \$1 million (\$1 million after-tax and minority) in 2018 as compared to a gain of \$14 million (\$13 million aftertax and minority) in 2017. Net gains (losses) on asset sales in 2017 included a gain of \$6 million related to the sale of a former wire plant site in Luxembourg.

Other (Income) Expense in 2018 included charges of \$12 million (\$12 million after-tax and minority), compared to charges of \$14 million (\$11 million after-tax and minority) in 2017, for hurricane related expenses. Other (Income) Expense in 2018 also included \$4 million (\$3 million after-tax and minority) for legal claims related to discontinued operations.

For further information, refer to the Note to the Consolidated Financial Statements No. 5, Other (Income) Expense.

Income Taxes

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, 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") as discussed below.

During the fourth quarter of 2018, we wrote off \$37 million in deferred tax assets for foreign tax credits that expired during the year and established a valuation allowance of \$98 million against foreign tax credits expiring primarily in 2021, as we have now concluded that it is not more likely than not that we will be able to utilize these credits prior to their expiration. These charges reflect the recognition of the \$88 million discrete tax benefit related to our Venezuelan subsidiary that reduced taxable income that otherwise would have utilized foreign tax credits. We also considered our forecasts of future profitability in assessing our ability to realize our foreign tax credits. These forecasts were prepared in connection with our annual budgeting process and include the impact of recent trends, including various macroeconomic factors such as rising 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 provide us sufficient positive evidence to conclude that it is more likely than not that the remaining foreign tax credits of \$637 million will be fully utilized, despite the negative evidence of their limited carryforward periods. For further information regarding our foreign source income, refer to Critical Accounting Policies.

The Tax Act established a corporate income tax rate of 21%, replacing the former 35% rate, and created a territorial tax system rather than a worldwide system, which generally eliminated the U.S. federal income tax on dividends from foreign subsidiaries. The transition to the territorial system included a onetime transition tax on certain of our foreign earnings previously untaxed in the United States (the "transition tax"). The Securities and Exchange Commission provided up to a one-year measurement period for companies to finalize the accounting for the impacts of this new legislation. As required, we finalized our accounting for items previously considered provisional during 2018. At December 31, 2017, we recorded an initial non-cash net charge to tax expense of \$299 million related to the enactment of the Tax Act. Our final accounting has adjusted this non-cash net charge to \$298 million. This net charge includes a deferred tax charge of \$384 million primarily from revaluing our net U.S. deferred tax assets to reflect the new U.S. corporate tax rate. No measurement period adjustment was necessary and this calculation is complete. The net charge also originally included a provisional deferred tax benefit of \$162 million to reverse reserves maintained for the taxation of undistributed foreign earnings under prior law, net of reserves established for foreign withholding taxes consistent with our revised indefinite reinvestment assertion. In the fourth quarter of 2018, we finalized our accounting and increased the provisional amount by \$9 million to \$171 million to reflect U.S. tax guidance issued during the year and to reflect our final indefinite reinvestment assertion. We were able to reasonably estimate the transition tax and recorded an initial provisional tax obligation of \$77 million at December 31, 2017. In general, the transition tax imposed by the Tax Act results in the taxation of our accumulated foreign earnings and profits ("E&P") at a 15.5% rate on liquid assets and 8% on the remaining unremitted foreign E&P, both net of foreign tax credits. Adjusted for U.S. tax guidance issued during 2018 and the impact of changes to E&P of our subsidiaries resulting from the filing of our 2017 corporate income tax return during the fourth quarter of 2018, we have now finalized our accounting and recognized an additional measurement period adjustment of \$8 million, resulting in a total transition tax obligation of \$85 million.

On January 15, 2019, the IRS finalized regulations that govern the transition tax. We are in the process of analyzing these regulations. We do not expect any material impact to our financial statements as a consequence of the final regulations.

Income tax expense in 2017 was \$513 million on income before income taxes of \$878 million. In 2017, tax expense was unfavorably impacted by net discrete adjustments of \$294 million due primarily to the net non-cash tax charge of \$299 million related to the enactment of the Tax Act as described above.

At December 31, 2018, our valuation allowance on certain of our U.S. federal, state and local deferred tax assets was \$113 million, primarily related to deferred tax assets for foreign tax credits as described above, and our valuation allowance on our foreign deferred tax assets was \$204 million.

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. 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 all or a significant portion of these valuation allowances will exist within the next twelve months.

For further information, refer to the Note to the Consolidated Financial Statements No. 6, Income Taxes.

Minority Shareholders' Net Income

Minority shareholders' net income was \$15 million in 2018, compared to \$19 million in 2017.

2017 Compared to 2016

Goodyear net income in 2017 was \$346 million, or \$1.37 per share, compared to \$1,264 million, or \$4.74 per share, in 2016. The decrease in Goodyear net income in 2017 was driven by an increase in income tax expense, primarily due to recognition of discrete tax charges in 2017 in connection with changes in U.S. income tax law compared to the recognition of discrete tax benefits in 2016, primarily due to the release of certain valuation allowances, and lower segment operating income, primarily in Americas and EMEA. These items were partially offset by a decrease in rationalization charges and lower corporate SAG, primarily due to lower incentive compensation.

Net Sales

Net sales in 2017 of \$15,377 million increased \$219 million, or 1.4%, compared to \$15,158 million in 2016 due to an increase in price and product mix of \$521 million, primarily driven by the impact of higher raw material costs on pricing, favorable foreign currency translation of \$178 million, primarily in EMEA and Americas, and higher sales in other tire-related businesses of \$89 million, driven by higher prices for third-party chemical sales in Americas. These increases were partially offset by lower tire unit volume of \$569 million, primarily in EMEA and Americas. Goodyear worldwide tire unit net sales were \$12,958 million and \$12,832 million in 2017 and 2016, respectively. Consumer and commercial net sales were \$9,285 million and \$2,928 million, respectively, in 2017. Consumer and commercial net sales were \$9,414 million and \$2,806 million, respectively, in 2016.

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

	Year Ended December 31,			
(In millions of tires)	2017	2016	% Change	
Replacement Units				
United States	38.3	39.2	(2.3)%	
International	75.2	78.1	(3.7)%	
Total	113.5	117.3	(3.3)%	
OE Units				
United States	13.7	15.7	(12.7)%	
International	32.0	33.1	(3.3)%	
Total	45.7	48.8	(6.4)%	
Goodyear worldwide tire units	159.2	166.1	(4.2)%	

The decrease in worldwide tire unit sales of 6.9 million units, or 4.2%, compared to 2016, included a decrease of 3.8 million replacement tire units, or 3.3%, comprised primarily of decreases in EMEA and Americas. OE tire units decreased 3.1 million units, or 6.4%, comprised primarily of decreases in Americas and EMEA. The overall volume decreases in EMEA and Americas were primarily related to lower consumer tire sales, driven by increased competition and changes in OEM production. Consumer and commercial unit sales in 2017 were 145.9 million and 11.5 million, respectively. Consumer and commercial unit sales in 2016 were 153.0 million and 11.6 million, respectively.

Cost of Goods Sold

CGS was \$11,680 million in 2017, increasing \$745 million, or 6.8%, from \$10,935 million in 2016. CGS was 76.0% of sales in 2017 compared to 72.1% of sales in 2016. CGS in 2017 increased due to higher raw material costs of \$618 million, foreign currency translation of \$141 million, primarily in EMEA and Americas, higher conversion costs of \$129 million, primarily due to increased under-absorbed overhead resulting from lower production volumes in Americas and EMEA, higher costs in other tire-related businesses of \$107 million, driven by an increase in raw material prices related to third-party chemical sales in Americas, and higher costs related to product mix of \$101 million. These increases were partially offset by lower volume of \$403 million, primarily in EMEA and Americas. CGS in 2017 included pension expense of \$16 million compared to \$15 million in 2016.

CGS in 2017 included accelerated depreciation and asset write-offs of \$40 million (\$28 million after-tax and minority), primarily related to our plan to close our manufacturing facility in Philippsburg, Germany. Accelerated depreciation was \$20 million (\$20 million after-tax and minority) in 2016, primarily related to our plan to close our manufacturing facility in Philippsburg, Germany and our plan to close our Wolverhampton, U.K. mixing and retreading facility.

Selling, Administrative and General Expense

SAG was \$2,279 million in 2017, decreasing \$130 million, or 5.4%, from \$2,409 million in 2016. SAG was 14.8% of sales in 2017 compared to 15.9% of sales in 2016. The decrease in SAG was due to lower wages and benefits of \$105 million, primarily related to lower incentive compensation and savings from rationalization plans, and lower advertising costs of \$49 million. These decreases were partially offset by foreign currency translation of \$27 million, primarily in EMEA, and increases due to general inflation. SAG in 2017 and 2016 included pension expense of \$19 million for each year.

Rationalizations

We recorded net rationalization charges of \$135 million (\$93 million after-tax and minority) in 2017. Net rationalization charges include charges of \$46 million related to plans to reduce manufacturing headcount in EMEA, \$35 million related to the closure of our tire manufacturing facility in Philippsburg, Germany, \$32 million related to global plans to reduce SAG headcount, and \$20 million related to SAG headcount reductions in EMEA.

We recorded net rationalization charges of \$210 million (\$198 million after-tax and minority) in 2016. Net rationalization charges included charges of \$116 million related to the plan to close our tire manufacturing facility in Philippsburg, Germany, \$34 million related to a global plan to reduce SAG headcount, and \$25 million related to manufacturing headcount reductions in EMEA.

For further information, refer to the Note to the Consolidated Financial Statements No. 2, Costs Associated with Rationalization Programs.

Interest Expense

Interest expense was \$335 million in 2017, decreasing \$37 million from \$372 million in 2016. The decrease was due primarily to a decrease in the average interest rate to 5.58% in 2017 compared to 6.23% in 2016. This decrease was partially offset by higher average debt balances of \$6,001 million in 2017 compared to \$5,972 million in 2016. Interest expense in 2017 and 2016 included \$6 million (\$4 million after-tax and minority) and \$12 million (\$8 million after-tax and minority), respectively, of expense related to the write-off of deferred financing fees and unamortized discounts related to the redemption of various debt instruments.

Other (Income) Expense

Other (Income) Expense in 2017 was expense of \$70 million, compared to expense of \$25 million in 2016. The \$45 million change in Other (Income) Expense was primarily due to lower gains on general and product liability (income) expense - discontinued products of \$27 million, higher non-service related pension and other postretirement benefits expense of \$27 million, and lower gains on asset sales of \$17 million. These increases were partially offset by lower financing fees and financial instruments expense of \$28 million.

Non-service related pension and other postretirement benefits expense was \$62 million in 2017, including pension settlement charges of \$19 million (\$13 million after-tax and minority), compared to \$35 million in 2016, including pension settlement charges of \$17 million (\$14 million after-tax and minority). The increase in 2017 compared to 2016 was due primarily to lower expected returns on pension plan assets of \$22 million and lower amortization of other postretirement benefits prior service credits of \$16 million, which was partially offset by lower pension interest cost of \$13 million.

General and product liability (income) expense - discontinued products in 2017 included a benefit of \$5 million (\$3 million after-tax and minority) for the recovery of past costs from certain asbestos insurers, as compared to a benefit in 2016 of \$24 million (\$15 million after-tax and minority) for the recovery of past costs from certain asbestos insurers and a benefit of \$10 million related to changes in assumptions for probable insurance recoveries for asbestos claims in future periods.

Net (gains) losses on asset sales were a gain of \$14 million (\$13 million after-tax and minority) in 2017 as compared to a gain of \$31 million (\$26 million after-tax and minority) in 2016. Net (gains) losses on asset sales in 2017 included a gain of \$6 million related to the sale of a former wire plant site in Luxembourg. Net (gains) losses on asset sales in 2016 included a gain of \$16 million related to the sale of the former wire plant site and a gain of \$9 million related to the sale of our interest in a supply chain logistics company.

Financing fees and financial instruments expense in 2017 included a premium of \$25 million (\$15 million after-tax and minority) related to the redemption of our \$700 million 7% senior notes due 2022, as compared to premiums of \$53 million (\$37 million after-tax and minority) in 2016 related to the redemption of our \$900 million 6.5% senior notes due 2021 and our €250 million 6.75% senior notes due 2019.

Other (Income) Expense in 2017 included charges of \$14 million (\$11 million after-tax and minority) for hurricane related expenses.

For further information, refer to the Note to the Consolidated Financial Statements No. 5, Other (Income) Expense.

Income Taxes

Income tax expense in 2017 was \$513 million on income before income taxes of \$878 million. In 2017, tax expense was unfavorably impacted by net discrete adjustments of \$294 million due primarily to the net tax charge of \$299 million related to the enactment of the Tax Act.

For 2016, the income tax benefit was \$77 million on income before income taxes of \$1,207 million. The net tax benefit in 2016 was driven by net discrete adjustments of \$458 million (\$459 million after minority interest), due primarily to a tax benefit of \$331 million from the December 31, 2016 release of the valuation allowances on certain subsidiaries in England, France, Luxembourg and New Zealand. The release of the valuation allowances on these subsidiaries is net of 2016 tax law changes that reduced deferred tax assets by \$23 million. The 2016 income tax benefit also included a \$163 million tax benefit resulting from changing our election for our 2009, 2010 and 2012 U.S. tax years from deducting foreign taxes to crediting foreign taxes. The 2016 income tax benefit was net of a \$39 million tax charge to establish a valuation allowance in the U.S. on deferred tax assets related to receivables from our deconsolidated Venezuelan subsidiary.

For further information, refer to the Note to the Consolidated Financial Statements No. 6, Income Taxes.

Minority Shareholders' Net Income

Minority shareholders' net income was \$19 million in 2017, compared to \$20 million in 2016.

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RESULTS OF OPERATIONS — SEGMENT INFORMATION

Segment information reflects our strategic business units ("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 \$1,274 million in 2018, \$1,556 million in 2017 and \$1,996 million in 2016. Total segment operating margin (segment operating income divided by segment sales) in 2018 was 8.2%, compared to 10.1% in 2017 and 13.2% in 2016.

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)	2018	2017		2016	
Tire Units	70.9		70.9		74.1
Net Sales	\$ 8,168	\$	8,212	\$	8,172
Operating Income	654		847		1,151
Operating Margin	8.0%		10.3%		14.1%

2018 Compared to 2017

Americas unit sales in 2018 remained consistent with 2017. Replacement tire volume increased 0.3 million units, or 0.6%, primarily in our consumer business in the United States driven by growth in the wholesale distribution channel as well as growth in retail, supported by increased sell out. These increases were partially offset by the impacts of the TireHub transition and the national transportation strike in Brazil in May. OE tire volume decreased 0.3 million units, or 1.7%, primarily in our consumer business in the United States driven by increased competition, partially offset by an increase in our consumer business in Brazil, despite the impact of the national transportation strike.

Net sales in 2018 were \$8,168 million, decreasing \$44 million, or 0.5%, compared to \$8,212 million in 2017. The decrease in net sales was driven by unfavorable foreign currency translation of \$144 million, primarily related to the Brazilian real. This decrease was partially offset by higher sales in other tire-related businesses of \$61 million, primarily driven by an increase in third-party sales of chemical products, and improvements in price and product mix of \$36 million, driven by increased customer demand for our 17-inch and above rim size tires.

Operating income in 2018 was \$654 million, decreasing \$193 million, or 22.8%, from \$847 million in 2017. The decrease in operating income was due to increased raw material costs of \$113 million, lower price and product mix of \$72 million, higher SAG of \$36 million, primarily driven by higher product liability costs and advertising expense, unfavorable foreign currency translation of \$25 million, and lower income in other tire-related businesses of \$10 million, primarily in the race tire business. These decreases were partially offset by favorable indirect tax settlements in Brazil totaling \$53 million, of which \$51 million related to prior years, and favorable conversion costs of \$14 million. SAG included incremental savings from rationalization plans of \$15 million. During 2018, Americas operating income was negatively impacted by about \$7 million (\$5 million after-tax and minority) as a result of the national transportation strike in Brazil.

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. Operating income in 2017 excluded rationalization charges of \$6 million and net gains on asset sales of \$4 million.

Americas' results are highly dependent upon the United States, which accounted for approximately 81% of Americas' net sales in both 2018 and 2017. Results of operations in the United States are expected to continue to have a significant impact on Americas' future performance.



2017 Compared to 2016

Americas unit sales in 2017 decreased 3.2 million units, or 4.4%, to 70.9 million units. OE tire volume decreased 1.7 million units, or 9.0%, primarily in consumer OE in the United States, driven by changes in OEM production. Replacement tire volume decreased 1.5 million units, or 2.8%, primarily in consumer replacement in the United States, Mexico and Canada. Declines in consumer replacement volumes in the United States were primarily driven by increased competition and lower volumes in 16-inch and below rim size tires.

Net sales in 2017 were \$8,212 million, increasing \$40 million, or 0.5%, compared to \$8,172 million in 2016. The increase in net sales was driven by improvements in price and product mix of \$168 million, primarily due to the impact of higher raw material costs on pricing, higher sales in other tire-related businesses of \$104 million, primarily driven by an increase in price for third-party sales of chemical products, and favorable foreign currency translation of \$49 million, primarily in Brazil. These increases in net sales were partially offset by lower tire volume of \$281 million.

Operating income in 2017 was \$847 million, decreasing \$304 million, or 26.4%, from \$1,151 million in 2016. The decrease in operating income was due to increased raw material costs of \$266 million, which more than offset improvements in price and product mix of \$131 million, unfavorable conversion costs of \$98 million, primarily due to increased under-absorbed overhead resulting from lower production volumes, lower tire unit volume of \$79 million, and incremental start-up costs of \$28 million associated with our new plant in San Luis Potosi, Mexico. These decreases in operating income were partially offset by the impact of an out of period adjustment in 2016 of \$24 million of expense related to the elimination of intracompany profit, primarily related to the years 2012 to 2015, with the majority attributable to 2012, and lower SAG of \$16 million, primarily related to lower incentive compensation and lower advertising expense. SAG included incremental savings from rationalization plans of \$23 million. During the third quarter of 2017, several Company facilities were directly impacted by Hurricanes Harvey and Irma, which negatively impacted Americas operating income by about \$6 million in 2017.

Operating income in 2017 excluded rationalization charges of \$6 million and net gains on asset sales of \$4 million. Operating income in 2016 excluded rationalization charges of \$15 million, net gains on asset sales of \$4 million and accelerated depreciation and asset write-offs of \$1 million.

Europe, Middle East and Africa

	 Year Ended December 31,				
(In millions)	 2018		2017		2016
Tire Units	57.8		57.1		61.1
Net Sales	\$ 5,090	\$	4,928	\$	4,880
Operating Income	363		367		472
Operating Margin	7.1%		7.4%		9.7%

2018 Compared to 2017

Europe, Middle East and Africa unit sales in 2018 increased 0.7 million units, or 1.3%, to 57.8 million units. Replacement tire volume increased 1.5 million units, or 3.7%, primarily in our consumer business driven by increased industry demand in the 17-inch and above rim size segment. OE tire volume decreased 0.8 million units, or 4.9%, primarily in our consumer business, driven by declines in the 16-inch and below rim size segment as a result of the continuation of our OE selectivity strategy and changes in market demand.

Net sales in 2018 were \$5,090 million, increasing \$162 million, or 3.3%, compared to \$4,928 million in 2017. Net sales increased due to improvements in price and product mix of \$125 million, mainly due to increased customer demand for our 17-inch and above rim size tires, higher tire unit volume of \$65 million, and favorable foreign currency translation of \$22 million, primarily related to the strengthening of the euro, partially offset by the weakening of the Turkish lira. These increases were partially offset by lower sales in other tire-related businesses of \$53 million mainly due to retread and race tire sales.

Operating income in 2018 was \$363 million, decreasing \$4 million, or 1.1%, compared to \$367 million in 2017. Operating income decreased due to lower income in other tire-related businesses of \$35 million, primarily due to lower intercompany sales, higher costs of \$22 million, primarily related to transportation and research and development, and foreign currency translation of \$6 million. These decreases were partially offset by improvements in price and product mix of \$59 million, which more than offset the impact of higher raw material costs of \$50 million, lower conversion costs of \$23 million, and lower SAG of \$8 million. SAG and conversion costs included savings from rationalization plans of \$19 million and \$41 million, respectively.

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. Operating income in 2017 excluded net rationalization charges of \$111 million, accelerated depreciation and asset write-offs of \$40 million, and net gains on asset sales of \$10 million.

EMEA's results are highly dependent upon Germany, which accounted for approximately 37% and 38% of EMEA's net sales in 2018 and 2017, respectively. Results of operations in Germany are expected to continue to have a significant impact on EMEA's future performance.

2017 Compared to 2016

Europe, Middle East and Africa unit sales in 2017 decreased 4.0 million units, or 6.5%, to 57.1 million units. Replacement tire volume decreased 2.4 million units, or 5.5%, primarily in our consumer business caused by decreased industry demand for 16- inch and below rim size tires and increased competition. OE tire volume decreased 1.6 million units, or 9.0%, primarily in our consumer business, driven by 16-inch and below rim size tires, as a result of the continuation of our OE selectivity strategy, increased competition and reduced OEM production due to certain customers managing inventory levels.

Net sales in 2017 were \$4,928 million, increasing \$48 million, or 1.0%, compared to \$4,880 million in 2016. Net sales increased due to improvements in price and product mix of \$244 million, due to our increased focus on 17-inch and above rim size tires and the impact of higher raw material costs on pricing, and favorable foreign currency translation of \$112 million, primarily related to the strengthening of the euro. These increases were partially offset by the impact of lower tire unit volume of \$303 million.

Operating income in 2017 was \$367 million, decreasing \$105 million, or 22.2%, compared to \$472 million in 2016. Operating income decreased due to higher raw material costs of \$229 million, which more than offset improvements in price and product mix of \$176 million, lower sales volume of \$91 million and higher conversion costs of \$31 million, primarily related to under-absorbed overhead due to lower production levels. These decreases were partially offset by lower SAG of \$59 million, primarily driven by lower advertising costs, lower wages and benefits due to restructuring savings and lower incentive compensation, and favorable foreign currency translation of \$9 million, primarily related to the strengthening of the euro. SAG and conversion costs included savings from rationalization plans of \$19 million and \$49 million, respectively.

Operating income in 2017 excluded net rationalization charges of \$111 million, accelerated depreciation and asset write-offs of \$40 million, and net gains on asset sales of \$10 million. Operating income in 2016 excluded net rationalization charges of \$184 million, accelerated depreciation of \$19 million, and net gains on asset sales of \$17 million.

Asia Pacific

	_	Year Ended December 31,						
(In millions)		201	18		2017		2016	
Tire Units	_		30.5		31.2		30.9	
Net Sales	\$	5	2,217	\$	2,237	\$	2,106	
Operating Income			257		342		373	
Operating Margin			11.6%		15.3%		17.7%	

2018 Compared to 2017

Asia Pacific unit sales in 2018 decreased 0.7 million units, or 2.3%, to 30.5 million units. OE tire volume decreased 0.5 million units, or 4.5%, primarily in our consumer business in China as a result of reduced OEM production. Replacement tire volume decreased 0.2 million units, or 0.8%, primarily in our consumer business in China.

Net sales in 2018 were \$2,217 million, decreasing \$20 million, or 0.9%, from \$2,237 million in 2017. Net sales decreased due to lower tire unit volume of \$48 million, unfavorable foreign currency translation of \$17 million, primarily related to the weakening of the Indian rupee, and lower sales in other tire-related businesses of \$11 million, primarily in the retail business. These decreases were partially offset by improvements in price and product mix of \$56 million.

Operating income in 2018 was \$257 million, decreasing \$85 million, or 24.9%, from \$342 million in 2017. Operating income decreased due to higher raw material costs of \$23 million, lower volume of \$15 million, higher SAG of \$12 million, higher research and development costs of \$10 million, charges of \$10 million related to a voluntary recall of consumer tires by an OE customer, lower price and product mix of \$8 million, and lower income in other tire-related businesses of \$8 million, primarily in the retail business.

Operating income in 2018 excluded net rationalization charges of \$3 million. Operating income in 2017 excluded net rationalization charges of \$2 million.

Asia Pacific's results are highly dependent upon China and Australia. China accounted for approximately 27% and 28% of Asia Pacific's net sales in 2018 and 2017, respectively. Australia accounted for approximately 27% of Asia Pacific's net sales in both 2018 and 2017. Results of operations in China and Australia are expected to continue to have a significant impact on Asia Pacific's future performance.

2017 Compared to 2016

Asia Pacific unit sales in 2017 increased 0.3 million units, or 0.7%, to 31.2 million units. Replacement tire volume increased 0.1 million units, or 0.5%, primarily due to growth in the consumer business, partially offset by lower volumes in the commercial business. OE tire volume increased 0.2 million units, or 1.1%, primarily due to growth in India, partially offset by lower volumes in China.

Net sales in 2017 were \$2,237 million, increasing \$131 million, or 6.2%, from \$2,106 million in 2016. Net sales increased by \$109 million due to improvements in price and product mix, primarily due to the impact of higher raw material costs on pricing, \$17 million due to favorable foreign currency translation, and \$15 million due to higher tire volume. These increases were partially offset by lower sales in other tire-related businesses of \$11 million, primarily in retail.

Operating income in 2017 was \$342 million, decreasing \$31 million, or 8.3%, from \$373 million in 2016. Operating income decreased due to higher raw material costs of \$123 million, which more than offset improvements in price and product mix of \$113 million, a decrease in incentives recognized for the expansion of our factory in China of \$13 million, and lower income in other tire-related businesses of \$9 million, primarily in retail. These decreases were partially offset by higher volume of \$4 million.

Operating income in 2017 excluded net rationalization charges of \$2 million. Operating income in 2016 excluded net gains on asset sales of \$1 million and net rationalization charges of \$1 million.

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 \$322 million, including related legal fees expected to be incurred, for potential product liability and other tort claims, including asbestos claims, at December 31, 2018. 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 \$166 million at December 31, 2018.

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 taking 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, 2018, we recorded a receivable related to asbestos claims of \$108 million, and we expect that approximately 65% 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, 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. 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 \$224 million for anticipated costs related to U.S. workers' compensation claims at December 31, 2018. 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 the Note to the Consolidated Financial Statements No. 19, Commitments and Contingent Liabilities.

Recoverability of Goodwill. Goodwill is tested for impairment annually or more frequently if an indicator of impairment is present. Goodwill totaled \$569 million at December 31, 2018.



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 the amount of the impairment loss, if any, must be measured.

At October 31, 2018, after considering changes to assumptions used in our most recent quantitative annual testing for each reporting unit, including the capital markets environment, economic conditions, tire industry competition and trends, changes in our results of operations, the magnitude of the excess of fair value over the carrying amount of each reporting unit as determined in our most recent quantitative annual testing, and other factors, we concluded that it was not more likely than not that the fair values of our reporting units were less than their respective carrying values and, therefore, did not perform a quantitative analysis.

Deferred Tax Asset Valuation Allowances and Uncertain Income Tax Positions. At December 31, 2018, we had valuation allowances aggregating \$317 million against certain of our U.S. federal, state and local and foreign net deferred tax assets.

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 (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.

Our net deferred tax assets include approximately \$637 million of foreign tax credits, net of valuation allowances of \$103 million, 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) if necessary, we can enact tax planning strategies, including the ability to capitalize research and development costs annually, accelerate income on cross border sales of inventory or raw materials to our subsidiaries and reduce 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 forecasts of future profitability in assessing our ability to realize our foreign tax credits. These forecasts were prepared in connection with our annual budgeting process and include the impact of recent trends, including various macroeconomic factors such as rising 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 the remaining foreign tax credits 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"). We do not anticipate incurring a GILTI liability, however, 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 taxes.

For additional information regarding uncertain income tax positions, valuation allowances and the impact of the Tax Act, refer to the Note to the Consolidated Financial Statements No. 6, Income Taxes.

Pensions and Other Postretirement Benefits. We have recorded liabilities for pension and other postretirement benefits of \$599 million and \$231 million, respectively, at December 31, 2018. 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 the 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 4.24% and 4.16%, respectively, at December 31, 2018, compared to 3.56% and 3.44%, respectively, at December 31, 2017. The increase in the discount rate at December 31, 2018 was due primarily to higher yields on highly rated corporate bonds. Interest cost included in our U.S. net periodic pension cost was \$157 million in 2018, compared to \$160 million in 2017 and \$164 million in 2016. Interest cost included in our worldwide net periodic other postretirement benefits cost was \$12 million in 2018, compared to \$13 million in 2017 and \$12 million in 2016.

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, 2018						
(Dollars in millions)	Change	P	BO/ABO	Annual Expense					
Pensions:									
Assumption:									
Discount rate	+/- 0.5%	\$	240	\$		3			
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 0.50%, 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, 2018, our net actuarial loss included in Accumulated Other Comprehensive Loss ("AOCL") related to global pension plans was \$3,104 million, \$2,493 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 2018 U.S. pension total benefits cost, we recognized \$120 million of the net actuarial losses in 2018. We will recognize approximately \$114 million of net actuarial losses in 2019 U.S. net periodic pension cost. If our future experience is consistent with our assumptions as of December 31, 2018, actuarial loss recognition over the next few years will remain at an amount near that to be recognized in 2019 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 (1.9%), 8.7% and 6.9% in 2018, 2017 and 2016, respectively, as compared to the expected rate of 4.58%, 5.08% and 5.33% in 2018, 2017 and 2016, 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 18 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 2018, 2017 and 2016, 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 in line with the accounting standards update issued by the FASB to improve the financial statement presentation of pension and postretirement benefits cost. Refer to the Note to the Consolidated Financial Statements No. 1, Accounting Policies.

Globally we expect our 2019 net periodic pension cost to be approximately \$125 million to \$150 million, including approximately \$30 million of service cost, compared to \$110 million in 2018, which included \$32 million of service cost. The increase in expected net periodic pension cost is primarily due to higher interest cost for our U.S. pension plans from increases in interest rates and lower expected returns on plan assets for our non-U.S. pension plans due to an increase in investments allocated to fixed income securities.

We experienced an increase in our U.S. discount rate at the end of 2018 but a large portion of the net actuarial loss included in AOCL of \$25 million for our worldwide other postretirement benefit plans as of December 31, 2018 is a result of the overall decline in U.S. discount rates over time. For purposes of determining 2018 worldwide net periodic other postretirement benefits cost, we recognized \$4 million of net actuarial losses in 2018. We will recognize approximately \$4 million of net actuarial losses in 2019. If our future experience is consistent with our assumptions as of December 31, 2018, actuarial loss recognized in 2019 before it begins to gradually decline.

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

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.

On March 7, 2018, we amended and restated our \$400 million second lien term loan facility. As a result of the amendment, the term loan now matures on March 7, 2025 and continues to bear interest at 200 basis points over LIBOR.

On September 28, 2018, certain of our European subsidiaries amended and restated the definitive agreements for our pan-European accounts receivable securitization facility, extending the term through 2023.

On October 9, 2018, we announced an increase in the quarterly cash dividend on our common stock, from \$0.14 per share to \$0.16 per share, beginning with the December 3, 2018 payment date.

For further information on the other strategic initiatives we pursued in 2018, refer to "Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations — Overview."

At December 31, 2018, we had \$801 million of Cash and Cash Equivalents, compared to \$1,043 million at December 31, 2017. The decrease in cash and cash equivalents of \$242 million was primarily due to cash used for investing activities of \$867 million, primarily related to capital expenditures of \$811 million; and cash used for financing activities of \$243 million, primarily related to common stock repurchases of \$220 million and common stock dividends of \$138 million, partially offset by net borrowings of \$135 million. These uses of cash were partially offset by cash flows from operating activities of \$916 million, driven by the profitability of our operating segments.

At December 31, 2018 and 2017 we had \$3,151 million and \$3,196 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)	2018	2017
First lien revolving credit facility	\$ 1,633	\$ 1,667
European revolving credit facility	629	659
Chinese credit facilities	199	217
Mexican credit facilities	140	
Other domestic and international debt	221	298
Notes payable and overdrafts	329	355
	\$ 3,151	\$ 3,196

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 2019 cash flow needs to include capital expenditures of approximately \$900 million. We also expect interest expense to range between \$325 million and \$350 million, restructuring payments to be approximately \$50 million, dividends on our common stock to be approximately \$150 million, and contributions to our funded non-U.S. pension plans to be approximately \$25 million to \$50 million. We expect working capital to be a use of cash of less than \$100 million in 2019. 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 2019 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, 2018, approximately \$697 million of net assets, including \$98 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, 2018, significant concentrations of cash and cash equivalents held by our international subsidiaries included the following amounts:

- \$278 million or 35% in Asia Pacific, primarily India, China and Japan (\$344 million or 33% at December 31, 2017),
- \$261 million or 33% in Europe, Middle East and Africa, primarily Belgium (\$355 million or 34% at December 31, 2017), and
- \$134 million or 17% in Americas, primarily Chile, Canada and Brazil (\$169 million or 16% at December 31, 2017).

Operating Activities

Net cash provided by operating activities was \$916 million in 2018, compared to \$1,158 million in 2017 and \$1,557 million in 2016. Net cash provided by operating activities in 2018 decreased \$242 million compared to 2017, primarily due to a \$282 million decrease in segment operating income.

Cash used for working capital in 2018 was \$120 million compared to \$106 million in 2017. Cash used for inventory increased \$127 million, while cash provided by accounts payable increased \$138 million; both reflecting the impact of higher raw material costs, causing the balances of each remaining on our year-end balance sheet to be higher compared to the prior year.

Net cash provided by operating activities in 2017 decreased \$399 million compared to 2016 primarily due to a \$440 million decrease in segment operating income.

Cash used for working capital in 2017 was \$106 million compared to \$117 million in 2016. Cash used for working capital in 2017 reflects the impacts of higher raw materials on our costs and pricing, driving year-over-year increases in cash used for accounts receivable of \$358 million and cash provided by accounts payable of \$241 million. Cash used for inventory decreased \$128 million during 2017 as the impacts of higher raw materials were more than offset by the impact of reduced production levels.

Investing Activities

Net cash used by investing activities was \$867 million in 2018, compared to \$879 million in 2017 and \$979 million in 2016. Capital expenditures were \$811 million in 2018, compared to \$881 million in 2017 and \$996 million in 2016. Beyond expenditures required to sustain our facilities, capital expenditures primarily related to the construction, expansion and modernization of manufacturing capacity in the United States, China, India and Thailand in 2018; the United States, Mexico, China and India in 2017; and the United States, Brazil, China and Mexico in 2016.

Financing Activities

Net cash used by financing activities was \$243 million, \$415 million and \$876 million in 2018, 2017 and 2016, respectively. Financing activities in 2018 and 2017 included net borrowings of \$135 million and \$129 million, respectively. Financing activities in 2016 included net debt repayments of \$256 million. We repurchased \$220 million, \$400 million and \$500 million of our common stock in 2018, 2017 and 2016, respectively. We paid dividends on our common stock of \$138 million, \$110 million and \$82 million in 2018, 2017 and 2016, respectively. We do not expect to make a significant amount of share repurchases in 2019.

Credit Sources

In aggregate, we had total credit arrangements of \$8,971 million available at December 31, 2018, of which \$3,151 million were unused, compared to \$8,963 million available at December 31, 2017, of which \$3,196 million were unused. At December 31, 2018, we had long term credit arrangements totaling \$8,212 million, of which \$2,822 million were unused, compared to \$8,346 million and \$2,841 million, respectively, at December 31, 2017. At December 31, 2018, we had short term committed and uncommitted credit arrangements totaling \$759 million, of which \$329 million were unused, compared to \$617 million and \$355

million, respectively, at December 31, 2017. 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, 2018, we had \$3,314 million of outstanding notes, compared to \$3,325 million at December 31, 2017.

\$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, 2018, our borrowing base, and therefore our availability, under the facility was \$330 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, 2018 and 2017, 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, 2018, we had \$343 million in letters of credit issued under these agreements.

Amended and Restated Second Lien Term Loan Facility due 2025

In March 2018, we amended and restated our second lien term loan facility. As a result of the amendment, the term loan, which previously matured on April 30, 2019, now 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, 2018 and 2017, the amounts outstanding under this facility were \$400 million.

€550 Million Amended and Restated Senior Secured European Revolving Credit Facility due 2020

Our amended and restated \notin 550 million European revolving credit facility consists of (i) a \notin 125 million German tranche that is available only to Goodyear Dunlop Tires Germany GmbH ("GDTG") and (ii) a \notin 425 million all-borrower tranche that is available to Goodyear Dunlop Tires Europe B.V. ("GDTE"), GDTG and Goodyear Dunlop Tires Operations S.A. Up to \notin 150 million of swingline loans and \notin 50 million in letters of credit are available for issuance under the all-borrower tranche. Amounts drawn under the facility will bear interest at LIBOR plus 175 basis points for loans denominated in U.S. dollars or pounds sterling and EURIBOR plus 175 basis points for loans denominated in euros, and undrawn amounts under the facility will be subject to an annual commitment fee of 30 basis points.

At December 31, 2018 and 2017, we had no borrowings and no letters of credit issued 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, 2014 under the European facility.

Accounts Receivable Securitization Facilities (On-Balance Sheet)

In September 2018, GDTE and certain other of our European subsidiaries amended and restated the definitive agreements for our pan-European accounts receivable securitization facility, extending the term through 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 16, 2017 to October 17, 2018, the designated maximum amount of the facility was &275 million. Effective October 18, 2018, the designated maximum amount of the facility was increased to &320 million.

The facility involves the ongoing daily sale of substantially all of the trade accounts receivable of certain GDTE 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 17, 2019.

At December 31, 2018, the amounts available and utilized under this program totaled \$335 million (\notin 293 million). At December 31, 2017, the amounts available and utilized under this program totaled \$224 million (\notin 187 million). The program does not qualify for sale accounting, and accordingly, these amounts are included in Long Term Debt and Capital 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, 2018 and 2017, the amount of receivables sold was \$568 million and \$572 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, 2018 and 2017.

Further Information

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 the Note to the Consolidated Financial Statements No. 15, Financing Arrangements and Derivative Financial Instruments.

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 any period of four consecutive fiscal quarters. As of December 31, 2018, our availability under this facility of \$1,633 million plus our Available Cash of \$157 million totaled \$1,790 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 GDTE and its subsidiaries. This financial covenant provides that we are not permitted to allow GDTE's ratio of Consolidated Net J.V. Indebtedness to Consolidated European J.V. 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 J.V. Indebtedness is determined net of the sum of cash and cash equivalents in excess of \$100 million held by GDTE 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 J.V. 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, 2018, 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, 2018, 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 J.V. Indebtedness" and "Consolidated European J.V. 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 that could include restructuring bank debt or capital markets transactions, possibly including the issuance of additional debt or equity. Given the challenges that we face and the uncertainties of the 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 2018, 2017 and 2016 we paid cash dividends of \$138 million, \$110 million and \$82 million, respectively, on our common stock. On January 14, 2019, 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 1, 2019 to stockholders of record as of the close of business on February 1, 2019. Future quarterly dividends are subject to Board approval.

On September 18, 2013, the Board of Directors approved our common stock repurchase program. From time to time, the Board of Directors has approved increases in the amount authorized to be purchased under that program. On February 2, 2017, the Board of Directors approved a further increase in that authorization to \$2.1 billion. This program expires on December 31, 2019, and is intended to be used, subject to our cash flow, to repurchase shares of common stock in open market transactions in order to offset new shares issued under equity compensation programs and to provide for additional shareholder returns. During 2018, we repurchased 8,936,302 shares at an average price, including commissions, of \$24.62 per share, or \$220 million in the aggregate. 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. We do not expect to make a significant amount of share repurchases in 2019.

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 strategy of divesting 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, 2018:

(In millions)	 Total	2019	2020	2021	2022	2023	Bey	ond 2023
Debt Obligations ⁽¹⁾	\$ 5,767	\$ 648	\$ 786	\$ 204	\$ 105	\$ 1,651	\$	2,373
Capital Lease Obligations ⁽²⁾	37	5	4	15	2	1		10
Interest Payments ⁽³⁾	1,608	292	247	205	195	191		478
Operating Leases ⁽⁴⁾	1,226	266	214	161	110	84		391
Pension Benefits ⁽⁵⁾	275	75	50	50	50	50		N/A
Other Postretirement Benefits ⁽⁶⁾	162	18	18	17	17	16		76
Workers' Compensation ⁽⁷⁾	292	42	29	22	18	15		166
Binding Commitments ⁽⁸⁾	3,194	1,846	444	302	145	127		330
Uncertain Income Tax Positions ⁽⁹⁾	8	4	4	—	—	_		—
	\$ 12,569	\$ 3,196	\$ 1,796	\$ 976	\$ 642	\$ 2,135	\$	3,824

(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 capital lease obligations are \$61 million.

(3) These amounts represent future interest payments related to our existing debt obligations and capital 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 \$15 million, \$12 million, \$8 million, \$5 million, \$3 million and \$6 million in each of the periods above, respectively, for a total of \$49 million. Payments, net of minimum sublease rentals, total \$1,177 million. The present value of the net operating lease payments is \$914 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, 2018. 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 the Note to the Consolidated Financial Statements No. 17, Pension, Other Postretirement Benefits and Savings Plans.

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 \$224 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, 2018.
- (9) These amounts primarily represent expected payments with interest for uncertain income tax positions as of December 31, 2018. 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.

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 \$73 million at December 31, 2018. For further information about our guarantees, refer to the Note to the Consolidated Financial Statements No. 19, Commitments and Contingent Liabilities.

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 carefully monitor our fixed and floating rate debt mix. Within defined limitations, we manage the mix using refinancing. At December 31, 2018, 33% of our debt was at variable interest rates averaging 4.92% compared to 34% at an average rate of 4.42% at December 31, 2017.

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

(In millions)	2018	2017
Carrying amount — liability	\$ 3,609	\$ 3,616
Fair value — liability	3,443	3,786
Pro forma fair value — liability	3,583	3,908

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 will 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 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)	2018	2017
Fair value — asset (liability)	\$ 11	\$ (15)
Pro forma decrease in fair value	(152)	(166)
Contract maturities	1/19-12/20	1/18-12/19

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 positions 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.



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

	2017
16 \$	5 4
(7)	(17)
2 \$	5 —
—	(2)
	16 \$ (7)

For further information on foreign currency contracts, refer to the Note to the Consolidated Financial Statements No. 15, Financing Arrangements and Derivative Financial Instruments.

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

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Management's Report on Internal Control over Financial Reporting	<u>48</u>
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Consolidated Financial Statements of The Goodyear Tire & Rubber Company:	
Consolidated Statements of Operations for each of the three years ended December 31, 2018	<u>50</u>
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Consolidated Balance Sheets at December 31, 2018 and December 31, 2017	<u>52</u>
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Consolidated Statements of Cash Flows for each of the three years ended December 31, 2018	<u>56</u>
Notes to Consolidated Financial Statements	<u>57</u>
Supplementary Data (unaudited)	<u>110</u>
Financial Statement Schedule:	
The following consolidated financial statement schedule of The Goodyear Tire & Rubber Company is filed as part of this Annual Report on Form 10-K and should be read in conjunction with the Consolidated Financial Statements of The Goodyear Tire & Rubber Company:	
Schedule II — Valuation and Qualifying Accounts	<u>FS- 2</u>

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, 2018 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, 2018.

The effectiveness of the Company's internal control over financial reporting as of December 31, 2018 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 as listed in the accompanying index (collectively referred to as the "consolidated financial statements"). We also have audited the Company's internal control over financial reporting as of December 31, 2018, 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, 2018 and 2017, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2018 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, 2018, based on criteria established in *Internal Control - Integrated Framework (2013)* issued by the COSO.

Basis for Opinions

The Company's management is responsible for these consolidated financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in 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, 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.

/s/ PricewaterhouseCoopers LLP

PricewaterhouseCoopers LLP

Cleveland, Ohio February 8, 2019

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

THE GOODYEAR TIRE & RUBBER COMPANY AND SUBSIDIARIES CONSOLIDATED STATEMENTS OF OPERATIONS

		Year E	anded December 31	,	
(In millions, except per share amounts)	2018		2017		2016
Net Sales (Note 2)	\$ 15,475	\$	15,377	\$	15,158
Cost of Goods Sold	11,961		11,680		10,935
Selling, Administrative and General Expense	2,312		2,279		2,409
Rationalizations (Note 3)	44		135		210
Interest Expense (Note 4)	321		335		372
Other (Income) Expense (Note 5)	(174)		70		25
Income before Income Taxes	1,011		878		1,207
United States and Foreign Tax Expense (Benefit) (Note 6)	303		513		(77)
Net Income	708		365		1,284
Less: Minority Shareholders' Net Income	15		19		20
Goodyear Net Income	\$ 693	\$	346	\$	1,264
Goodyear Net Income — Per Share of Common Stock					
Basic	\$ 2.92	\$	1.39	\$	4.81
Weighted Average Shares Outstanding (Note 7)	 237		249		263
Diluted	\$ 2.89	\$	1.37	\$	4.74
Weighted Average Shares Outstanding (Note 7)	 239		253		266
Cash Dividends Declared Per Common Share	\$ 0.58	\$	0.44	\$	0.31

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)

	 Ye	ear Ei	nded December 3	31,	
(In millions)	2018		2017		2016
Net Income	\$ 708	\$	365	\$	1,284
Other Comprehensive Income (Loss):					
Foreign currency translation net of tax of (\$10) in 2018 (\$39 in 2017, (\$2) in 2016)	(264)		257		(221)
Defined benefit plans:					
Amortization of prior service cost and unrecognized gains and losses included in total benefit cost net of tax of \$34 in 2018 (\$40 in 2017, \$33 in 2016)	105		77		63
Decrease (increase) in net actuarial losses net of tax of \$1 in 2018 ((\$37) in 2017, (\$53) in 2016)	16		(100)		(62)
Immediate recognition of prior service cost and unrecognized gains and losses due to curtailments, settlements and divestitures net of tax of \$5 in 2018 (\$14 in 2017, \$0 in 2016)	20		27		17
Prior service (cost) credit from plan amendments net of tax of (\$3) in 2018 ((\$2) in 2017, \$0 in 2016)	(12)		(4)		_
Deferred derivative gains (losses) net of tax of \$3 in 2018 ((\$8) in 2017, \$4 in 2016)	9		(20)		8
Reclassification adjustment for amounts recognized in income net of tax \$0 in 2018 (\$1 in 2017, (\$1) in 2016)	7		1		(5)
Other Comprehensive Income (Loss)	(119)		238		(200)
Comprehensive Income	589		603		1,084
Less: Comprehensive Income (Loss) Attributable to Minority Shareholders	(4)		35		8
Goodyear Comprehensive Income	\$ 593	\$	568	\$	1,076

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

THE GOODYEAR TIRE & RUBBER COMPANY AND SUBSIDIARIES

CONSOLIDATED BALANCE SHEETS

	 Decer	nber 31,	,
(In millions, except share data)	2018		2017
Assets			
Current Assets:			
Cash and Cash Equivalents (Note 1)	\$ 801	\$	1,043
Accounts Receivable (Note 9)	2,030		2,025
Inventories (Note 10)	2,856		2,787
Prepaid Expenses and Other Current Assets	238		224
Total Current Assets	5,925		6,079
Goodwill (Note 11)	569		595
Intangible Assets (Note 11)	136		139
Deferred Income Taxes (Note 6)	1,847		2,008
Other Assets (Note 12)	1,136		792
Property, Plant and Equipment (Note 13)	7,259		7,451
Total Assets	\$ 16,872	\$	17,064
Liabilities			
Current Liabilities:			
Accounts Payable-Trade	\$ 2,920	\$	2,807
Compensation and Benefits (Notes 17 and 18)	471		539
Other Current Liabilities	737		1,026
Notes Payable and Overdrafts (Note 15)	410		262
Long Term Debt and Capital Leases due Within One Year (Note 15)	243		391
Total Current Liabilities	4,781		5,025
Long Term Debt and Capital Leases (Note 15)	5,110		5,076
Compensation and Benefits (Notes 17 and 18)	1,345		1,515
Deferred Income Taxes (Note 6)	95		100
Other Long Term Liabilities	471		498
Total Liabilities	11,802		12,214
Commitments and Contingent Liabilities (Note 19)			
Shareholders' Equity			
Goodyear Shareholders' Equity			
Common Stock, no par value:			
Authorized, 450 million shares, Outstanding shares — 232 million (240 million in 2017)	232		240
Capital Surplus	2,111		2,295
Retained Earnings	6,597		6,044
Accumulated Other Comprehensive Loss (Note 21)	(4,076)		(3,976)
Goodyear Shareholders' Equity	4,864		4,603
Minority Shareholders' Equity — Nonredeemable	206		247
Total Shareholders' Equity	5,070		4,850
Total Liabilities and Shareholders' Equity	\$ 16,872	\$	17,064

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

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

					Accumulated		Minority	
					Other	Goodyear	Shareholders'	Total
	Common	Stock	Capital	Retained	Comprehensive	Shareholders'	Equity — Non-	Shareholders'
(Dollars in millions)	Shares	Amount	Surplus	Earnings	Loss	Equity	Redeemable	Equity
Balance at December 31, 2015								
(after deducting 11,445,445 common treasury shares)	267,017,982	\$ 267	\$ 3,093	\$ 4,570	\$ (4,010)	\$ 3,920	\$ 222	\$ 4,142
Comprehensive income (loss):								
Net income				1,264		1,264	20	1,284
Foreign currency translation (net of tax of (\$2))					(209)	(209)	(12)	(221)
Amortization of prior service cost and unrecognized gains and losses included in total benefit cost (net of tax of \$33)					63	63		63
Increase in net actuarial losses (net of tax of (\$53))					(62)	(62)		(62)
Immediate recognition of prior service cost and unrecognized gains and losses due to curtailments, settlements and divestitures (net of tax of \$0)					17	17		17
Deferred derivative gains (net of tax of \$4)					8	8		8
Reclassification adjustments for amounts recognized in income (net of tax of (\$1))					(5)	(5)		(5)
Other comprehensive income (loss)						(188)	(12)	(200)
Total comprehensive income (loss)						1,076	8	1,084
Adoption of new accounting standard				56		56		56
Dividends declared to minority shareholders							(12)	(12)
Stock-based compensation plans (Note 18)			24			24		24
Repurchase of common stock (Note 20)	(16,706,392)	(17)	(483)			(500)		(500)
Dividends declared (Note 20)				(82)		(82)		(82)
Common stock issued from treasury	1,284,944	2	11			13		13
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

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)

					Accumulated		Minority	
	Commor	Stock	Capital	Retained	Other Comprehensive	Goodyear Shareholders'	Shareholders' Equity — Non-	Total Shareholders'
	Shares		Capital		Loss		Redeemable	
(Dollars in millions)	Shares	Amount	Surplus	Earnings	Loss	Equity	Redeemable	Equity
Balance at December 31, 2016		* • • • •	* • • • •	¢ = 000		*	* • • • •	A (BAB)
(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 costs 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
Dividends declared to minority shareholders							(6)	(6)
Stock-based compensation plans (Note 18)			24			24		24
Repurchase of common stock (Note 20)	(12,755,547)	(13)	(387)			(400)		(400)
Dividends declared (Note 20)				(110)		(110)		(110)
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

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

THE GOODYEAR TIRE & RUBBER COMPANY AND SUBSIDIARIES

						Ac	cumulated Other	Goodyear		Mino Shareh	5	1	Total
	Common	ı Stocl	k	Capital	Retained	Con	prehensive	Shar	eholders'	Equity	– Non-	Shar	reholders'
(Dollars in millions)	Shares	An	ount	Surplus	Earnings		Loss	I	Equity	Redee	mable	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 standards (Note 1)					(1)				(1)				(1)
Dividends declared to minority shareholders											(8)		(8)
Stock-based compensation plans (Note 18)				19					19				19
Repurchase of common stock (Note 20)	(8,936,302)		(9)	(211)					(220)				(220)
Dividends declared (Note 20)					(139)				(139)				(139)
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

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)		2018		2017		2016	
Cash Flows from Operating Activities:							
Net Income	\$	708	\$	365	\$	1,284	
Adjustments to Reconcile Net Income to Cash Flows from Operating Activities:							
Depreciation and Amortization		778		781		727	
Amortization and Write-Off of Debt Issuance Costs		15		21		29	
Provision for Deferred Income Taxes		131		366		(229)	
Net Pension Curtailments and Settlements (Note 17)		22		19		17	
Net Rationalization Charges (Note 3)		44		135		210	
Rationalization Payments		(174)		(154)		(86)	
Net Gains on Asset Sales (Note 5)		(1)		(14)		(31)	
Gain on TireHub transaction, net of transaction costs (Note 5)		(272)				_	
Pension Contributions and Direct Payments		(74)		(90)		(89)	
Changes in Operating Assets and Liabilities, Net of Asset Acquisitions and Dispositions:							
Accounts Receivable		(172)		(147)		211	
Inventories		(171)		(44)		(172)	
Accounts Payable — Trade		223		85		(156)	
Compensation and Benefits		(26)		(65)		(50)	
Other Current Liabilities		(181)		(76)		(56)	
Other Assets and Liabilities		66		(24)		(52)	
Total Cash Flows from Operating Activities		916		1,158		1,557	
Cash Flows from Investing Activities:							
Capital Expenditures		(811)		(881)		(996)	
Asset Dispositions (Note 5)		2		12		35	
Short Term Securities Acquired		(68)		(83)		(72)	
Short Term Securities Redeemed		68		83		60	
Notes Receivable		(55)		—		_	
Other Transactions		(3)		(10)	_	(6)	
Total Cash Flows from Investing Activities		(867)		(879)		(979)	
Cash Flows from Financing Activities:							
Short Term Debt and Overdrafts Incurred		1,944		1,054		417	
Short Term Debt and Overdrafts Paid		(1,795)		(1,046)		(228)	
Long Term Debt Incurred		6,455		6,463		4,988	
Long Term Debt Paid		(6,469)		(6,342)		(5,433)	
Common Stock Issued (Note 18)		4		14		13	
Common Stock Repurchased (Note 20)		(220)		(400)		(500)	
Common Stock Dividends Paid (Note 20)		(138)		(110)		(82)	
Transactions with Minority Interests in Subsidiaries		(31)		(7)		(11)	
Debt Related Costs and Other Transactions		7		(41)		(40)	
Total Cash Flows from Financing Activities		(243)		(415)		(876)	
Effect of Exchange Rate Changes on Cash, Cash Equivalents and Restricted Cash		(43)		57		(15)	
Net Change in Cash, Cash Equivalents and Restricted Cash		(237)		(79)		(313)	
Cash, Cash Equivalents and Restricted Cash at Beginning of the Year		1,110		1,189		1,502	
Cash, Cash Equivalents and Restricted Cash at End of the Year	\$	873	\$	1,110	\$	1,189	

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, 2018, we adopted an accounting standards update, and all related amendments, with new guidance on recognizing revenue from contracts with customers. The standards update outlines a single comprehensive model for entities to utilize to recognize revenue when it transfers goods or services to customers in an amount that reflects the consideration that will be received in exchange for the goods or services. We applied the new guidance to all open contracts at the date of adoption using the modified retrospective method. We recognized the cumulative effect of initially applying the new guidance as an adjustment to the opening balance of retained earnings. The comparative information has not been restated and continues to be reported under the accounting standards in effect for those periods.

The cumulative effect of the changes made to our January 1, 2018 Consolidated Balance Sheet for the adoption of the standards update was as follows:

	Balance at	Adjustment for	Balance at		
(In millions)	December 31, 2017	New Standard	January 1, 2018		
Accounts Receivable	\$ 2,025	\$ 3	\$ 2,028		
Prepaid Expenses and Other Current Assets	224	7	231		
Deferred Income Taxes — Asset	2,008	1	2,009		
Accounts Payable — Trade	2,807	7	2,814		
Other Current Liabilities	1,026	7	1,033		
Retained Earnings	6,044	(3)	6,041		

The impact of the adoption of the standards update on our Consolidated Statements of Operations for the year ended December 31, 2018 was an increase of \$7 million to Net Sales and an increase of \$5 million to Net Income.

The impact of the adoption of the standards update on our Consolidated Balance Sheet as of December 31, 2018 was as follows:

	As of December 31, 2018									
			E	alances						
(In millions)	A	s Reported	Witho	out Adoption		Effect of Change				
Accounts Receivable	\$	2,030	\$	2,018	\$		12			
Prepaid Expenses and Other Current Assets		238		228			10			
Deferred Income Taxes — Asset		1,847		1,848			(1)			
Accounts Payable — Trade		2,920		2,911			9			
Other Current Liabilities		737		727			10			
Retained Earnings		6,597		6,595			2			

We do not expect the impact of the adoption of this new standards update to be material to our consolidated financial statements on an ongoing basis.

Effective January 1, 2018, we adopted an accounting standards update intended to improve the financial statement presentation of pension and postretirement benefits cost. The new guidance requires employers that offer defined benefit pension or other postretirement benefit plans to report service cost in the same income statement line as compensation costs and to report non-service related costs separately from service cost outside a sub-total of income from operations, if one is presented. In addition, the new guidance allows only service cost to be capitalized. We applied the new guidance using the retrospective method. In alignment with the new standards update, we reclassified \$39 million and \$37 million of expense from Cost of Goods Sold ("CGS") and \$23 million of expense and a \$2 million benefit from Selling, Administrative and General Expense ("SAG"), including corporate related costs of \$28 million and \$24 million, to Other (Income) Expense for the years ended December 31, 2017 and 2016, respectively. The provision of the new standards update that allows only service cost to be capitalized resulted in an additional one-time charge of \$9 million which was recorded in Other (Income) Expense for the year ended December 31, 2018.

Effective January 1, 2018, we adopted an accounting standards update with new guidance on the accounting for the income tax consequences of intra-entity transfers of assets other than inventory, including the elimination of the prohibition on recognition of current and deferred income taxes on such transfers. As a result of using the modified retrospective adoption approach, \$2 million was recorded as a cumulative effect adjustment to increase Retained Earnings, with Deferred Income Taxes increasing by \$7 million and Other Assets decreasing by \$5 million. We do not expect the impact of the adoption of this new standards update to be material to our consolidated financial statements on an ongoing basis.

Effective January 1, 2018, we adopted an accounting standards update with new guidance to clarify when changes to the terms or conditions of a share-based payment award must be accounted for as a modification. The new guidance requires the application of modification accounting if the value, vesting conditions or classification of the award changes. The adoption of this standards update did not impact our consolidated financial statements.

Recently Issued Accounting Standards

In August 2018, the Financial Accounting Standards Board ("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 accounting standards update is not expected to have a material impact on our consolidated financial statements.

In February 2018, the FASB issued an accounting standards update that allows an optional one-time reclassification from Accumulated Other Comprehensive Income (Loss) to Retained Earnings for the stranded tax effects resulting from the new corporate tax rate under the Tax Cuts and Jobs Act. The standards update is effective for fiscal years and interim periods beginning after December 15, 2018, with early adoption permitted, and may be applied retrospectively or as of the beginning of the period of adoption. Goodyear has elected not to adopt this optional reclassification.

In August 2017, the FASB issued an accounting standards update with new guidance 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 hedge strategies allowed and providing relief around the documentation and assessment requirements. The standards update is effective using a modified retrospective approach, with the presentation and disclosure guidance required prospectively, for fiscal years and interim periods beginning after December 15, 2018, with early adoption permitted. The adoption of this accounting standards update will not have a material impact on our consolidated financial statements or disclosures.

In January 2017, the FASB issued 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. The standards update is effective prospectively for annual and interim goodwill impairment testing performed in fiscal years beginning after December 15, 2019, with early adoption permitted. The adoption of this standards update is not expected to impact our consolidated financial statements.

In February 2016, the FASB issued an accounting standards update with new guidance intended to increase transparency and comparability among organizations relating to leases. Lessees will be required 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 FASB 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 will be required to be recognized on the balance sheet. The standards update will also require quantitative and qualitative disclosures regarding key information about leasing arrangements. The standards update is effective using a modified retrospective approach for fiscal years and interim periods beginning after December 15, 2018, with early adoption permitted. As originally issued, the standards update required application at the beginning of the earliest comparative period presented at the time of adoption. In July 2018, the FASB issued new guidance allowing entities the option to instead apply the provisions of the new leases guidance at the effective date, without adjusting the comparative periods presented. We plan to elect this optional transition method along with the practical expedients permitted under the transition guidance that will retain the lease classification and initial direct costs for any leases that exist prior to adoption of the standard. In addition, we will not reasses whether any contracts entered into prior to adoption are leases.

We have substantially completed aggregating and evaluating our worldwide lease contracts and are in the final stages of implementing a new lease accounting system to support the accounting and disclosure requirements of this standards update. Upon adoption, we anticipate recording a right-of-use asset and lease liability on our Consolidated Balance Sheet similar in magnitude to the total present value of outstanding future minimum payments for operating leases as shown in Note 14; therefore, we expect this standards update will have a material impact on our Consolidated Balance Sheets and related disclosures. The adoption of

this standards update is not expected to have a material impact on our Consolidated Statements of Operations or Statements of Cash Flows.

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:

- recoverability of intangibles and other long-lived assets,
- deferred tax asset valuation allowances and uncertain income tax positions,
- workers' compensation,
- general and product liabilities and other litigation,
- 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 CGS.

Appropriate provisions are made for uncollectible accounts based on historical loss experience, portfolio duration, economic conditions and credit risk. 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 \$424 million, \$406 million and \$388 million in 2018, 2017 and 2016, 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 19.

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 19.

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 19.

Advertising Costs

Costs incurred for producing and communicating advertising are generally expensed when incurred as a component of 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 \$345 million, \$320 million and \$355 million in 2018, 2017 and 2016, 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. 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 3.

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.

The Tax Cuts and Jobs Act, which was enacted on December 22, 2017, subjects a U.S. parent to current tax on its "global intangible low-taxed income," or GILTI. We do not anticipate incurring a GILTI liability, however, 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. Refer to Note 6.

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, 2018, our cash investments with any single counterparty did not exceed \$180 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 are related to operations are reported as operating activities. Government grants received that are solely related to capital expenditures are reported as investing activities. The Consolidated Statements of Cash Flows are presented net of capital leases of \$6 million, \$5 million and \$3 million originating in the years ended December 31, 2018, 2017 and 2016, respectively. Cash flows from investing activities in 2018 exclude \$266 million of accrued capital expenditures remaining 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 exclude \$264 million of accrued capital expenditures remaining unpaid at December 31, 2016, and include payment of \$254 million of capital expenditures that were accrued and unpaid at December 31, 2016, and include payment of \$254 million of capital expenditures that were accrued and unpaid at December 31, 2016, 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)		2018		2017		2016				
Cash and Cash Equivalents	\$	801	\$	1,043	\$	1,132				
Restricted Cash		72		67		57				
Total Cash, Cash Equivalents and Restricted Cash	\$	873	\$	1,110	\$	1,189				

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, 2018, approximately \$697 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 10.

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 the amount of the impairment loss, if any, must be measured.

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 11.

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 Accumulated Other Comprehensive Loss ("AOCL"), net of tax. We regularly review our investments to determine whether a decline in fair value below the cost basis is other than temporary. If the decline in fair value is judged to be other than temporary, the cost basis of the security is written down to fair value and the amount of the write-down is included in the Consolidated Statements of Operations. Refer to Notes 16 and 21.

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 solely 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 \$776 million, \$779 million and \$726 million in 2018, 2017 and 2016, respectively. Refer to Notes 4 and 13.

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. Ineffectiveness in hedging relationships is recorded in Other (Income) Expense in the current period.

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 recognized in Other (Income) Expense over the life of the contract.

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 15.

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 18.

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 7.

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 15 and 16.

Reclassifications and Adjustments

Certain items previously reported in specific financial statement captions have been reclassified to conform to the current presentation. Additionally, in the second quarter of 2016, we recorded an out of period adjustment of \$24 million of expense related to the elimination of intracompany profit in Americas. The adjustment primarily relates to the years, and interim periods therein, of 2012 to 2015, with the majority attributable to 2012. The adjustment did not have a material effect on any of the periods impacted.

Note 2. Net Sales

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

	Europe, Middle East										
(In millions)		Americas		and Africa		Asia Pacific		Total			
Tire unit sales	\$	6,417	\$	4,771	\$	2,009	\$	13,197			
Other tire and related sales		620		278		127		1,025			
Retail services and service related sales		564		34		77		675			
Chemical		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, such as tire rims, tire valves and valve stems.

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 and Other Long Term Liabilities in the Consolidated Balance Sheet each totaled \$39 million at December 31, 2018. 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 balance of deferred revenue related to contracts with customers, and changes during the year ended December 31, 2018:

(In millions)	
Balance at December 31, 2017	\$ 121
Revenue deferred during period	116
Revenue recognized during period	(159)
Impact of foreign currency translation	_
Balance at December 31, 2018	\$ 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 excess and high-cost manufacturing capacity and to reduce associate costs.

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

(In millions)	Associate	e-related Costs	Other Costs	Total
Balance at December 31, 2015	\$	96	\$ 7	\$ 103
2016 charges ⁽¹⁾		202	16	218
Incurred, Net of Foreign Currency Translation of (13) million and 0 million, respectively		(75)	(18)	(93)
Reversed to the Statement of Operations		(9)		(9)
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

(1) Charges of \$64 million, \$135 million and \$218 million in 2018, 2017 and 2016, respectively, exclude \$(1) million, \$13 million and \$1 million of benefit plan curtailments and settlements recorded in Rationalizations in the Statement of Operations.

(2) Incurred in 2016 of \$93 million excludes \$6 million of rationalization payments, primarily for labor claims relating to a previously closed facility in Greece.

The accrual balance of \$81 million at December 31, 2018 is expected to be substantially utilized in the next 12 months and includes \$46 million related to plans to reduce manufacturing headcount and improve operating efficiency in Europe, Middle East and Africa ("EMEA") and \$29 million related to global plans to reduce SAG headcount.

The net rationalization charges included in Income before Income Taxes are as follows:

(In millions)	2018	2017		2016
Current Year Plans				
Associate Severance and Other Related Costs	\$ 40	\$	81	\$ 188
Other Exit and Non-Cancelable Lease Costs	—		2	1
Current Year Plans - Net Charges	\$ 40	\$	83	\$ 189
Prior Year Plans				
Associate Severance and Other Related Costs	\$ (11)	\$	9	\$ 5
Benefit Plan Curtailments and Settlements	(1)		13	1
Other Exit and Non-Cancelable Lease Costs	16		30	15
Prior Year Plans - Net Charges	 4		52	 21
Total Net Charges	\$ 44	\$	135	\$ 210
Asset Write-off and Accelerated Depreciation Charges	\$ 4	\$	40	\$ 20

Substantially all of the new charges in 2018 related to future cash outflows. Net current year plan charges at December 31, 2018 include 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. Net current year plan charges at December 31, 2018 include reversals of \$1 million for actions no longer needed for their originally intended purposes.

Net 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. Net prior year plan charges for the year ended December 31, 2018 include reversals of \$18 million for actions no longer needed for their originally intended purposes.

Ongoing rationalization plans had approximately \$720 million in charges through 2018 and approximately \$12 million is expected to be incurred in future periods.

Approximately 500 associates will be released under new plans initiated in 2018, of which approximately 150 were released through December 31, 2018. In 2018, approximately 500 associates were released under plans initiated in prior years. Approximately 550 associates remain to be released under all ongoing rationalization plans.

At December 31, 2018, approximately 850 former associates of the closed Amiens, France manufacturing facility have asserted wrongful termination or other claims against us. Refer to Note 19.

Asset write-off and accelerated depreciation charges in 2018 primarily related to the closure of our tire manufacturing facility in Philippsburg, Germany. Asset write-off and accelerated depreciation for all periods were recorded in CGS.

Rationalization activities initiated in 2017 consisted primarily of net 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. Net 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, \$8 million related to manufacturing headcount reductions in EMEA, and \$7 million related to a global plan to reduce SAG headcount.

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

Rationalization activities initiated in 2016 consisted primarily of net charges of \$116 million related to the plan to close our tire manufacturing facility in Philippsburg, Germany, \$34 million related to a global plan to reduce SAG headcount, and \$25 million

related to manufacturing headcount reductions in EMEA. Net prior year plan charges recognized in the year ended December 31,

2016 include charges of \$12 million related to the closure of one of our manufacturing facilities in Amiens, France.

Accelerated depreciation charges in 2016 primarily related to the closure of our Wolverhampton, U.K. mixing and retreading facility and the plan to close 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)	2018		2017	2016	
Interest expense before capitalization	\$	335	\$ 358	\$ 398	
Capitalized interest		(14)	(23)	(26)	
	\$	321	\$ 335	\$ 372	

Cash payments for interest, net of amounts capitalized, were \$331 million, \$314 million and \$351 million in 2018, 2017 and 2016, respectively.

Note 5. Other (Income) Expense

(In millions)	2018	2017	2	2016
Gain on TireHub transaction, net of transaction costs	\$ (272)	\$ _	\$	_
Non-service related pension and other postretirement benefits	121	62		35
Interest income on indirect tax settlements in Brazil	(38)	_		_
Financing fees and financial instruments	36	55		83
Royalty income	(20)	(32)		(23)
Interest income	(16)	(13)		(15)
Net foreign currency exchange (gains) losses	(16)	(7)		(13)
General and product liability (income) expense - discontinued products	9	—		(27)
Net (gains) losses on asset sales	(1)	(14)		(31)
Miscellaneous expense	23	19		16
	\$ (174)	\$ 70	\$	25

On July 1, 2018, we formed a 50/50 joint venture with Bridgestone Americas, Inc. ("Bridgestone") that combined our Company-Owned Wholesale Distribution ("COWD") business and Bridgestone's tire wholesale warehouse business to create TireHub, LLC ("TireHub"), a national tire distributor in the United States. Upon formation, we transferred certain assets and liabilities of the COWD business, with a net book value of \$6 million, to TireHub. With the assistance of a third party valuation specialist, we determined the fair value of our equity interest in TireHub to be \$292 million as of July 1, 2018, using a discounted cash flow method. As a result, we recognized a gain of \$286 million, which represents the difference between the fair value of the equity interest received and the net book value of the assets and liabilities contributed. For the year ended December 31, 2018, we incurred transaction costs of \$14 million in connection with the formation of the joint venture.

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. Non-service related pension and other postretirement benefits cost for the year ended December 31, 2018 includes expense of \$9 million 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. Refer to Note 17.

We have 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 have recorded a gain of \$53 million in CGS and related interest income of \$38 million in Other (Income) Expense in 2018.

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. Financing fees and financial instruments expense in 2016 included premiums of \$53 million related to the redemption of our \$900 million 6.5% senior notes due 2021 in June 2016 and our €250 million 6.75% senior notes due 2019 in January 2016.

Royalty income is derived primarily from licensing arrangements related to divested businesses as well as other licensing arrangements.

Interest income consists primarily of amounts earned on cash deposits.

Foreign currency exchange in all periods reflects net gains and losses resulting from the effect of exchange rate changes on various foreign currency transactions worldwide.

General and product liability (income) expense - discontinued products includes charges for claims against us related primarily to asbestos personal injury claims, net of probable insurance recoveries. General and product liability (income) expense - discontinued products in 2018, 2017 and 2016 includes a benefit of \$3 million, \$5 million and \$24 million, respectively, for the recovery of past costs from certain asbestos insurers. General and product liability (income) expense - discontinued products in 2016 included a benefit of \$10 million related to changes in assumptions for probable insurance recoveries for asbestos claims in future periods.

Net (gains) losses on asset sales in 2017 included a gain of \$6 million related to the sale of a former wire plant site in Luxembourg. Net (gains) losses on asset sales in 2016 included a gain of \$16 million related to the sale of the former wire plant site and a gain of \$9 million related to the sale of our interest in a supply chain logistics company.

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.

Note 6. Income Taxes

The components of Income before Income Taxes follow:

(In millions)	2018		201	7	2016		
U.S.	\$ 43	39	\$	394	\$	595	
Foreign	57	2		484		612	
	\$ 1,01	1	\$	878	\$	1,207	

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

(In millions)	2018	2017	2016
U.S. federal income tax expense at the statutory rate of 21% (35% for 2017 and 2016)	\$ 212	\$ 307	\$ 422
Adjustment for foreign income taxed at different rates	30	(55)	(51)
Net establishment of U.S. valuation allowance	25	5	39
U.S. charges (benefits) related to foreign tax credits and R&D	20	(23)	(163)
Net establishment (resolution) of uncertain tax positions	18	(6)	3
Provision for undistributed foreign earnings, net	(9)	(162)	_
Transition tax	8	77	—
Net foreign losses (income) with no tax due to valuation allowances	7	(7)	8
Net establishment (release) of foreign valuation allowances	(5)	1	(354)
State income taxes, net of U.S. federal benefit	(1)	9	16
Domestic production activities deduction	(1)	(16)	(3)
Other	(1)	(6)	8
Deferred tax impact of enacted tax rate and law changes	—	389	(2)
United States and Foreign Tax Expense (Benefit)	\$ 303	\$ 513	\$ (77)

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

(In millions)	2018	2017	2016
Current:			
Federal	\$ (15)	\$ (22)	\$ (25)
Foreign	188	166	175
State	(1)	3	2
	 172	147	 152
Deferred:			
Federal	120	389	77
Foreign	6	(8)	(328)
State	5	(15)	22
	 131	366	 (229)
United States and Foreign Tax Expense (Benefit)	\$ 303	\$ 513	\$ (77)

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, 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") as discussed below.

During the fourth quarter of 2018, we wrote off \$37 million in deferred tax assets for foreign tax credits that expired during the year and established a valuation allowance of \$98 million against foreign tax credits expiring primarily in 2021, as we have now concluded that it is not more likely than not that we will be able to utilize these credits prior to their expiration. These charges reflect the recognition of the \$88 million discrete tax benefit related to our Venezuelan subsidiary that reduced taxable income that otherwise would have utilized foreign tax credits. We also considered our forecasts of future profitability in assessing our ability to realize our foreign tax credits. These forecasts were prepared in connection with our annual budgeting process and include the impact of recent trends, including various macroeconomic factors such as rising 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 provide us sufficient positive evidence to conclude that it is more likely than not that the remaining foreign tax credits of \$637 million will be fully utilized, despite the negative evidence of their limited carryforward periods.

The Tax Act established a corporate income tax rate of 21%, replacing the former 35% rate, and created a territorial tax system rather than a worldwide system, which generally eliminated the U.S. federal income tax on dividends from foreign subsidiaries. The transition to the territorial system included a onetime transition tax on certain of our foreign earnings previously untaxed in the United States (the "transition tax"). The Securities and Exchange Commission provided up to a one-year measurement period for companies to finalize the accounting for the impacts of this new legislation. As required, we finalized our accounting for items previously considered provisional during 2018. At December 31, 2017, we recorded an initial non-cash net charge to tax expense of \$299 million related to the enactment of the Tax Act. Our final accounting has adjusted this non-cash net charge to \$298 million. This net charge includes a deferred tax charge of \$384 million primarily from revaluing our net U.S. deferred tax assets to reflect the new U.S. corporate tax rate. No measurement period adjustment was necessary and this calculation is complete. The net charge also originally included a provisional deferred tax benefit of \$162 million to reverse reserves maintained for the taxation of undistributed foreign earnings under prior law, net of reserves established for foreign withholding taxes consistent with our revised indefinite reinvestment assertion. In the fourth quarter of 2018, we finalized our accounting and increased the provisional amount by \$9 million to \$171 million to reflect U.S. tax guidance issued during the year and to reflect our final indefinite reinvestment assertion. We were able to reasonably estimate the transition tax and recorded an initial provisional tax obligation of \$77 million at December 31, 2017. In general, the transition tax imposed by the Tax Act results in the taxation of our accumulated foreign earnings and profits ("E&P") at a 15.5% rate on liquid assets and 8% on the remaining unremitted foreign E&P, both net of foreign tax credits. Adjusted for U.S. tax guidance issued during 2018 and the impact of changes to E&P of our subsidiaries resulting from the filing of our 2017 corporate income tax return during the fourth quarter of 2018, we have now finalized our accounting and recognized an additional measurement period adjustment of \$8 million, resulting in a total transition tax obligation of \$85 million.

On January 15, 2019, the IRS finalized regulations that govern the transition tax. We are in the process of analyzing these regulations. We do not expect any material impact to our financial statements as a consequence of the final regulations.

The Tax Act subjects a U.S. parent to current tax on its "global intangible low-taxed income" ("GILTI"). We do not anticipate incurring a GILTI liability, however, 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.

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.

In 2016, the income tax benefit of \$77 million was favorably impacted by net discrete adjustments of \$458 million, due primarily to a tax benefit of \$331 million from the December 31, 2016 release of the valuation allowance on certain subsidiaries in England, France, Luxembourg and New Zealand. As of December 31, 2016, these subsidiaries on which we had maintained a full valuation allowance achieved earnings of a duration and magnitude that they were in a position of cumulative profits for the most recent three-year period. As a consequence of this profitability and our future business plans forecasting sustainable profitability, we concluded that it was more likely than not that our deferred tax assets in these entities would be realized. The 2016 income tax benefit also included a \$163 million tax benefit resulting from changing our election for our 2009, 2010 and 2012 U.S. tax years from deducting foreign taxes to crediting foreign taxes, a \$39 million tax charge related to establishing a valuation allowance in the United States on deferred tax assets related to receivables from our deconsolidated Venezuelan subsidiary which were contributed to its capital, and a \$7 million tax benefit related to the release of a valuation allowance in Brazil due to the collection of a receivable that had previously been written off as uncollectible.

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

(In millions)	2018	2017
Tax loss carryforwards and credits	\$ 1,473	\$ 1,515
Capitalized research and development expenditures	404	402
Accrued expenses deductible as paid	261	297
Postretirement benefits and pensions	207	223
Deferred interest deductions	40	
Rationalizations and other provisions	26	36
Vacation and sick pay	23	24
Investment and receivables related to Venezuelan deconsolidation		80
Other	111	85
	2,545	2,662
Valuation allowance	(317)	(318)
Total deferred tax assets	2,228	2,344
Property basis differences	(475)	(414)
Tax on undistributed earnings of subsidiaries	(1)	(22)
Total net deferred tax assets	\$ 1,752	\$ 1,908

At December 31, 2018, we had \$562 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 \$60 million of tax credits in various European countries that are subject to expiration from 2019 to 2028. A valuation allowance totaling \$204 million has been recorded against these and other deferred tax assets where recovery of the asset or carryforward is uncertain. In addition, we had \$815 million of federal and \$96 million of state tax assets for net operating loss and tax credit carryforwards. The federal carryforwards consist of \$740 million of foreign tax credits that are subject to expiration from 2019 to 2028 and \$75 million of tax assets related to research and development credits and other federal credits that are subject to expiration from 2030 to 2038. The state carryforwards are subject to expiration from 2019 to 2034. A valuation allowance of \$113 million has been recorded against federal and state deferred tax assets, primarily federal carryforwards for foreign tax credits, where recovery is uncertain.

At December 31, 2018, we had unrecognized tax benefits of \$71 million that if recognized, would have a favorable impact on our tax expense of \$71 million. We had accrued interest of \$2 million as of December 31, 2018. 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 2019 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)	2018		2017	2016
Balance at January 1	\$ 5	52	\$ 63	\$ 54
Increases related to prior year tax positions		9	2	19
Decreases related to prior year tax positions		(1)	(2)	(8)
Settlements		(2)	(8)	(8)
Foreign currency impact		(5)		6
Increases related to current year tax positions	2	21		1
Lapse of statute of limitations		(3)	(3)	(1)
Balance at December 31	\$	71	\$ 52	\$ 63

We are open to examination in the United States for 2018 and in Germany from 2013 onward. Generally, for our remaining tax jurisdictions, years from 2013 onward are still open to examination.

We have undistributed earnings and profits of our foreign subsidiaries totaling approximately \$2.2 billion at December 31, 2018 as compared to approximately \$2.8 billion at December 31, 2017. During 2018, we repatriated approximately \$900 million of undistributed earnings to the United States primarily representing dividends and return of capital from subsidiaries in Singapore, Luxembourg and Japan. As required, we finalized our indefinite reinvestment assertion under the Tax Act during the fourth quarter of 2018 and, as a consequence, 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 \$77 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 \$178 million, \$144 million and \$153 million in 2018, 2017 and 2016, 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)	2018	2017	2016
Earnings per share — basic:			
Goodyear net income	\$ 693	\$ 346	\$ 1,264
Weighted average shares outstanding	 237	 249	 263
Earnings per common share — basic	\$ 2.92	\$ 1.39	\$ 4.81
Earnings per share — diluted:			
Goodyear net income	\$ 693	\$ 346	\$ 1,264
Weighted average shares outstanding	 237	 249	263
Dilutive effect of stock options and other dilutive securities	2	4	3
Weighted average shares outstanding — diluted	 239	253	266
Earnings per common share — diluted	\$ 2.89	\$ 1.37	\$ 4.74

Weighted average shares outstanding — diluted for 2018 excludes approximately 2 million equivalent shares related to options with exercise prices greater than the average market price of our common stock (i.e., "underwater" options). There were approximately 1 million equivalent shares related to options with exercise prices greater than the average market price of our common stock for 2017 and 2016.

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, 2018, 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. Americas also provides related products and services including retreaded tires, tread rubber, 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.

Europe, Middle East and Africa 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)	2018	2017	2016
Sales			
Americas	\$ 8,168	\$ 8,212	\$ 8,172
Europe, Middle East and Africa	5,090	4,928	4,880
Asia Pacific	2,217	2,237	2,106
Net Sales	\$ 15,475	\$ 15,377	\$ 15,158
Segment Operating Income			
Americas	\$ 654	\$ 847	\$ 1,151
Europe, Middle East and Africa	363	367	472
Asia Pacific	257	342	373
Total Segment Operating Income	1,274	1,556	1,996
Less:			
Rationalizations	44	135	210
Interest expense	321	335	372
Other (income) expense ⁽¹⁾	(174)	70	25
Asset write-offs and accelerated depreciation	4	40	20
Corporate incentive compensation plans	13	33	76
Intercompany profit elimination	4	2	2
Retained expenses of divested operations	9	13	18
Other ⁽²⁾	 42	 50	 66
Income before Income Taxes	\$ 1,011	\$ 878	\$ 1,207

(1) Refer to Note 5.

(2) Primarily represents unallocated corporate costs and the elimination of \$18 million, \$30 million and \$22 million for the years ended December 31, 2018, 2017 and 2016, respectively, of royalty income attributable to the strategic business units.

The following table presents segment assets at December 31:

(In millions)	2018	2017
Assets		
Americas	\$ 7,160	\$ 6,923
Europe, Middle East and Africa	4,809	4,995
Asia Pacific	2,602	2,681
Total Segment Assets	14,571	14,599
Corporate ⁽¹⁾	2,301	2,465
	\$ 16,872	\$ 17,064

(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)	2018	2017	2016
Net Sales			
United States	\$ 6,692	\$ 6,678	\$ 6,724
Germany	1,883	1,874	1,853
Other international	6,900	6,825	6,581
	\$ 15,475	\$ 15,377	\$ 15,158
Long-Lived Assets			
United States	\$ 2,734	\$ 2,750	
China	762	766	
Other international	3,763	3,935	
	\$ 7,259	\$ 7,451	

At December 31, 2018, significant concentrations of cash and cash equivalents held by our international subsidiaries included the following amounts:

- \$278 million or 35% in Asia Pacific, primarily India, China and Japan (\$344 million or 33% at December 31, 2017),
- \$261 million or 33% in Europe, Middle East and Africa, primarily Belgium (\$355 million or 34% at December 31, 2017), and
- \$134 million or 17% in Americas, primarily Chile, Canada and Brazil (\$169 million or 16% at December 31, 2017).

Rationalizations, as described in Note 3, Costs Associated with Rationalization Programs, Net (gains) losses on asset sales, as described in Note 5, Other (Income) Expense, 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)		2018	2017	2016
Rationalizations				
Americas	(5 3	\$ 6	\$ 15
Europe, Middle East and Africa		36	111	184
Asia Pacific		3	2	1
Total Segment Rationalizations	-	42	119	200
Corporate		2	16	10
		5 44	\$ 135	\$ 210

(In millions)	2018	2017	2016
Net (Gains) Losses on Asset Sales			
Americas ⁽¹⁾	\$ (275)	\$ (4)	\$ (4)
Europe, Middle East and Africa	2	(10)	(17)
Asia Pacific		—	(1)
Total Segment Asset Sales	(273)	 (14)	 (22)
Corporate	—	—	(9)
	\$ (273)	\$ (14)	\$ (31)

(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)	2018	2017	2016
Asset Write-offs and Accelerated Depreciation			
Americas	\$ —	\$ —	\$ 1
Europe, Middle East and Africa	4	40	19
Total Segment Asset Write-offs and Accelerated Depreciation	\$ 4	\$ 40	\$ 20

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

(In millions)	2018		2017	2016
Capital Expenditures				
Americas	\$	406	\$ 525	\$ 618
Europe, Middle East and Africa		180	159	191
Asia Pacific		188	164	137
Total Segment Capital Expenditures		774	 848	 946
Corporate		37	33	50
	\$	811	\$ 881	\$ 996

(In millions)	2018	2017	2016
Depreciation and Amortization	 		
Americas	\$ 414	\$ 398	\$ 366
Europe, Middle East and Africa	201	191	192
Asia Pacific	131	124	120
Total Segment Depreciation and Amortization	 746	713	 678
Corporate	32	68	49
	\$ 778	\$ 781	\$ 727

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

(In millions)	2018	2017	2016
Equity in (Income)			
Americas	\$ 11	\$ (5)	\$
Europe, Middle East and Africa	(1)	—	(1)
Total Segment Equity in (Income)	\$ 10	\$ (5)	\$ (1)

Note 9. Accounts Receivable

(In millions)	2018		2017
Accounts receivable	\$ 2,1	43 \$	2,141
Allowance for doubtful accounts	(1	13)	(116)
	\$ 2,0	30 \$	2,025

Note 10. Inventories

(In millions)	2018	2017
Raw materials	\$ 569	\$ 466
Work in process	152	142
Finished goods	2,135	2,179
	\$ 2.856	\$ 2.787

Note 11. Goodwill and Intangible Assets

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

(In millions)	lance at ber 31, 2017	Acquisitions	Divestitures	Translation	Balance at ember 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 the net carrying amount of goodwill allocated by reporting unit, and changes during 2017:

(In millions)	ance at oer 31, 2016	Acquisitions	Divestitures	Translation	Balance at ember 31, 2017
Americas	\$ 91	\$ _	\$ _	\$ 	\$ 91
Europe, Middle East and Africa	383	1	_	53	437
Asia Pacific	61	1		5	67
	\$ 535	\$ 2	\$ _	\$ 58	\$ 595

The following table presents information about intangible assets:

	_			2018			2017						
(In millions)		Gross Carrying Amount ⁽¹⁾		Accumulated Amortization ⁽¹⁾		Net Carrying Amount		Gross Carrying Amount ⁽¹⁾		Accumulated Amortization ⁽¹⁾		Carrying Amount	
Intangible assets with indefinite lives	\$	124	\$	(6)	\$	118	\$	124	\$	(6)	\$	118	
Trademarks and patents		23		(19)		4		26		(21)		5	
Other intangible assets		23		(9)		14		24		(8)		16	
	\$	170	\$	(34)	\$	136	\$	174	\$	(35)	\$	139	

(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 both 2018 and 2017, and \$1 million in 2016. We estimate that annual amortization expense related to intangible assets will be approximately \$2 million in 2019 through 2021, and \$1 million in 2022 and 2023. The weighted average remaining amortization period is approximately 21 years.

Our annual impairment analyses for 2018, 2017 and 2016 indicated no impairment of goodwill or intangible assets with indefinite lives. In addition, there were no events or circumstances that indicated the impairment tests should be re-performed for goodwill or for intangible assets with indefinite lives for any reporting unit at December 31, 2018.

Note 12. Other Assets and Investments

Dividends received from our consolidated subsidiaries were \$608 million, \$558 million and \$66 million in 2018, 2017 and 2016, respectively. Dividends received in 2018 were primarily from subsidiaries in Singapore and Japan and paid to the United States. Dividends received in 2017 were primarily from a subsidiary in Luxembourg and paid to the United States. Dividends received from our affiliates accounted for using the equity method were \$5 million, \$5 million and \$4 million in 2018, 2017 and 2016, respectively.

Note 13. Property, Plant and Equipment

	2018						2017						
		0		Capital		T • 1		0		Capital			
(In millions)		Owned		Leases		Total		Owned		Leases		Total	
Property, plant and equipment, at cost:													
Land	\$	427	\$	—	\$	427	\$	433	\$	—	\$	433	
Buildings		2,564		29		2,593		2,589		30		2,619	
Machinery and equipment		13,440		43		13,483		13,456		46		13,502	
Construction in progress		654		1		655		721		_		721	
		17,085		73		17,158		17,199		76		17,275	
Accumulated depreciation		(10,128)		(33)		(10,161)		(10,047)		(31)		(10,078)	
		6,957		40		6,997		7,152		45		7,197	
Spare parts		262		—		262		254		—		254	
	\$	7,219	\$	40	\$	7,259	\$	7,406	\$	45	\$	7,451	

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; machinery and equipment, 3 to 40 years.

Note 14. Leased Assets

Net rental expense comprised the following:

(In millions)	2018		2017		2016
Gross rental expense	\$	333	\$	332	\$ 332
Sublease rental income		(16)		(17)	(27)
	\$	317	\$	315	\$ 305

We enter into leases primarily for our wholesale distribution facilities, administrative offices, retail stores, vehicles and data processing equipment under varying terms and conditions. Many of the leases require us to pay taxes assessed against leased property and the cost of insurance and maintenance. A portion of our retail distribution network is sublet to independent dealers.

While substantially all subleases and some operating leases are cancelable for periods beyond 2019, management expects that in the normal course of its business nearly all of its independent dealer distribution network will be actively operated. As leases and subleases for existing locations expire, we would normally expect to evaluate such leases and either renew the leases or substitute another more favorable retail location.

The following table presents future minimum lease payments:

							2024 and	
(In millions)	 2019	_	2020	 2021	2022	2023	Beyond	Total
Capital Leases								
Minimum lease payments	\$ 8	\$	7	\$ 18	\$ 3	\$ 2	\$ 23	\$ 61
Imputed interest	(3)		(3)	(3)	(1)	(1)	(13)	(24)
Present value	\$ 5	\$	4	\$ 15	\$ 2	\$ 1	\$ 10	\$ 37
Operating Leases				 	 	 	 	
Minimum lease payments	\$ 266	\$	214	\$ 161	\$ 110	\$ 84	\$ 391	\$ 1,226
Minimum sublease rentals	(15)		(12)	(8)	(5)	(3)	(6)	(49)
	\$ 251	\$	202	\$ 153	\$ 105	\$ 81	\$ 385	\$ 1,177
Imputed interest	 			 	 	 	 	(263)
Present value								\$ 914

Note 15. Financing Arrangements and Derivative Financial Instruments

At December 31, 2018, we had total credit arrangements of \$8,971 million, of which \$3,151 million were unused. At that date, 33% of our debt was at variable interest rates averaging 4.92%.

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

At December 31, 2018, we had short term committed and uncommitted credit arrangements totaling \$759 million, of which \$329 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:

	D	ecember 31,	Ľ	December 31,
(In millions)		2018		2017
Chinese credit facilities	\$	122	\$	—
Other domestic and foreign debt		288		262
Notes payable and overdrafts	\$	410	\$	262
Weighted average interest rate		8.03%		5.00%
Long term debt and capital leases due within one year:				
Chinese credit facilities	\$	32	\$	113
Other domestic and foreign debt (including capital leases)		211		278
Total long term debt and capital leases due within one year	\$	243	\$	391
Weighted average interest rate		4.57%		6.86%
Total obligations due within one year	\$	653	\$	653

Long Term Debt and Capital Leases and Financing Arrangements

At December 31, 2018, we had long term credit arrangements totaling \$8,212 million, of which \$2,822 million were unused.

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

	 December	31, 2018	December 31, 2017			
(In millions)	 Amount	Interest Rate	Amount	Interest Rate		
Notes:						
8.75% due 2020	\$ 278		\$ 275			
5.125% due 2023	1,000		1,000			
3.75% Euro Notes due 2023	286		300			
5% due 2026	900		900			
4.875% due 2027	700		700			
7% due 2028	150		150			
Credit Facilities:						
\$2.0 billion first lien revolving credit facility due 2021	—	_	—	—		
Second lien term loan facility due 2025	400	4.46%	400	3.50%		
€550 million revolving credit facility due 2020	—	_	—	—		
Pan-European accounts receivable facility	335	1.01%	224	0.90%		
Mexican credit facilities	200	4.30%	340	3.14%		
Chinese credit facilities	219	5.03%	212	4.87%		
Other foreign and domestic debt ⁽¹⁾	884	5.35%	967	6.02%		
	5,352		5,468			
Unamortized deferred financing fees	(36)		(41)			
	 5,316		5,427	-		
Capital lease obligations	37		40			
	 5,353		5,467			
Less portion due within one year	(243)		(391)			
	\$ 5,110		\$ 5,076			

(1) Interest rates are weighted average interest rates related to various foreign credit facilities with customary terms and conditions and domestic debt related to our Global and Americas Headquarters.

NOTES

\$282 million 8.75% Senior Notes due 2020

At December 31, 2018, \$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, 2018, \$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 on or after November 15, 2018 at a redemption price of 102.563%, 101.281% and 100% during the 12-month periods commencing on November 15, 2018, 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 Dunlop Tires Europe B.V. ("GDTE"), 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 GDTE

At December 31, 2018, €250 million aggregate principal amount of GDTE'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 GDTE 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 on or after December 15, 2018 at a redemption price of 101.875%, 100.938% and 100% during the 12-month periods commencing on December 15, 2018, 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, 2018, \$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. In addition, prior to May 31, 2019 we may redeem up to 35% of the original aggregate principal amount of these notes from net cash proceeds of certain equity offerings at a redemption price equal to 105% of the principal amount 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.

\$700 million 4.875% Senior Notes due 2027

At December 31, 2018, \$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.

<u>\$150 million 7% Senior Notes due 2028</u>

At December 31, 2018, \$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

<u>\$2.0 billion Amended and Restated First Lien Revolving Credit Facility due 2021</u>

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, 2018, our borrowing base, and therefore our availability, under this facility was \$330 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, 2018 and 2017, 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

In March 2018, we amended our second lien term loan facility. As a result of the amendment, the term loan, which previously matured on April 30, 2019, now 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, 2018 and 2017, the amounts outstanding under this facility were \$400 million.

€550 million Amended and Restated Senior Secured European Revolving Credit Facility due 2020

Our amended and restated &550 million European revolving credit facility consists of (i) a &125 million German tranche that is available only to Goodyear Dunlop Tires Germany GmbH ("GDTG") and (ii) a &425 million all-borrower tranche that is available to GDTE, GDTG and Goodyear Dunlop Tires Operations S.A. Up to &150 million of swingline loans and &50 million in letters of credit are available for issuance under the all-borrower tranche. Amounts drawn under this facility will bear interest at LIBOR plus 175 basis points for loans denominated in U.S. dollars or pounds sterling and EURIBOR plus 175 basis points for loans denominated in euros, and undrawn amounts under the facility will be subject to an annual commitment fee of 30 basis points.

GDTE and certain of its subsidiaries in the United Kingdom, Luxembourg, France and Germany provide guarantees to support the facility. GDTE'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 GDTE; and
- a substantial portion of the tangible and intangible assets of GDTE 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. GDTE 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, which matures on May 12, 2020, contains covenants similar to those in our first lien revolving credit facility, with additional limitations applicable to GDTE and its subsidiaries. In addition, under the facility, GDTE's ratio of Consolidated Net J.V. Indebtedness to Consolidated European J.V. 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 J.V. Indebtedness" and "Consolidated European J.V. 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, 2014. The facility also has customary defaults, including a cross-default to material indebtedness of Goodyear and our subsidiaries.

At December 31, 2018 and 2017, we had no borrowings and no letters of credit issued under the European revolving credit facility.

Accounts Receivable Securitization Facilities (On-Balance Sheet)

On September 28, 2018, GDTE and certain other of our European subsidiaries amended and restated the definitive agreements for our pan-European accounts receivable securitization facility, extending the term through 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 beginning October 16, 2017 to October 17, 2018, the designated maximum amount of the facility was ≤ 275 million. Effective October 18, 2018, the designated maximum amount of the facility was increased to ≤ 320 million.

The facility involves an ongoing daily sale of substantially all of the trade accounts receivable of certain GDTE 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 17, 2019.

At December 31, 2018, the amounts available and utilized under this program totaled \$335 million (\in 293 million). At December 31, 2017, the amounts available and utilized under this program totaled \$224 million (\in 187 million). The program does not qualify for sale accounting, and accordingly, these amounts are included in Long Term Debt and Capital 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, 2018 and 2017, the amount of receivables sold was \$568 million and \$572 million, respectively.

Other Foreign Credit Facilities

A Mexican subsidiary and a U.S. subsidiary have several financing arrangements in Mexico. At December 31, 2018, the amounts available and utilized under these facilities were \$340 million and \$200 million, respectively. At December 31, 2017, the amounts available and utilized under these facilities were \$340 million. The facilities ultimately mature in 2020. The facilities contain covenants relating to the Mexican and U.S. subsidiary and have customary representations and warranties and default provisions relating to the Mexican and U.S. subsidiary's ability to perform its respective obligations under the applicable facilities.

A Chinese subsidiary has several financing arrangements in China. At December 31, 2018 and 2017, the amounts available under these facilities were \$672 million and \$648 million, respectively. At December 31, 2018, the amount utilized under these facilities was \$341 million, of which \$219 million was long term debt and \$122 million was notes payable. At December 31, 2018, \$32 million of the long term debt was due within a year. At December 31, 2017, the amount utilized under these facilities was \$212 million of long term debt, of which \$113 million 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. At December 31, 2017, the unused amounts available under these facilities were \$116 million and \$217 million, respectively. At December 31, 2018, and 2017, restricted cash related to funds obtained under these credit facilities was \$0 million and \$7 million, respectively.

Debt Maturities

The annual aggregate maturities of our debt (excluding the impact of deferred financing fees and unamortized discounts) and capital leases for the five years subsequent to December 31, 2018 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)	2019		2020	2021	2022	2023
U.S.	\$	26	\$ 450	\$ 1	\$ 1	\$ 1,001
Foreign		627	340	218	106	651
	\$	653	\$ 790	\$ 219	\$ 107	\$ 1,652

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

	Decen	ıber 31,]	December 31,
(In millions)	20)18		2017
Fair Values — Current asset (liability):				
Accounts receivable	\$	7	\$	3
Other current liabilities		(6)		(9)

At December 31, 2018 and 2017, these outstanding foreign currency derivatives had notional amounts of \$1,240 million and \$1,409 million, respectively, and were primarily related to intercompany loans. Other (Income) Expense included net transaction gains of \$80 million and losses of \$57 million in 2018 and 2017, respectively, on foreign currency derivatives. 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)	nber 31, 018]	December 31, 2017		
Fair Values — Current asset (liability):					
Accounts receivable	\$ 9	\$	1		
Other current liabilities	(1)		(8)		
Fair Values — Long term asset (liability):					
Other assets	\$ 2	\$	—		
Other long term liabilities	—		(2)		

At December 31, 2018 and 2017, these outstanding foreign currency derivatives had notional amounts of \$347 million and \$250 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 designated as cash flow hedging instruments (before tax and minority):

		Year Ended					
(In millions) (Income) Expense		2018		2017			
Amounts deferred to AOCL	\$	(12)	\$	28			
Amount of deferred loss (gain) reclassified from AOCL into CGS		7		2			
Amounts excluded from effectiveness testing		(3)		(2)			

The estimated net amount of the deferred gains at December 31, 2018 that is expected to be reclassified to earnings within the next twelve months is \$5 million.

The counterparties to our foreign currency contracts were considered by us to be substantial and creditworthy financial institutions that are 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:

]	Fotal Carryin Conso Balanc	lidat	ed	Quoted Pri Markets f Assets/I (Le	or Ide	entical ities	Significant Other Observable Inputs (Level 2)			Significant Unobservabl Inputs (Level 3)			ervable
(In millions)		2018		2017	2018		2017	2018		2017		2018		2017
Assets:														
Investments	\$	10	\$	11	\$ 10	\$	11	\$ 	\$		\$		\$	_
Foreign Exchange Contracts		18		4	_			18		4		_		—
Total Assets at Fair Value	\$	28	\$	15	\$ 10	\$	11	\$ 18	\$	4	\$	_	\$	
Liabilities:														
Foreign Exchange Contracts	\$	7	\$	19	\$ —	\$	—	\$ 7	\$	19	\$	—	\$	—
Total Liabilities at Fair Value	\$	7	\$	19	\$ —	\$		\$ 7	\$	19	\$		\$	

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

(In millions)	December 31, 2018		December 31, 2017
Fixed Rate Debt ⁽¹⁾ :			
Carrying amount — liability	\$	3,609	\$ 3,616
Fair value — liability		3,443	3,786
Variable Rate Debt ⁽¹⁾ :			
Carrying amount — liability	\$	1,707	\$ 1,811
Fair value — liability		1,689	1,811

Excludes notes payable and overdrafts of \$410 million and \$262 million at December 31, 2018 and 2017, respectively, of which \$230 million and \$110 million, respectively, are at fixed rates and \$180 million and \$152 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 a fair value of \$3,496 million and \$3,857 million at December 31, 2018 and 2017, respectively, was 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 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 are expected to be effective in the first 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 rationalization charges for employees who terminated service as a result of ongoing rationalization plans.

During the second quarter of 2016, annuities were purchased from existing plan assets to fully settle \$41 million in obligations of a separate pension plan in the U.K. which resulted in a settlement charge of \$14 million recorded in Other (Income) Expense.

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

	Pension Plans																	
				U.S.					N	on-U.S.			Other Postretirement Benefits					
(In millions)		2018		2017		2016		2018		2017		2016		2018		2017		2016
Benefits cost (credit):																	_	
Service cost	\$	4	\$	4	\$	5	\$	28	\$	31	\$	29	\$	3	\$	4	\$	3
Interest cost		157		160		164		69		71		80		12		13		12
Expected return on plan assets		(219)		(241)		(255)		(70)		(80)		(88)		—		(1)		—
Amortization of prior service credit		—		—		—		—				—		(8)		(29)		(45)
Amortization of net losses		112		111		109		29		32		27		4		6		5
Net periodic cost (credit)		54		34		23		56		54		48		11		(7)		(25)
Net curtailments/settlements/termination benefits		8		29		—		13		3		16		—				2
Total benefits cost (credit)	\$	62	\$	63	\$	23	\$	69	\$	57	\$	64	\$	11	\$	(7)	\$	(23)
Recognized in other comprehensive (income) loss before tax and minority:																		
Prior service cost (credit) from plan amendments	\$	_	\$	_	\$	—	\$	31	\$	3	\$	_	\$	(16)	\$	3	\$	
Increase (decrease) in net actuarial losses		14		128		81		(18)		25		35		(14)		(15)		(1)
Amortization of prior service credit in net periodic cost		_		_		_		_		_		_		8		29		45
Amortization of net losses in net periodic cost		(112)		(111)		(109)		(30)		(29)		(27)		(5)		(6)		(5)
Immediate recognition of prior service cost and unrecognized gains and losses due to curtailments, settlements, and divestitures		(11)		(29)		_		(14)		(12)		(17)		_		_		_
Total recognized in other comprehensive (income) loss before tax and minority		(109)		(12)		(28)		(31)		(13)		(9)		(27)		11		39
Total recognized in total benefits cost (credit) and other comprehensive (income) loss before tax and minority) \$	(47)	\$	51	\$	(5)	\$	38	\$	44	\$	55	\$	(16)	\$	4	\$	16

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 \$4 million, \$(17) million and \$(31) million for our U.S. plans in 2018, 2017 and 2016, respectively, and \$7 million, \$10 million and \$8 million for our non-U.S. plans in 2018, 2017 and 2016, 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 2019 is \$114 million and \$0 million, respectively, for our U.S. plans and \$29 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 2019 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 approximately \$1 million annually.

The change in benefit obligation and plan assets for 2018 and 2017 and the amounts recognized in our Consolidated Balance Sheet at December 31, 2018 and 2017 are as follows:

	Pension Plans										
		U	.S.			Non	-U.S.		 Other Postretin	remei	nt Benefits
(In millions)		2018		2017		2018		2017	2018		2017
Change in benefit obligation:											
Beginning balance	\$	(5,331)	\$	(5,285)	\$	(3,109)	\$	(2,863)	\$ (286)	\$	(294)
Service cost — benefits earned		(4)		(4)		(28)		(31)	(3)		(4)
Interest cost		(157)		(160)		(69)		(71)	(12)		(13)
Plan amendments		—		—		(29)		(3)	14		(3)
Actuarial gain (loss)		315		(303)		40		(29)	19		15
Participant contributions		—		—		(2)		(2)	(13)		(14)
Curtailments/settlements/termination benefits		25		55		113		21	—		—
Foreign currency translation		—		—		177		(280)	15		(9)
Benefit payments		418		366		133		149	32		36
Ending balance	\$	(4,734)	\$	(5,331)	\$	(2,774)	\$	(3,109)	\$ (234)	\$	(286)
Change in plan assets:											
Beginning balance	\$	4,978	\$	4,972	\$	2,806	\$	2,507	\$ 4	\$	4
Actual return on plan assets		(110)		417		4		146	—		—
Company contributions to plan assets		—		—		36		56	2		2
Cash funding of direct participant payments		17		10		21		24	16		20
Participant contributions		—		—		2		2	13		14
Settlements		(22)		(55)		(112)		(11)	—		—
Foreign currency translation		—		—		(160)		231	—		—
Benefit payments		(418)		(366)		(133)		(149)	(32)		(36)
Ending balance	\$	4,445	\$	4,978	\$	2,464	\$	2,806	\$ 3	\$	4
Funded status at end of year	\$	(289)	\$	(353)	\$	(310)	\$	(303)	\$ (231)	\$	(282)

Other postretirement benefits unfunded status was \$112 million and \$132 million for our U.S. plans at December 31, 2018 and 2017, respectively, and \$119 million and \$150 million for our non-U.S. plans at December 31, 2018 and 2017, respectively.

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

	Pension Plans											
	U.S.				Non	-U.S.		Other Postretirement Benefits				
(In millions)		2018		2017		2018		2017		2018		2017
Noncurrent assets	\$	_	\$	_	\$	325	\$	349	\$	—	\$	—
Current liabilities		(20)		(16)		(20)		(21)		(17)		(20)
Noncurrent liabilities		(269)		(337)		(615)		(631)		(214)		(262)
Net amount recognized	\$	(289)	\$	(353)	\$	(310)	\$	(303)	\$	(231)	\$	(282)

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

Pension Plans											
U.S.					Non-U.S.				Other Postretirement Benefi		
	2018		2017		2018		2017		2018		2017
\$	(3)	\$	(4)	\$	31	\$	4	\$	(32)	\$	(27)
	2,493		2,603		611		669		25		47
	2,490		2,599		642		673		(7)		20
	(77)		(103)		(105)		(109)		(19)		(26)
	—		—		(1)		(1)		—		—
\$	2,413	\$	2,496	\$	536	\$	563	\$	(26)	\$	(6)
	\$	2018 \$ (3) 2,493 2,490 (77) 	2018 \$ (3) \$ 2,493	U.S. 2018 2017 \$ (3) \$ (4) 2,493 2,603 2,490 2,599 (77) (103)	U.S. 2018 2017 \$ (3) \$ (4) 2,493 2,603 2,490 2,599 (77) (103)	U.S. Non 2018 2017 2018 \$ (3) \$ (4) \$ 31 2,493 2,603 611 2,490 2,599 642 (77) (103) (105) (1)	U.S. Non-U.S. 2018 2017 2018 \$ (3) \$ (4) \$ 31 \$ 2,493 2,603 611 2,490 2,599 642 $-$ (77) (103) (105) $ -$ (1) $-$	U.S. Non-U.S. 2018 2017 2018 2017 \$ (3) \$ (4) \$ 31 \$ 4 2,493 2,603 611 669 2,490 2,599 642 673 (77) (103) (105) (109) (1) (1)	U.S. Non-U.S. 2018 2017 2018 2017 \$ (3) \$ (4) \$ 31 \$ 4 \$ 2,493 2,603 611 669 $ $	U.S. Non-U.S. Other Postretic 2018 2017 2018 2017 2018 2017 2018 \$ (3) \$ (4) \$ 31 \$ 4 \$ (32) 2,493 2,603 611 669 25 2,490 2,599 642 673 (7) (77) (103) (105) (109) (19) (1) (1)	U.S. Non-U.S. Other Postretiment 2018 2017 2018 2017 2018 2018 \$ (3) \$ (4) \$ 31 \$ 4 \$ (32) \$ 2,493 2,603 611 669 25 2

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

	Pension Plan	s	Other Postretiremen Benefits	ıt		
	2018	2017	2018	2017		
Discount rate:						
— U.S.	4.24%	3.56%	4.16%	3.44%		
— Non-U.S.	2.69	2.53	5.03	4.92		
Rate of compensation increase:						
— U.S.	N/A	N/A	N/A	N/A		
— Non-U.S.	2.91	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					
	2018	2017	2016	2018	2017	2016			
Discount rate for determining interest cost:									
— U.S.	3.09%	3.18%	3.23%	2.99%	3.02%	2.98%			
— Non-U.S.	2.56	2.70	3.37	6.13	5.98	6.31			
Expected long term return on plan assets:									
— U.S.	4.58	5.08	5.33	N/A	N/A	N/A			
— Non-U.S.	3.02	3.12	3.81	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	3.18	2.63	N/A	N/A	N/A			

For 2018, a weighted average discount rate of 3.09% 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, 2017, applied to our expected benefit payment cash flows. For our non-U.S. locations, a weighted average discount rate of 2.56% 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 2018, an assumed weighted average long term rate of return of 4.58% 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 3.02% 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, 2018. Benefit payments for other postretirement benefits are presented net of retiree contributions and Medicare Part D Subsidy Receipts:

		Pension Plans							
(In millions)	U.3	5.	Non-U.S.						
2019	\$	417	\$ 123	\$ 18					
2020		388	120	18					
2021		380	122	17					
2022		363	128	17					
2023		353	130	16					
2024-2028		1,650	693	76					

The following table presents selected information on our pension plans:

	 U	J .S.		 Noi	1-U.S.	
(In millions)	2018		2017	2018		2017
All plans:						
Accumulated benefit obligation	\$ 4,725	\$	5,320	\$ 2,688	\$	3,017
Plans not fully-funded:						
Projected benefit obligation	\$ 4,732	\$	5,329	\$ 908	\$	945
Accumulated benefit obligation	4,723		5,318	852		887
Fair value of plan assets	4,443		4,976	281		302

Certain non-U.S. subsidiaries maintain unfunded pension plans consistent with local practices and requirements. 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. At December 31, 2017, these plans accounted for \$227 million of our accumulated pension benefit obligation, \$251 million of our projected pension benefit obligation, \$251 million of our projected pension benefit obligation, \$251 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 2019.

Assumed health care cost trend rates at December 31 follow:

	2018	2017
Health care cost trend rate assumed for the next year	6.5%	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, 2018 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	5.	Non-U.S.			
	2018	2017	2018	2017		
Cash and short term securities	2%	2%	1%	1%		
Equity securities	6	6	4	9		
Debt securities	92	92	94	85		
Alternatives	—	—	1	5		
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 5% equities and 95% fixed income.

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	0	ignificant Other bservable uts (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	2	19	_	_	19
Other Investments	_		-		_	-	6	_	4	2
Total Investments in the Fair Value Hierarchy	3,425	\$ 48	\$	3,375	\$ 2	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			

The fair values of our pension plan assets at December 31, 2017, by asset category are as follows:

			U.9	S.		Non-U.S.				
(In millions)	Total	Quoted Prices in Active Markets for Identic Assets (Leve	al	Significant Other Observable Inputs (Level 2)	Significant Other Unobservable Inputs (Level 3)	Total	N	Quoted Prices in Active Iarkets for Identical ssets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Other Unobservable Inputs (Level 3)
Cash and Short Term Securities	\$ 55	\$ 3	39	\$ 16	\$ —	\$ 20) \$	19	\$ 1	\$ —
Equity Securities										
Common and Preferred Stock	_	-	_	_	_	24	ļ	24	_	—
Commingled Funds	_	-	_	_	_	148	}	17	_	131
Mutual Funds	_	-	_	_	_	5	5	5	_	—
Debt Securities										
Corporate Bonds	2,699	-	_	2,698	1	156	5	14	142	—
Government Bonds	1,033	-	_	1,033	_	2,358	3	73	2,285	_
Repurchase Agreements	_	-	_	_	_	(763	5)	_	(763)	—
Asset Backed Securities	58	-		58	_	47	,	4	43	_
Commingled Funds	_	-	_	_	_	10)	—	10	_
Mutual Funds	—	-	_	_	_	5	,	7	—	_
Alternatives										
Real Estate	—	-	_	_	_	2	Ļ	—	_	4
Insurance Contracts	2	-	_	_	2	18	3	_	_	18
Other Investments	_	-	_	_	_	10)	_	7	3
Total Investments in the Fair Value Hierarchy	3,847	\$ 3	39	\$ 3,805	\$3	2,044	. \$	163	\$ 1,725	\$ 156

Investments Measured at Net Asset Value, as

Practical Expedient:		
Equity Securities		
Commingled Funds	54	66
Mutual Funds	_	18
Partnership Interests	238	—
Debt Securities		
Mutual Funds	111	7
Commingled Funds	682	579
Short Term Securities		
Commingled Funds	67	6
Alternatives		
Commingled Funds		95
Total Investments	4,999	2,815
Other	(21)	(9)
Total Plan Assets	\$ 4,978	\$ 2,806

At December 31, 2018 and 2017, 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 invested in hedge funds and currency derivatives, which are valued based on the NAV as determined by the fund manager using the most recent financial information available. Participation in real estate funds are valued based on institutional bid evaluations as determined by the fund manager using the most recent financial information available. Other investments include derivative financial instruments, which are primarily valued using independent pricing sources which utilize industry standard derivative valuation models, and directed insurance contracts, which 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, 2018:

	Non-U.S.								
(In millions)	Equity Securities - Insurance Commingled Contracts Real Estate Funds O						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	

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, 2017:

	Non-U.S.							
(In millions)		urance ntracts	Rea	Estate		ity Securities - commingled Funds		Other
Balance, beginning of year	\$	14	\$	61	\$	118	\$	3
Realized gains (losses)		—		4		2		_
Unrealized (losses) gains relating to instruments still held at the reporting date		_		1		18		_
Purchases, sales, issuances and settlements (net)		2		(65)		(18)		_
Foreign currency translation		2		3		11		
Balance, end of year	\$	18	\$	4	\$	131	\$	3

Other postretirement benefits plan assets at December 31, 2018 and 2017, 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 \$111 million, \$111 million and \$122 million for 2018, 2017 and 2016, 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. 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 onefourth 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 2018:

	Options	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term (Years)	Aggregate Intrinsic Value (In millions)
Outstanding at January 1	6,597,098	\$ 19.91		
Options granted	_	—		
Options exercised	(684,374)	14.43		\$ 9
Options expired	(72,205)	23.46		
Options cancelled	(260,067)	28.57		
Outstanding at December 31	5,580,452	20.14	4.5	24
Vested and expected to vest at December 31	5,485,525	19.93	4.5	24
Exercisable at December 31	4,717,476	17.93	4.0	24
Available for grant at December 31	16,211,852			

In addition, the aggregate intrinsic value of options exercised in 2017 and 2016 was \$18 million and \$14 million, respectively.

Significant option groups outstanding at December 31, 2018 and related weighted average exercise price and remaining contractual term information follows:

					Remaining Contractual Term
Grant Date	Options Outstanding	Options Exercisable	I	Exercise Price	(Years)
2/27/2017	615,265	187,801	\$	35.26	8.2
2/22/2016	598,622	324,268		29.90	7.2
2/23/2015	544,078	420,286		27.16	6.2
2/24/2014	391,667	391,667		26.44	5.2
2/28/2013	963,158	963,158		12.98	4.2
2/27/2012	748,001	748,001		12.94	3.2
2/22/2011	545,267	545,267		13.91	2.1
2/23/2010	377,324	377,324		12.74	1.1
2/26/2009	159,212	159,212		4.81	0.2
All Other	637,858	600,492		(1)	(1)
	5,580,452	4,717,476			

(1) Options in the "All other" category had exercise prices ranging from \$7.02 to \$32.72. The weighted average exercise price for options outstanding and exercisable in that category was \$19.31 and \$18.58, respectively, while the remaining weighted average contractual term was 4.2 and 3.9, respectively.

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

	2017	2016
Weighted average grant date fair value	\$ 12.05	\$ 11.92
Black-Scholes model assumptions ⁽¹⁾ :		
Expected term (years)	7.20	7.20
Interest rate	2.13%	1.45%
Volatility	33.63%	40.78%
Dividend yield	1.13%	0.94%

(1) We review the assumptions used in our Black-Scholes model in conjunction with estimating the grant date fair value of the annual grants of options by our Board of Directors. There were no stock options granted during 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 2018, 2017 and 2016 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 2018:

	Units	Weighted Average Grant Date Fair Value
Unvested at January 1	342,307	\$ 33.73
Units granted	195,583	29.04
Units vested	(157,396)	30.95
Units forfeited	(47,298)	33.63
Unvested at December 31	333,196	32.30

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 2018:

	Units	Weighted Average Grant Date Fair Value
Unvested at January 1	856,398	\$ 30.15
Units granted	935,656	28.54
Units vested and settled	(207,542)	28.06
Units forfeited	(196,079)	28.15
Unvested at December 31	1,388,433	29.81

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)	2018	2017	2016
Stock-based compensation expense recognized	\$ 16	\$ 22	\$ 23
Tax benefit	(4)	(6)	(8)
After-tax stock-based compensation expense	\$ 12	\$ 16	\$ 15
Cash payments to settle SARs	\$ 1	\$ 1	\$ 1
Cash received from stock option exercises	\$ 9	\$ 19	\$ 17

As of December 31, 2018, unearned compensation cost related to the unvested portion of all stock-based awards was approximately \$29 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 \$45 million and \$46 million at December 31, 2018 and 2017, 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, \$10 million was included in Other Current Liabilities at both December 31, 2018 and 2017. 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 \$224 million and \$243 million for anticipated costs related to workers' compensation at December 31, 2018 and 2017, respectively. Of these amounts, \$42 million and \$45 million were included in Current Liabilities as part of Compensation and Benefits at December 31, 2018 and 2017, 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, 2018 and 2017, the liability was discounted using a risk-free rate of return. At December 31, 2018, we estimate that it is reasonably possible that the liability could exceed our recorded amounts by approximately \$30 million.

General and Product Liability and Other Litigation

We have recorded liabilities totaling \$322 million and \$316 million, including related legal fees expected to be incurred, for potential product liability and other tort claims, including asbestos claims, at December 31, 2018 and 2017, respectively. Of these amounts, \$57 million and \$55 million were included in Other Current Liabilities at December 31, 2018 and 2017, 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, 2018, 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 \$5 million and within Other Assets of \$30 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 previously 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 147,200 claims by defending, obtaining a dismissal, 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 \$541 million and \$529 million through December 31, 2018 and 2017, 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)	2018	2017	2016
Pending claims, beginning of year	54,300	64,400	67,400
New claims filed during the year	1,300	1,900	1,900
Claims settled/dismissed during the year	(12,500)	(12,000)	(4,900)
Pending claims, end of year	43,100	54,300	64,400
Payments ⁽¹⁾	\$ 13	\$ 16	\$ 20

(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, 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. We recorded gross liabilities for both asserted and unasserted claims, inclusive of defense costs, totaling \$166 million and \$167 million at December 31, 2018 and 2017, 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 a receivable related to asbestos claims of \$108 million and \$113 million at December 31, 2018 and 2017, respectively. We expect that approximately 65% 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 and \$15 million was included in Current Assets as part of Accounts Receivable at December 31, 2018 and 2017, respectively. 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, 2018, we had approximately \$565 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 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 €120 million (\$137 million) against 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, would result in 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, 2018, we had binding commitments for raw materials, capital expenditures, utilities and various other types of contracts. Total commitments on contracts that extend beyond 2019 are expected to total approximately \$1,900 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 \$73 million and \$82 million at December 31, 2018 and 2017, 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 \$47 million in connection with an indirect tax assessment in EMEA. As of December 31, 2018, this guarantee amount has been reduced to \$44 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, 2018, this guarantee amount has been reduced to \$29 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 2020. 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.

Indemnifications

At December 31, 2018, 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 \$18 million and \$17 million for potential claims under warranties offered by us at December 31, 2018 and 2017, respectively, the majority of which are recorded in Other Current Liabilities.

The following table presents changes in the warranty reserve during 2018 and 2017:

(In millions)	2	018	2017
Balance at January 1	\$	17 \$	19
Payments made during the period		(26)	(27)
Expense recorded during the period		28	24
Translation adjustment		(1)	1
Balance at December 31	\$	18 \$	17

Note 20. Capital Stock

Dividends

During 2018, 2017 and 2016 we paid cash dividends of \$138 million, \$110 million and \$82 million, respectively, on our common stock. This amount excludes dividends earned on stock based compensation plans of \$1 million for 2018. On January 14, 2019, 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 1, 2019 to stockholders of record as of the close of business on February 1, 2019. 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. From time to time, the Board of Directors has approved increases in the amount authorized to be purchased under that program. On February 2, 2017, the Board of Directors approved a further increase in that authorization to \$2.1 billion. This program expires on December 31, 2019, and is intended to be used, subject to our cash flow, to repurchase shares of common stock in open market transactions in order to offset new shares issued under equity compensation programs and to provide for additional shareholder returns. During 2018, we repurchased 8,936,302 shares at an average price, including commissions, of \$24.62 per share, or \$220 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 2018, we did not repurchase any shares from employees.

Note 21. Reclassifications out of Accumulated Other Comprehensive Loss

The following table presents changes in Accumulated Other Comprehensive Loss (AOCL) by component, for the years ended December 31, 2018, 2017 and 2016:

(In millions)	Foreign Currency Translation Adjustment		Act	nrecognized Net tuarial Losses and ior Service Costs	200	erred Derivative Gains (Losses)	Total
Balance at December 31, 2015	\$	(946)	\$	(3,071)	\$	7	\$ (4,010)
Other comprehensive income (loss) before reclassifications		(209)		(62)		8	(263)
Amounts reclassified from accumulated other comprehensive loss		_		80		(5)	75
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)

The following table presents reclassifications out of AOCL for the years ended December 31, 2018, 2017 and 2016:

			ear Ended cember 31,			
(In millions)	 2018		2017		2016	
Component of AOCL	Amount	Rec	lassified from	m AC	OCL	Affected Line Item in the Consolidated Statements of Operations
Amortization of prior service cost and unrecognized gains and losses	\$ 139	\$	117	\$	96	Other (Income) Expense
Immediate recognition of prior service cost and unrecognized gains and losses due to curtailments and settlements	25		41		17	Other (Income) Expense / Rationalizations
Unrecognized Net Actuarial Losses and Prior Service Costs, before tax	\$ 164	\$	158	\$	113	
Tax effect	(39)		(54)		(33)	United States and Foreign Taxes
Net of tax	\$ 125	\$	104	\$	80	Goodyear Net Income
Deferred Derivative Losses (Gains), before tax	\$ 7	\$	2	\$	(6)	Cost of Goods Sold
Tax effect			(1)		1	United States and Foreign Taxes
Net of tax	\$ 7	\$	1	\$	(5)	Goodyear Net Income
Total reclassifications	\$ 132	\$	105	\$	75	Goodyear Net Income

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.

				Condense	ed Con	solidating B	alan	ce Sheet		
					Dece	mber 31, 20	18			
(In millions)	Parent Company			Guarantor Subsidiaries		-Guarantor Ibsidiaries	Consolidating Entries and Eliminations		(Consolidated
Assets:										
Current Assets:										
Cash and Cash Equivalents	\$	127	\$	30	\$	644	\$	_	\$	801
Accounts Receivable		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)		—
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
Long Term Debt and Capital Leases Due Within One Year		2		—		241		—		243
Total Current Liabilities		1,583		141		3,631		(574)		4,781
Long Term Debt and Capital 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

	Condensed Consolidating Balance Sheet										
					Dece	ember 31, 20	17				
(In millions)	Pare	nt Company		Guarantor Subsidiaries		n-Guarantor ubsidiaries		Consolidating Entries and Eliminations	C	Consolidated	
Assets:											
Current Assets:											
Cash and Cash Equivalents	\$	176	\$	32	\$	835	\$	—	\$	1,043	
Accounts Receivable		649		116		1,260		—		2,025	
Accounts Receivable From Affiliates		—		254		71		(325)		—	
Inventories		1,444		43		1,329		(29)		2,787	
Prepaid Expenses and Other Current Assets		59		3		157		5		224	
Total Current Assets		2,328		448		3,652		(349)		6,079	
Goodwill		24		1		444		126		595	
Intangible Assets		119				20		—		139	
Deferred Income Taxes		1,549		35		424		—		2,008	
Other Assets		221		51		518		2		792	
Investments in Subsidiaries		4,424		503		—		(4,927)		—	
Property, Plant and Equipment		2,491		420		4,569		(29)		7,451	
Total Assets	\$	11,156	\$	1,458	\$	9,627	\$	(5,177)	\$	17,064	
Liabilities:											
Current Liabilities:											
Accounts Payable-Trade	\$	927	\$	115	\$	1,765	\$	—	\$	2,807	
Accounts Payable to Affiliates		325		_		—		(325)		—	
Compensation and Benefits		322		15		202		—		539	
Other Current Liabilities		323		2		701		—		1,026	
Notes Payable and Overdrafts		_				262		—		262	
Long Term Debt and Capital Leases Due Within One Year		60		_		331		—		391	
Total Current Liabilities		1,957		132		3,261		(325)		5,025	
Long Term Debt and Capital Leases		3,544		152		1,380		—		5,076	
Compensation and Benefits		682		109		724		—		1,515	
Deferred Income Taxes		—		1		99		—		100	
Other Long Term Liabilities		370		8		120		—		498	
Total Liabilities		6,553		402		5,584		(325)		12,214	
Commitments and Contingent Liabilities											
Shareholders' Equity:											
Goodyear Shareholders' Equity:											
Common Stock		240		—		—		—		240	
Other Equity		4,363		1,056		3,796		(4,852)		4,363	
Goodyear Shareholders' Equity		4,603		1,056		3,796		(4,852)		4,603	
Minority Shareholders' Equity — Nonredeemable						247				247	
Total Shareholders' Equity		4,603		1,056		4,043		(4,852)		4,850	
Total Liabilities and Shareholders' Equity	\$	11,156	\$	1,458	\$	9,627	\$	(5,177)	\$	17,064	

				Consolida	ating	Statements o	f Op	erations					
	Year Ended December 31, 2018												
(In millions)	Paren	t Company		Guarantor Subsidiaries		n-Guarantor ubsidiaries		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 Tax (Benefit) Expense		129		(6)		179		1		303			
Equity in Earnings (Loss) of Subsidiaries		333		47		—		(380)		—			
Net Income (Loss)		693		32		362		(379)	-	708			
Less: Minority Shareholders' Net Income						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			

					Statements o	-		
			Year	Ende	ed December	31, 2	017	
(In millions)	Paren	t Company	Guarantor Subsidiaries		n-Guarantor ubsidiaries		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 Tax (Benefit) Expense		417	(2)		101		(3)	513
Equity in Earnings (Loss) of Subsidiaries		353	39		—		(392)	_
Net Income (Loss)		346	45		372		(398)	 365
Less: Minority Shareholders' Net Income		_	_		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

	Consolidating Statements of Operations												
Year Ended December 31, 2016													
Pare	Parent Company		Guarantor Subsidiaries	Non-Guaranton Subsidiaries			Entries and		Consolidated				
\$	7,418	\$	1,265	\$	9,121	\$	(2,646)	\$	15,158				
	5,476		1,212		6,962		(2,715)		10,935				
	1,079		37		1,294		(1)		2,409				
	20				190		_		210				
	276		12		129		(45)		372				
	(35)		8		(35)		87		25				
f	602		(4)		581		28		1,207				
	104		(7)		(180)		6		(77)				
	766		122		_		(888)		_				
	1,264		125		761		(866)		1,284				
	_		_		20		_		20				
\$	1,264	\$	125	\$	741	\$	(866)	\$	1,264				
\$	1,076	\$	55	\$	585	\$	(632)	\$	1,084				
					8				8				
\$	1,076	\$	55	\$	577	\$	(632)	\$	1,076				
	\$ f	\$ 7,418 5,476 1,079 20 276 (35) f 602 104 766 1,264 <u>\$ 1,264</u> \$ 1,076 <u></u>	\$ 7,418 \$ 5,476 1,079 20 276 (35) f 602 104 766 1,264 \$ 1,264 \$ 1,076 \$	Year Parent Company Guarantor Subsidiaries \$ 7,418 \$ 1,265 \$ 7,418 \$ 1,212 \$ 1,079 37 20 20 20 20 20 20 20 20 20 20 20 20 20 20 20 20 20 20 20 20 20 20 20 20 20 20 20 20 20 30 30 30 30 30 40 104 (7) 120 120 125 40 120 125 5 1,0076 \$ 55 5 5	Year Ender Parent Company Guarantor Subsidiaries Non Subsidiaries \$ 7,418 \$ 1,265 \$ 5,476 1,212 1 1 1 1,079 37 1 1 1 20 1 1 1 1 20 12 1	Year Ended December Parent Company Guarantor Subsidiaries Non-Guarantor Subsidiaries \$ 7,418 \$ 1,265 \$ 9,121 5,476 1,212 6,962 1,294 20 - 190 20 - 190 37 1,294 20 190 20 - 190 37 1,294 36 353 4 205 - 190 37 1,294 20 - - 190 37 1,294 20 - - 190 37 1,294 20 - - 190 37 1,294 20 - - 190 37 1,294 4 105 8 (35) 35 35 6 104 (7) (180) 36 36 36 5 1,264 \$ 125 761 35 36 365 <tr< td=""><td>Year Ended December 31, 2 Parent Company Guarantor Subsidiaries Non-Guarantor Subsidiaries Non-Guarantor Subsidiaries \$ 7,418 \$ 1,265 \$ 9,121 \$ 5,476 1,212 6,962 1 1,079 37 1,294 20 190 12 129 12 20 190 12 129 12 20 190 12 129 12 20 120 129 12 129 12 20(35) 8 (35) 10 104 10 1</td><td>Year Ended December 31, 2016 Parent Company Guarantor Subsidiaries Non-Guarantor Subsidiaries Consolidating Eliminations \$ 7,418 \$ 1,265 \$ 9,121 \$ (2,646) $5,476$ 1,212 6,962 (2,715) (2,646) 1,079 37 1,294 (1) 20 190 21 20 190 20 190 - 21 129 (45) (45) (45) 335 8 (35) 87 - 602 (4) 581 28 - 104 (7) (180) 6 6 1,264 125 761 (866) - 1,264 125 761 (866) - - - 20 - - - \$ 1,264 \$ 55 \$ 585</td><td>Year Ended December 31, 2016 Parent Company Guarantor Subsidiaries Non-Guarantor Subsidiaries Consolidating Entries and Ellininations \$ 7,418 \$ 1,265 \$ 9,121 \$ (2,646) \$ 5,476 1,212 6,962 (2,715) 1,079 37 1,294 (1) 20 190 </td></tr<>	Year Ended December 31, 2 Parent Company Guarantor Subsidiaries Non-Guarantor Subsidiaries Non-Guarantor Subsidiaries \$ 7,418 \$ 1,265 \$ 9,121 \$ 5,476 1,212 6,962 1 1,079 37 1,294 20 190 12 129 12 20 190 12 129 12 20 190 12 129 12 20 120 129 12 129 12 20(35) 8 (35) 10 104 10 1	Year Ended December 31, 2016 Parent Company Guarantor Subsidiaries Non-Guarantor Subsidiaries Consolidating Eliminations \$ 7,418 \$ 1,265 \$ 9,121 \$ (2,646) $5,476$ 1,212 6,962 (2,715) (2,646) 1,079 37 1,294 (1) 20 190 21 20 190 20 190 - 21 129 (45) (45) (45) 335 8 (35) 87 - 602 (4) 581 28 - 104 (7) (180) 6 6 1,264 125 761 (866) - 1,264 125 761 (866) - - - 20 - - - \$ 1,264 \$ 55 \$ 585	Year Ended December 31, 2016 Parent Company Guarantor Subsidiaries Non-Guarantor Subsidiaries Consolidating Entries and Ellininations \$ 7,418 \$ 1,265 \$ 9,121 \$ (2,646) \$ 5,476 1,212 6,962 (2,715) 1,079 37 1,294 (1) 20 190				

THE GOODYEAR TIRE & RUBBER COMPANY AND SUBSIDIARIES NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

	Condensed Consolidating Statement of Cash Flows						
	Year Ended December 31, 2018						
		Guarantor	Non-Guarantor	Consolidating Entries and			
(In millions)	Parent Company	Subsidiaries	Subsidiaries	Eliminations	Consolidated		
Cash Flows from Operating Activities:	ф <u>1 77</u> 1	¢	¢ (270)	¢ (COD)	¢ 010		
Total Cash Flows from Operating Activities	\$ 1,771	\$ 32	\$ (279)	\$ (608)	\$ 916		
Cash Flows from Investing Activities:	(207)	(61)	(447)		(011)		
Capital Expenditures	(307)	(61)	(443)	-	(811)		
Asset Dispositions	_	2		—	2		
Short Term Securities Acquired			(68)		(68)		
Short Term Securities Redeemed		—	68		68		
Capital Contributions Received 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 Received 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	(55)	(2)	(202)		(237)		
Year	201	32	877	_	1,110		
Cash, Cash Equivalents and Restricted Cash at End of the Year	\$ 168	\$ 30	\$ 675	\$	\$ 873		

THE GOODYEAR TIRE & RUBBER COMPANY AND SUBSIDIARIES NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

			-	ment 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 Received and Loans Incurred	(79)	—	(292)	371	—			
Capital Redemptions and Loans Paid	76	_	563	(639)	_			
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 Received 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			

THE GOODYEAR TIRE & RUBBER COMPANY AND SUBSIDIARIES NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

	Condensed Consolidating Statement of Cash Flows Year Ended December 31, 2016					
(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	\$ 609	\$ 135	\$ 885	\$ (72)	\$ 1,557	
Cash Flows from Investing Activities:						
Capital Expenditures	(370)	(107)	(525)	6	(996)	
Asset Dispositions	11	—	24	—	35	
Short Term Securities Acquired		—	(72)	—	(72)	
Short Term Securities Redeemed			60	—	60	
Capital Contributions Received and Loans Incurred	(257)	_	(576)	833	_	
Capital Redemptions and Loans Paid	163		148	(311)		
Other Transactions		_	(6)	_	(6)	
Total Cash Flows from Investing Activities	(453)	(107)	(947)	528	(979)	
Cash Flows from Financing Activities:						
Short Term Debt and Overdrafts Incurred			417		417	
Short Term Debt and Overdrafts Paid	_		(228)		(228)	
Long Term Debt Incurred	2,896		2,092		4,988	
Long Term Debt Paid	(3,016)	_	(2,417)	_	(5,433)	
Common Stock Issued	13	_	_		13	
Common Stock Repurchased	(500)		—		(500)	
Common Stock Dividends Paid	(82)	_	_		(82)	
Capital Contributions Received and Loans Incurred	576	59	198	(833)	_	
Capital Redemptions and Loans Paid	(148)	(80)	(83)	311	_	
Intercompany Dividends Paid	_	(19)	(47)	66	_	
Transactions with Minority Interests in Subsidiaries			(11)		(11)	
Debt Related Costs and Other Transactions	(46)		6		(40)	
Total Cash Flows from Financing Activities	(307)	(40)	(73)	(456)	(876)	
Effect of Exchange Rate Changes on Cash, Cash Equivalents and Restricted Cash	_		(15)	_	(15)	
Net Change in Cash, Cash Equivalents and Restricted Cash	(151)	(12)	(150)		(313)	
Cash, Cash Equivalents and Restricted Cash at Beginning of the Year	361	67	1,074	_	1,502	
Cash, Cash Equivalents and Restricted Cash at End of the Year	\$ 210	\$ 55	\$ 924	\$ —	\$ 1,189	

Supplementary Data (Unaudited)

Quarterly Data

	Quarter							
(In millions, except per share amounts)		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, as well as weighted average shares changing throughout the year, the quarterly earnings per share amounts do 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 charges of \$1 million related to accelerated depreciation.

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.



	Quarter							
(In millions, except per share amounts)		First		Second		Third	Fourth	Year
2017								
Net Sales	\$	3,699	\$	3,686	\$	3,921	\$ 4,071	\$ 15,377
Gross Profit		939		901		867	990	3,697
Net Income (Loss)		169		154		132	(90)	365
Less: Minority Shareholders' Net Income		3		7		3	6	19
Goodyear Net Income (Loss)	\$	166	\$	147	\$	129	\$ (96)	\$ 346
Goodyear Net Income (Loss) - Per Share of Common Stock:*								
— Basic	\$	0.66	\$	0.58	\$	0.52	\$ (0.39)	\$ 1.39
— Diluted	\$	0.65	\$	0.58	\$	0.50	\$ (0.39)	\$ 1.37
Weighted Average Shares Outstanding — Basic		252		252		250	244	249
— Diluted		256		256		254	244	253
Dividends Declared per Share of Common Stock	\$	0.10	\$	0.10	\$	0.10	\$ 0.14	\$ 0.44
Selected Balance Sheet Items at Quarter-End:								
Total Assets	\$	17,194	\$	17,646	\$	17,852	\$ 17,064	
Total Debt and Capital Leases		5,933		6,076		6,391	5,729	
Goodyear Shareholders' Equity		4,733		4,909		4,882	4,603	
Total Shareholders' Equity		4,960		5,145		5,121	4,850	

* Due to the anti-dilutive impact of potentially dilutive securities, as well as weighted average shares changing throughout the year, the quarterly earnings per share amounts do not add to the full year.

All numbers presented below are after-tax and minority.

The first quarter of 2017 included rationalization charges of \$20 million and charges of \$5 million related to accelerated depreciation and asset write-offs. The first quarter of 2017 also included discrete tax benefits of \$2 million.

The second quarter of 2017 included rationalization charges of \$20 million, debt repayment charges of \$19 million, and charges of \$16 million related to accelerated depreciation and asset write-offs. The second quarter of 2017 also included net gains on asset sales of \$12 million and discrete tax benefits of \$13 million.

The third quarter of 2017 included rationalization charges of \$31 million, charges of \$15 million for hurricane related expenses, pension settlement charges of \$8 million, and charges of \$7 million related to accelerated depreciation and asset write-offs. The third quarter of 2017 also included discrete tax benefits of \$10 million and a benefit of \$3 million related to the recovery of past costs from certain of our asbestos insurers.

The fourth quarter of 2017 included discrete tax charges of \$315 million primarily related to changes in U.S. tax law, rationalization charges of \$22 million, pension settlement charges of \$3 million, and charges of \$1 million related to accelerated depreciation and asset write-offs.

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, 2018 (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 48 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 49 of this Annual Report on Form 10-K.

Changes in Internal Control Over Financial Reporting

There have been no changes in our internal control over financial reporting during the year ended December 31, 2018 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 "Executive Officers of the Registrant." 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 8, 2019 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 47 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-4 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, 2018

INDEX TO FINANCIAL STATEMENT SCHEDULES

Financial Statement Schedules:

Schedule No. Page Number II FS-2

Valuation and Qualifying Accounts

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.

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SCHEDULE II — VALUATION AND QUALIFYING ACCOUNTS

Year Ended December 31,

(In millions)

				Addi	itions	6						
Description		Balance at ning of period		rged (credited) to income	Ch	arged (credited) to AOCL	Ľ	eductions from reserves	ad	Translation justment during period	в	alance at end of period
				2018	3							
Allowance for doubtful accounts	\$	116	\$	21	\$	_	\$	(19) (a)	\$	(5)	\$	113
Valuation allowance — deferred tax assets		318		18		(1)		_		(18)		317
				2017	7							
Allowance for doubtful accounts	\$	101	\$	12	\$	_	\$	(6) (a)	\$	9	\$	116
Valuation allowance — deferred tax assets		326		(19)		_		—		11		318
	2016											
Allowance for doubtful accounts	\$	105	\$	10	\$	_	\$	(13) (a)	\$	(1)	\$	101
Valuation allowance — deferred tax assets		621		(309)		2		_		12		326

Note: (a) Accounts receivable charged off.

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THE GOODYEAR TIRE & RUBBER COMPANY

Annual Report on Form 10-K For the Year Ended December 31, 2018

INDEX OF EXHIBITS

Exhibit Table Item	Description of Exhibit	Exhibit Number
<u>No.</u> 3	Articles of Incorporation and By-Laws	Exhibit Number
(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 April 22, 2009, 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 April 22, 2009, 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 April 22, 2009, 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 April 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 guarter ended June 30, 2015, File No. 1-1927).	
(b)	<u>Code of Regulations of The Goodyear Tire & Rubber Company, adopted November 22, 1955, and as most recently</u> <u>amended on February 28, 2017 (incorporated by reference, filed as Exhibit 3.1 to the Company's Current Report on</u> <u>Form 8-K, filed March 6, 2017, File No. 1-1927).</u>	
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 Quarterly 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).	

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	Description of Exhibit
(e)	Indenture, dated as of December 15, 2015, among Goodyear Dunlop Tires Europe B.V., as Issuer, the Company, a 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., a Registar and Luxembourg Paying Agent and Transfer Agent, in respect of GDTE's 3.75% Senior Notes due 202 (incorporated by reference, filed as Exhibit 4.1 to the Company's Annual Report on Form 10-K for the year ender December 31, 2015, File No. 1-1927).
	In accordance with Item 601(b)(4)(iii) of Regulation S-K, certain instruments defining the rights of holders of lon term debt of the Company and its consolidated subsidiaries pursuant to which the total amount of securities authorize thereunder does not exceed 10% of the total assets of the Company and its subsidiaries on a consolidated basis are no 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 lender
	issuing banks, syndication agents, documentation agents, senior managing agents, joint lead arrangers and join bookrunners party thereto, and JPMorgan Chase Bank, N.A., as Administrative Agent and Collateral Agen (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 Chas 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 lender documentation agents, syndication agent, joint lead arrangers and joint bookrunners party thereto, Deutsche Bank Tru Company Americas, as Collateral Agent, and JPMorgan Chase Bank, N.A., as Administrative Agent (incorporated b reference, filed as Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q for the quarter ended March 3 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, 201 among the Company, the subsidiaries of the Company identified therein and JPMorgan Chase Bank, N.A., as Collater 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, an 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 guarter ended March 31, 2017, File No. 1-1927).
(f)	Amended and Restated Lenders Lien Subordination and Intercreditor Agreement, dated as of April 19, 2012, amon JPMorgan Chase Bank, N.A., as Collateral Agent for the First Lien Secured Parties referred to therein, Deutsche Ban Trust Company Americas, as Collateral Agent for the Second Lien Secured Parties referred to therein, the Compan and the subsidiaries of the Company named therein (incorporated by reference, filed as Exhibit 10.5 to the Company 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 May 12, 2015, among the Company, Goodyer Dunlop Tires Europe B.V., Goodyear Dunlop Tires Germany GmbH, Goodyear Dunlop Tires Operations S.A., th lenders party thereto, J.P. Morgan Europe Limited, as Administrative Agent, JPMorgan Chase Bank, N.A., a Collateral Agent, BNP Paribas, as Syndication Agent, and the documentation agents, joint bookrunners and joint lea arrangers identified therein (incorporated by reference, filed as Exhibit 10.1 to the Company's Quarterly Report of

Exhibit Number

Exhibit Table Item No.	Description of Exhibit	Exhibit Number
(h)	Amendment and Restatement Agreement, dated as of May 12, 2015, among the Company, Goodyear Dunlop Tires 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, BNP Paribas, as Issuing Bank, the subsidiary guarantors party thereto, and the 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 June 30, 2015, 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., 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), and 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), and 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 of March 30, 2015, 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)*	<u>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).</u>	
(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)*	<u>Form of Incentive Stock Option Grant Agreement (incorporated by reference, filed as Exhibit 10.3 to the Company's</u> <u>Current Report on Form 8-K, filed June 8, 2017, File No. 1-1927).</u>	
(0)*	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)*	Performance Recognition Plan of the Company, as amended and restated on October 7, 2008 (incorporated by reference, filed as Exhibit 10.8 to the Company's Annual Report on Form 10-K for the year ended December 31, 2008, File No. 1-1927).	
(v)*	<u>The Goodyear Tire & Rubber Company Management Incentive Plan, effective January 1, 2009, as amended June 5, 2018.</u>	10.1
(w)*	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).	
(x)*	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).	
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Table of Contents

Exhibit Table Item No.	Description of Exhibit	Exhibit Number
(y)*	Defined Benefit Excess Benefit Plan of the Company, as amended and restated as of October 7, 2008, effective as of	
07	January 1, 2005 (incorporated by reference, filed as Exhibit 10.11 to the Company's Annual Report on Form 10-K for	
	<u>the year ended December 31, 2008, File No. 1-1927).</u>	
(z)*	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).	
	<u>Report of Form 10-R for the year ended December 51, 2012, File Ro. 1-1527).</u>	
(aa)*	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	
	<u>ended June 30, 2017, File No. 1-1927).</u>	
(bb)*	Outside Directors' Equity Participation Plan, as adopted February 2, 1996 and last amended as of July 1, 2017 (incorporated by reference, filed as Euclidean Euclidean Company's Outstally Report on Form 10.0 for the guarter	
	(incorporated by reference, filed as Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q for the quarter ended September 30, 2017, File No. 1-1927).	
(cc)*	<u>The Goodyear Tire & Rubber Company Executive Severance and Change in Control Plan, adopted February 28, 2013</u>	
(00)	(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).	
(dd)*	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).	
(ee)* 21	Letter Agreement, dated December 14, 2018, between the Company and Joseph Zekoski. Subsidiaries	10.2
(a)	List of Subsidiaries of the Company at December 31, 2018.	21.1
(a) 23	Consents	21.1
(a)	Consent of PricewaterhouseCoopers LLP.	23.1
(a) 24	Powers of Attorney	23.1
(a)	Powers of Attorney of Officers and Directors signing this report.	24.1
(u) 31	302 Certifications	27.1
(a)	Certificate of Chief Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.	31.1
(b)	Certificate of Chief Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.	31.2
32	906 Certifications	01.2
(a)	<u>Certificate of Chief Executive Officer and Chief Financial Officer pursuant to Section 906 of the Sarbanes-Oxley Act</u>	32.1
(4)	of 2002.	2=11
101	Interactive Data File	
(a)	The following materials from the Company's Annual Report on Form 10-K for the year ended December 31, 2018, formatted in XBRL: (i) the Consolidated Statements of Operations, (ii) the Consolidated Statements of Comprehensive Income (Loss), (iii) the Consolidated Balance Sheets, (iv) the Consolidated Statements of Shareholders' Equity, (v) the	101

* Indicates management contract or compensatory plan or arrangement

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Consolidated Statements of Cash Flows and (vi) the Notes to Consolidated Financial Statements.

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 8, 2019

/s/ RICHARD J. KRAMER

Richard J. Kramer, Chairman of the Board, Chief Executive Officer and President

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 8, 2019

/s/ RICHARD J. KRAMER

Richard J. Kramer, Chairman of the Board, Chief Executive Officer, President and Director (Principal Executive Officer)

Date: February 8, 2019

Date: February 8, 2019

/s/ DARREN R. WELLS

Darren R. Wells, Executive Vice President and Chief Financial Officer (Principal Financial Officer)

/s/ EVAN M. SCOCOS

Evan M. Scocos, Vice President and Controller (Principal Accounting Officer)

JAMES A. FIRESTONE, Director WERNER GEISSLER, Director PETER S. HELLMAN, Director LAURETTE T. KOELLNER, Director W. ALAN MCCOLLOUGH, Director

Date: February 8, 2019

JOHN E. McGLADE, Director MICHAEL J. MORELL, Director RODERICK A. PALMORE, Director STEPHANIE A. STREETER, Director THOMAS H. WEIDEMEYER, Director MICHAEL R. WESSEL, Director /s/ DARREN R. WELLS

Darren R. Wells, Signing as Attorney-in-Fact for the Directors whose names appear opposite.

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THE GOODYEAR TIRE & RUBBER COMPANY

MANAGEMENT INCENTIVE PLAN

Effective January 1, 2009, as amended June 5, 2018

PREAMBLE

This Management Incentive Plan (the "Plan") is adopted effective January 1, 2009, by the Board of Directors of The Goodyear Tire & Rubber Company (the "Company"). The purpose of the Plan is to advance the interests of the Company and its stockholders and assist the Company in motivating, attracting and retaining executive officers by providing incentives and financial rewards to such executive officers that are intended to be deductible to the maximum extent possible as "performance-based compensation" within the meaning of Section 162(m) of the Code.

ARTICLE I

Definitions

- 1.1 "Award" means an award of incentive compensation pursuant to the Plan.
- 1.2 "Code" means the Internal Revenue Code of 1986, as amended.
- 1.3 "Committee" means the Compensation Committee of the Board of Directors of the Company, or a subcommittee thereof consisting of members appointed from time to time by the Board of Directors of the Company, and shall comprise not less than such number of directors as shall be required to permit the Plan to satisfy the requirements of Section 162(m) of the Code. The Committee administering the Plan shall be composed solely of "outside directors" within the meaning of Section 162(m) of the Code.
- 1.4 "Company" means The Goodyear Tire & Rubber Company, an Ohio corporation.
- 1.5 "Disability" means a total and permanent disability that causes a Participant to be eligible to receive long term disability benefits from the Company's long term disability plan, or any similar plan or program sponsored by a subsidiary of the Company.
- 1.6 "EBIT" has the meaning set forth in Section 3.1 hereof.
- 1.7 "Executive Officers" mean Board-appointed officers of the Company who are designated by the Board as "Section 16 officers."
- 1.8 "Participant" means an Executive Officer who is selected by the Committee to participate in the Plan.
- 1.9 "Performance Period" means the time period during which the achievement of the performance goals is to be measured.
- 1.10 "Plan" means this Management Incentive Plan.
- 1.11 "Retirement" means termination of employment with the Company or an affiliated entity when a Participant is age 55 or older.

ARTICLE II

Eligibility and Participation

2.1 <u>Eligibility and Participation</u>. The Committee shall select Executive Officers of the Company who are eligible to receive Awards under the Plan, and who shall be Participants in the Plan during any Performance Period in which they may earn an Award.

ARTICLE III

Terms of Awards

3.1 <u>Calculation of Awards</u>. The Award payable under the Plan for a Performance Period (proportionately adjusted for any portion of the Performance Period that is less than a full calendar year) is equal to 0.75% of EBIT for the Chief Executive Officer for the Performance Period and 0.5% of EBIT for each of the other Participants for the Performance Period.

"EBIT" means the Company's net sales, less cost of goods sold, and selling, administrative and general expense, as reported in the Company's consolidated statement of operations for the applicable Performance Period, prior to accrual of any amounts for payment under the Plan for the Performance Period, adjusted to eliminate the effects of charges for restructurings, discontinued operations, extraordinary items, other unusual or non-recurring items, and the cumulative effect of tax or accounting changes, each as defined by generally accepted accounting principles or identified in the Company's consolidated financial statements, notes to the consolidated financial statements or management's discussion and analysis of financial condition and results of operations.

- 3.2 <u>Discretionary Adjustment</u>. The Committee may not increase the amount payable under the Plan or with respect to an Award pursuant to Section 3.1, but retains the discretionary authority to reduce the amount. The Committee may establish factors to take into consideration in implementing its discretion, including, but not limited to, corporate and/or business unit performance against achievement of financial goals (e.g., operating income or cash flow) or non-financial goals, economic and relative performance considerations, and assessments of individual performance.
- 3.3 <u>Form of Payment</u>. Each Award under the Plan shall be paid in cash or its equivalent. The Committee in its discretion may determine that all or a portion of an Award shall be paid in shares of common stock, restricted stock, stock options, or other stock-based or stock-denominated units, which shall be issued pursuant to the Company's equity compensation plans in existence at the time of the grant.
- 3.4 <u>Timing of Payment</u>. Payment of Awards will be made as soon as practicable following the end of the Performance Period and after determination of and certification of the Award, but in no event more than two and a half months after the end of the Performance Period with respect to which such Award was earned, unless a Participant has, prior to the grant of an Award, submitted an election to defer receipt of the Award in accordance with a deferred compensation plan approved by the Committee.
- 3.5 <u>Performance Period</u>. Within 90 days after the commencement of each Performance Period or, if earlier, by the expiration of 25% of a Performance Period, the Committee will designate one or more Performance Periods, determine the Participants for the Performance Periods and affirm the applicability of the Plan's formula for determining the Award for each Participant for the Performance Periods. The time period during which the achievement of the performance goals is to be measured shall be determined by the Committee, but may be no longer than five years and no less than six months.
- 3.6 <u>Certification</u>. Following the close of each Performance Period and prior to payment of any amount to any Participant under the Plan, the Committee will certify in writing as to the attainment of the performance goals and the amount of the Award.

ARTICLE IV

New Hires, Promotions and Terminations

- 4.1 <u>New Participants During the Performance Period</u>. If an individual is newly hired or promoted during a Performance Period into a position eligible for participation in the Plan, he or she shall be eligible for an Award under the Plan for the Performance Period, prorated for the portion of the Performance Period following the date of eligibility for the Plan, subject to Section 3.2 hereof and the other terms and conditions of the Plan.
- 4.2 <u>Retirement, Disability or Death</u>. A Participant who terminates employment with the Company during a Performance Period due to Retirement, Disability or death shall be eligible, unless otherwise determined by the Committee, to receive an Award prorated for the portion of the Performance Period prior to termination of employment. Awards payable in the event of death shall be paid to the Participant's estate.
- 4.3 <u>Termination of Employment</u>. If a Participant terminates employment with the Company for a reason other than Retirement, Disability or death, unless otherwise determined by the Committee, no Award shall be payable with respect to the Performance

ARTICLE V

Miscellaneous

- 5.1 <u>Withholding Taxes</u>. The Company shall have the right to make payment of Awards net of any applicable federal, state, local or foreign taxes required to be withheld, or to require the Participant to pay such withholding taxes. If the Participant fails to make such tax payments as required, the Company shall, to the extent permitted by law, have the right to deduct any such taxes from any payment of any kind otherwise due to such Participant or to take such other action as may be necessary to satisfy such withholding obligations.
- 5.2 <u>Nontransferability</u>. No Award may be sold, assigned, transferred, pledged, hypothecated or otherwise disposed of, including assignment pursuant to a domestic relations order, during the time in which the requirement of continued employment or attainment of performance goals has not been achieved. Each Award shall be paid during the Participant's lifetime only to the Participant, or, if permissible under applicable law, to the Participant's legal representatives. No Award shall, prior to receipt thereof by the Participant, be in any manner liable for or subject to the debts, contracts, liabilities or torts of the Participant.
- 5.3 <u>Administration</u>. The Committee shall administer the Plan, interpret the terms of the Plan, amend and rescind rules relating to the Plan, and determine the rights and obligations of Participants under the Plan. The Committee may delegate any of its authority as it solely determines, consistent with applicable law and the rules and regulations of the Nasdaq Stock Market. In administering the Plan, the Committee may at its option employ compensation consultants, accountants and counsel and other persons to assist or render advice to the Committee, all at the expense of the Company. All decisions of the Committee shall be final and binding upon all parties including the Company, its stockholders, and the Participants. The provisions of this Plan are intended to ensure that all Awards granted hereunder qualify for the exemption from the limitation on deductibility imposed by Section 162(m) of the Code, and this Plan shall be interpreted and operated consistent with that intention.
- 5.4 <u>Severability</u>. If any provisions of the Plan or any Award is or becomes or is deemed to be invalid, illegal or unenforceable in any jurisdiction or would disqualify the Plan or any Award under any law deemed applicable by the Committee, such provision shall be construed or deemed amended to conform to applicable laws, or if it cannot be so construed or deemed amended without, in the determination of the Committee, materially altering the purpose or intent of the Plan or the Award, such provision will be stricken as to such jurisdiction, and the remainder of the Plan or Award shall remain in full force and effect.
- 5.5 <u>No Fund Created</u>. Neither the Plan nor any Award shall create or be construed to create a trust or separate fund of any kind or a fiduciary relationship between the Company and a Participant or any other person. To the extent that any person acquires a right to receive payments from the Company pursuant to an Award, such right shall be no greater than the right of any unsecured general creditor of the Company.
- 5.6 <u>Employment at Will</u>. Neither the adoption of the Plan, eligibility of any person to participate, nor payment of an Award to a Participant shall be construed to confer upon any person a right to be continued in the employ of the Company. The Company expressly reserves the right to discharge any Participant whenever in the sole discretion of the Company its interest may so require.
- 5.7 <u>Amendment or Termination of the Plan</u>. The Board of Directors of the Company reserves the right to amend or terminate the Plan at any time with respect to future Awards to Participants. Amendments to the Plan will require stockholder approval to the extent required to comply with applicable law, including the exemption under Section 162(m) of the Code.
- 5.8 <u>Non-Exclusivity of Plan</u>. Neither the adoption of the Plan by the Board of Directors nor the submission of the Plan to stockholders of the Company for approval shall be construed as creating any limitations on the power of the Board of Directors or the Committee to adopt such other incentive arrangements as either may deem desirable, including, without limitation, cash or equity-based compensation arrangements, either tied to performance or otherwise.
- 5.9 <u>Governing Law</u>. The Plan and any agreements hereunder shall be interpreted in accordance with the laws of the State of Ohio, without reference to principles of conflict of laws that might result in the application of the laws of another jurisdiction, and applicable federal law.

The Goodyear Tire & Rubber Company

Akron, Ohio 44316-0001

December 14, 2018

Joseph Zekoski Senior Vice President, Global Operations & Technology

Re: Agreement

Dear Joe:

You are a valued member of the management team of The Goodyear Tire & Rubber Company (the "Company" or "Goodyear") who we believe will help us continue in our success and move us forward in meeting our long-term business objectives. This letter is being presented to you in recognition of the importance of your skills and experiences and contributions to the Company.

As such, we have developed a special arrangement designed to apply to you. This Agreement amends and restates the Agreement dated June 22, 2018. By executing this Agreement, you will be eligible to receive a lump sum payment of \$450,000.00 ("Retention Bonus") if you remain an associate of the Company and actively provide the services required of you through at least February 28, 2019 ("Retention Date"), subject to the terms and conditions contained herein.

Assuming all conditions are met, the Retention Bonus will be paid by March 31, 2019 and will be subject to withholding taxes as required by law. The Retention Bonus will be payable in addition to your regular annual salary, benefits and participation in the Company's incentive compensation plans; provided, however, you will not be a participant in the Performance Recognition Plan in 2018. Since the Retention Bonus represents a unique payment to you, the Retention Bonus will not be considered in calculating compensation-related benefits (e.g., pension benefits).

As part of this Agreement, you agree to continue to follow the policies and procedures established by the Company, which may change from time to time, work directions from the Company's management team, and the provisions set forth herein. Payment of the Retention Bonus will be subject to the Company being satisfied (in its reasonable judgment) with (1) your cooperation, diligence and loyalty through the Retention Date, (2) your performance through the Retention Date, (3) your compliance with all Company policies and procedures and other agreements with the Company through the Retention Date, and (4) the continuation of your active employment with the Company through the Retention Date.

If the Company terminates your employment prior to the Retention Date for other than cause, you will be entitled to receive the Retention Bonus in accordance with the terms of this agreement. For purposes of this paragraph, "cause" means (i) gross negligence or willful misconduct in the performance of your duties with the Company, (ii) engaging in conduct which is injurious to the Company, monetarily or otherwise, (iii) committing any felony or any crime involving fraud, breach of trust or misappropriation, (iv) any material breach or violation of any agreement relating to your employment with the Company, or (v) any material breach or violation of the Company policy.

If you voluntarily leave the Company, or if the Company terminates your employment for cause, prior to the Retention Date, you will not receive the Retention Bonus.

In the event of your permanent disability or death prior to the Retention Date, you or your estate will receive the Retention Bonus pro-rated from June 22, 2018 to your last day worked. For purposes of this Agreement, disability is defined in accordance with the Company's long-term disability program. These amounts will be paid within sixty (60) days of your death or the Company's determination of your permanent disability.

Following the Retention Date, the Company desires to retain your services to Goodyear and its subsidiaries, subject to the terms and conditions set forth herein. The arrangement with Goodyear is as follows:

- a. You agree to provide to Goodyear and its subsidiaries transition services as requested by Goodyear's Chief Executive Officer relating to (i) the transition of the position of Senior Vice President, Global Operations & Technology; (ii) associate mentoring and development; and (3) other matters as may be mutually agreed upon by you and the Chief Executive Officer.
- b. Your transition services will be delivered during the period from March 1, 2019 through December 31, 2019 (the "Transition Services Period"). Goodyear agrees that you may terminate this arrangement at any time with or without cause upon thirty (30) days written notice to Goodyear. Upon any such termination, Goodyear will have no further obligation to pay any costs except for unpaid fees and unreimbursed out-of-pocket expenses, if any, incurred prior to the termination.
- c. Your transition services will generally be provided from your home and at Goodyear's Akron, Ohio headquarters, as agreed upon by you and the Chief Executive Officer. Other travel may be required as agreed upon by you and the Chief Executive Officer.
- d. Your transition services will be performed in a timely, diligent and workmanlike manner.
- e. Your transition services will be performed in accordance with all laws and regulations and Goodyear's policies, including the Business Conduct Manual.

Goodyear agrees to pay a fee of \$134,400.00 per quarter for the transition services performed under this Agreement, payable on the last business day of each quarter (except a pro-rated quarterly payment will be made by March 31, 2019 for the period March 1, 2019 through March 31, 2019), subject to withholding taxes as required by law. In addition to the transition service fees, Goodyear will reimburse you for all reasonable and customary out-of-pocket expenses incurred by you in the performance of the transition services, in accordance with Goodyear's applicable policies. Your requests for reimbursements must include copies of all receipts evidencing the costs incurred by you.

Any information provided by Goodyear to you in connection with this Agreement will be considered to be both confidential and proprietary to Goodyear (collectively, the "Confidential Information"). You agree to hold in confidence and not to disclose to or use for others during the term of this Agreement, and for a period of five (5) years following the termination or expiration thereof, Confidential Information, including but not limited to contracts, agreements, financial information, business operations, specific transactions, clients, customers, employees, marketing, purchasing, sales, distribution, shipping, advertising, business or other methods, computer systems, internal and external memoranda, practices, procedures, ideas, suggestions, work results, or other secret or confidential information received from Goodyear in connection with, or which results from, the services to be performed hereunder, or with respect to any other matter of a secret or confidential nature which may come into your possession in the performance of your services for Goodyear hereunder, except such information as is or becomes general public knowledge, or is disclosed to you independently by a third party legally authorized to do so, or the disclosure of which is authorized in writing by an officer of Goodyear, or is required to be disclosed by law, provided, however, in such event, you will take all reasonable steps to notify Goodyear so that a protective order or other appropriate remedy may be obtained prior to any such disclosure. You agree to return (or destroy and certify in writing that you have destroyed) any Confidential Information and all other materials provided to you upon demand within thirty (30) days of termination or expiration of this Agreement.

You agree that any data, ideas, suggestions, processes or work results arising out of your services are and shall remain the sole property of Goodyear.

During the Transition Services Period, you will not participate in any employee benefit plan of Goodyear and will not be covered by workers' compensation.

This Agreement is not assignable by either party, the transition services to be performed by you being personal to Goodyear. This Agreement constitutes the entire agreement between the parties with respect to the subject matter thereof and supersedes all prior agreements and understandings, oral or written, and may not be modified or amended except in writing signed by both parties. This Agreement shall be governed by and construed in accordance with the laws of the State of Ohio. All notices required to be given hereunder shall be sent to the applicable party at the address for such party set forth herein or such other address as a party may provide in writing to the other party.

If the foregoing meets with your acceptance, please execute and return this Agreement to John T. Lucas, 200 Innovation Way, Akron, Ohio 44316-0001.

THE GOODYEAR TIRE & RUBBER COMPANY

<u>/s/ Joseph Zekoski</u> By: <u>/s/ John T. Lucas</u> Joseph Zekoski John T. Lucas, Senior Vice President

Global Human Resources

SUBSIDIARIES OF THE REGISTRANT (1) (2) (3)

The subsidiary companies of The Goodyear Tire & Rubber Company at December 31, 2018, and the places of incorporation or organization thereof, are:

PLACE OF INCORPORATION OR ORGANIZATION

NAME OF SUBSIDIARY

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
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

INTERNATIONAL	+
Airship Participacoes 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 Canada Inc.	Canada
Goodyear Dalian Tire Company Ltd.	China
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 Baltic OU	Estonia
Goodyear Dunlop Tires Belgium N.V.	Belgium
Goodyear Dunlop Tires Czech s.r.o.	Czech Republic
Goodyear Dunlop Tires Danmark A/S	Denmark
Goodyear Dunlop Tires Espana S.A.	Spain
Goodyear Dunlop Tires Europe B.V.	Netherlands
Goodyear Dunlop Tires Finland OY	Finland
Goodyear Dunlop Tires France	France
Goodyear Dunlop Tires Germany GmbH	Germany
Goodyear Dunlop Tires Hellas S.A.I.C.	Greece
Goodyear Dunlop Tires Hungary Ltd.	Hungary
Goodyear Dunlop Tires Ireland Ltd	Ireland
Goodyear Dunlop Tires Ireland (Pension Trustees) Limited	Ireland
Goodyear Dunlop Tires Italia SpA	Italy
Goodyear Dunlop Tires Manufacturing GmbH & Co. KG	Germany
Goodyear Dunlop Tires Norge A/S	Norway
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 Portugal Unipessoal, Ltda	Portugal

NAME OF SUBSIDIARY

PLACE OF INCORPORATION OR ORGANIZATION

Goodyear Dunlop Tires Slovakia s.r.o.	Slovakia
Goodyear Dunlop Tires Suisse S.A.	Switzerland
Goodyear Dunlop Tires Sverige A.B.	Sweden
Goodyear Dunlop Tires Ukraine	Ukraine
Goodyear Dunlop Tyres UK Ltd	England
Goodyear Dunlop Tyres UK (Pension Trustees) Limited	England
Goodyear Earthmover Pty Ltd	Australia
Goodyear EEMEA Financial Services Center Sp. z.o.o.	Poland
Goodyear Holdings Sarl	Luxembourg
+Goodyear India Ltd	India
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 Marketing & Sales Sdn. Bhd.	Malaysia
Goodyear Maroc S.A.	Могоссо
Goodyear Middle East FZE	Dubai
Goodyear Nederland B.V.	Netherlands
Goodyear Orient Company Private Limited	Singapore
+Goodyear Philippines, Inc.	Philippines
Goodyear Regional Business Services Inc.	Philippines
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-SLP, S. de R.L. de C.V.	Mexico
Goodyear South Africa (Pty) Ltd	South Africa
Goodyear South Asia Tyres Private Limited	India
+Goodyear Taiwan Limited	Taiwan
+Goodyear (Thailand) Public Company Limited	Thailand
Goodyear Tire Management Company (Shanghai) Ltd.	China
Goodyear Tyre and Rubber Holdings (Pty) Ltd	South Africa
Goodyear Tyres Pty Ltd	Australia
Goodyear Tyres Vietnam LLC	Vietnam
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
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NAME OF SUBSIDIARY

PLACE OF INCORPORATION OR ORGANIZATION

Mercury Participacoes Ltda	Brazil
Motorway Tyres and 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
Sava Trade d.o.o.	Croatia
Snella Auto	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
Ventech Systems GmbH	Germany
Vulcan Participacoes Ltda	Brazil
Vulco Developpement	France
Vulco Truck Services	France
Wingfoot Insurance Company Limited	Bermuda
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., 99.53%; 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 Marketing & Sales Sdn. Bhd., 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., 81.4%; 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, 2018, the Registrant did not have any majority owned subsidiaries that were not consolidated.

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 8, 2019 relating to the financial statements, 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 8, 2019

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, DAVID L. BIALOSKY and EVAN M. SCOCOS, 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, 2018, 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 4th day of December, 2018.

/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/ Michael J. Morell
John E. McGlade, Director	Michael J. Morell, Director
/s/ Roderick A. Palmore	/s/ Stephanie A. Streeter
Roderick A. Palmore, Director	Stephanie A. Streeter, Director
/s/ Thomas H. Weidemeyer	/s/ Michael R. Wessel
Thomas H. Weidemeyer, Director	Michael R. Wessel, Director

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 8, 2019

/s/ RICHARD J. KRAMER

Richard J. Kramer Chairman of the Board, Chief Executive Officer and President (Principal Executive Officer)

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 8, 2019

/s/ DARREN R. WELLS

Darren R. Wells Executive Vice President and Chief Financial Officer (Principal Financial Officer)

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 906 of the Sarbanes-Oxley Act of 2002 (subsections (a) and (b) of 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, 2018 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 8, 2019

/s/ RICHARD J. KRAMER

Richard J. Kramer Chairman of the Board, Chief Executive Officer and President The Goodyear Tire & Rubber Company

Dated: February 8, 2019

/s/ DARREN R. WELLS

Darren R. Wells Executive Vice President and Chief Financial Officer The Goodyear Tire & Rubber Company