MICHELIN
A BETTER WAY FORWARD

2019

RESULTS

CONTENTS

01. PRESS RELEASE

Press release

Clermont-Ferrand, February 10, 2020

Financial information for the year ended December 31, 2019

COMPAGNIE GÉNÉRALE DES ÉTABLISSEMENTS MICHELIN

2019: €3,009 million in segment operating income,
up €179 million or 6.5% at constant exchange rates
€1,730 million in net income, up €70 million
€1,615 million in structural free cash flow

- In a deteriorated environment and shrinking markets,
  - Sales rose 7.8% at constant exchange rates, lifted by acquisitions (up 6.8%);
  - The Group improved its performance, thanks to tight steering of operations.
- Segment operating income at constant exchange rates rose by €179 million, of which €127 million from acquisitions, and segment operating margin held firm at 12.5%.
  - Volumes down 1.2%, in line with the markets;
  - €324 million positive net impact of changes in the price mix and raw materials costs, attesting to sustained price discipline and a product mix enhanced by the growth in sales of 18-inch and larger Passenger car tires, the Specialty businesses and the balance between Original Equipment and Replacement business in the Group sales;
  - €61 million in competitiveness gains, net of inflation, and ongoing transformation of the Group's manufacturing footprint.
- Integration of Fenner and Camso in line with expectations, and sustained deployment of the strategy with the acquisition of Indonesian tiremaker Multistrada and telematics provider Masternaut.
- €1,615 million in structural free cash flow, reflecting growth in EBITDA and responsive production management in declining markets.
- Proposed dividend of €3.85 per share.

Florent Menegaux, Managing Chairman, said: "In 2019, in a highly unstable environment, Michelin successfully maintained its market share and improved its earnings. During this particularly demanding period of transformation for the Group, I would like to personally thank all of our employees for demonstrating such remarkable engagement. In addition to delivering this solid performance, the men and women of Michelin are continuing to innovate every day, not only in tires but also in such areas as hydrogen mobility and biosourced and high-tech materials. Michelin remains committed to reducing its environmental footprint."

Outlook

In 2020, the Passenger car and Light truck tire markets are expected to decline slightly over the year, with flat growth in Replacement demand and a sustained contraction in Original Equipment demand. Truck and Off-the-road tire markets should continue to soften, impacted by the sharp decline in Original Equipment business. Mining markets should also shrink due to a slight inventory adjustment, while tire consumption should be sustained.

In this generally declining market environment, Michelin's objectives for 2020 are as follows:

Segment operating income at constant parity slightly down on the prior year and free cash flow of more than €1.5 billion excluding the systemic effect of the coronavirus crisis in China.

(in € millions)	2019*	2018 (restated)	2018 (reported)
Sales	24,135		22,028
Segment operating income	3,009		2,775
Segment operating margin	12.5%	12.6%	12.6%
Automotive and related distribution(1)	11.1%	11.4%	11.6%
Road transportation and related distribution(1)	9.3%	9.6%	8.8%
Specialty businesses and related distribution(1)	18.7%	20.1%	19.6%
Other operating income and expenses	(318)		(225)
Operating income	2,691		2,550
Net income	1,730		1,660
Segment EBITDA	4,763		4,119
Capital expenditure	1,801		1,669
Net debt(4)	5,184	4,056	3,719
Gearing(4)	39%	33%	31%
Employee benefit obligations(4)	3,873	3,858	3,850
Free cash flow(2)(4)	1,142	(1,985)	(2,011)
Return on capital employed(5)	13.7%		14%
Employees on payroll(3)	121,339		117,400
Earnings per share	€9.69		€9.30
Dividend for the year	€3.85		€3.70

(1) Following the acquisition of Camso and the merger of the Off-the-road businesses, certain minor adjustments have been made to the composition of the segments.
(2) Free cash flow, which is stated before dividend payments and financing transactions, corresponds to net cash from operating activities less net cash used in investing activities (adjusted for net cash flows relating to cash management financial assets and financial assets lodged as collateral for debt).
(3) At period-end.
(4) The consolidated statement of financial position for the year ended December 31, 2018 did not include the opening balance sheet for Camso, whose acquisition price was accounted for as preliminary goodwill. Following Camso's consolidation in first-half 2019, the opening balance sheet was restated.
(5) ROCE after tax and excluding goodwill, acquired intangible assets and equity-accounted companies.
** Including the impact of applying IFRS 16.*

MARKET REVIEW

PASSENGER CAR AND LIGHT TRUCK TIRES

2019/2018 *(in number of tires)*	Europe including Russia & CIS*	Europe excluding Russia & CIS*	North America	Central America	South America	Asia (excluding India)	Africa/ India/ Middle East	Total
Original Equipment	-5%	-5%	-4%**		-4%	-7%	-17%	-6%
Replacement	-2%	-2%	+2%	-1%	+2%	+2%	-2%	+0%

Fourth quarter 2019/2018 *(in number of tires)*	Europe including Russia & CIS*	Europe excluding Russia & CIS*	North America	Central America	South America	Asia (excluding India)	Africa/ India/ Middle East	Total
Original Equipment	-4%	-4%	-9%**		-5%	-4%	-17%	-6%
Replacement	-2%	-2%	-0%	-6%	+9%	-4%	-2%	-2%

** Including Turkey.*
*** North America and Central America.*

In 2019, the global Original Equipment and Replacement Passenger car and Light truck tire market was down 2% in number of tires sold.

Original Equipment

- Worldwide unit sales of Original Equipment tires declined by 6% in 2019. In line with second half 2018 trends, demand fell 8% in the first six months of the year before easing to a 5% decline in the second half, buoyed by the fourth-quarter upturn in the Chinese market.
- In Europe, demand declined by 5% overall during the year, reflecting a 5% contraction in Western Europe due to the significant impact of the decline in automobile sales caused by (i) weaker vehicle exports to the United States and China; and (ii) flat domestic demand. Eastern Europe also saw demand shrink by 5%.
- The North American market ended the year down 4%. After declining by 4% in the first half, demand dropped by another 5% in the second six months, heavily impacted by the General Motors strike in the fourth quarter, as well as by inventory drawdowns across the auto industry.
- Markets in South America ended the year down 4% overall, reflecting the heavily adverse effects of the economic crisis in Argentina.
- In Asia (excluding India), total demand fell by 7% over the year, with a 9% drop in the Chinese market. From 15% in the first half, the fall-off in demand slowed to 2% in the second, thanks to more favorable prior-year comparatives and purchases made ahead of the Chinese New Year in the fourth quarter. Overall, the Chinese market was hard hit by a decline in consumption caused by the Chinese-American trade war and a more lackluster economic environment.
- The Africa/India/Middle East market dropped 17% over the year, as demand was severely dampened by the plunge in domestic spending in India (due to the liquidity crunch and new regulations) and the geopolitical crisis in the Middle East.

Replacement

- In Europe, the market contracted by 2% overall during the year. After declining 3% in the first half under the highly negative impact of the Turkish economic crisis and inventory drawdowns in Western Europe, demand remained on a downward trend in the second six months, losing another 1% primarily because warm winter weighed on winter tire demand. In this environment, the all-season segment continued to enjoy robust demand and remained the leading market growth driver across Europe.
- In a favorable economic environment, demand in North America rose by 2% overall, as a 5% contraction in the Canadian market was offset by a sustained 3% gain in the United States, led by rising sales of Asian tire imports.
- In Central America, the market narrowed by 1% over the year, primarily due to the decline in Mexican demand in the second half.
- In South America, demand rose by 2% over the year. After being severely impacted in the first half by the economic crisis in Argentina (down 13%) and the decline in Brazilian demand (down 3%), the market rebounded by 8% in the second half, lifted by import tire sales in Brazil and Argentina.
- Demand in Asia (excluding India) ended 2019 up 2% overall. The sustained strong gains in China (up 4%) were considerably attenuated by the flatness of demand in Southeast Asia. The Japanese market was hurt by the fourth quarter increase in the VAT rate and, more seriously, by the lack of a real winter season. The other countries in the region showed modest growth over the year.
- In the Africa/India/Middle East region, demand slipped 2% over the year. The 17% collapse in the Indian market as the liquidity crunch weighed on consumer spending was partially offset by rising demand in the Middle East (up 5%) and Africa.

TRUCK TIRES (RADIAL AND BIAS)

2019/2018 *(in number of tires)*	**Europe including Russia & CIS***	**Europe excluding Russia & CIS***	**North America**	**Central America**	**South America**	**Asia (excluding India)**	**Africa/ India/ Middle East**	**Total**
Original Equipment	-9%	-10%	+1%	-51%	+22%	+1%	-31%	-4%
Replacement	+3%	+2%	-13%	-1%	-1%	-1%	-2%	-2%

Fourth quarter 2019/2018 *(in number of tires)*	**Europe including Russia & CIS***	**Europe excluding Russia & CIS***	**North America**	**Central America**	**South America**	**Asia (excluding India)**	**Africa/ India/ Middle East**	**Total**
Original Equipment	-17%	-20%	-14%	-68%	+3%	+9%	-44%	-6%
Replacement	+6%	+3%	-16%	-5%	+1%	-3%	-3%	-3%

* *Including Turkey.*

The number of new Truck tires sold worldwide declined by 3% in 2019, with a second half performance in line with first half trends. The 4% downturn in OE demand and the 13% plunge in the North American Replacement market were only partially offset by the 3% increase in the European Replacement market.

Original Equipment

- The global Original Equipment Truck tire market, as measured by the number of new tires sold, contracted by 4% in 2019. After declining by 2% in the first six months, demand fell by a faster 6% in the second half following the downturn in North America.
- In Europe, the Original Equipment market fell by 9% over the year. The first half saw a 4% decline, caused by the highly adverse impact of the economic crisis in Turkey (down 23%) and of Brexit uncertainties in the UK (down 17%). The contraction further tightened in the second half, with a 15% drop led by the fall-off in automaker demand in Germany (down 32%), as well as in France (down 12%) and Spain (down 19%). However, the Turkish market began to level off during the period (down 4% in the second half).
- In a still buoyant economic environment, the North American OE market delivered very strong 9% growth in the first half before turning downwards in the second, with an 8% decline off of very high prior-year comparatives.
- In South America, the market grew by 22% over the full year, but slowed to a 12% gain in the second half.
- Demand in Asia (excluding India) edged up 1% overall in 2019. After declining by 2% in the first half, the market rebounded by 4% in the second six months, lifted by Chinese demand and a favorable basis of comparison. Demand in the rest of Asia declined by 11% over the second half, with a 5% contraction in Japan (after an increase in the first half led by regulatory changes) and a 31% drop in Indonesia.
- In the Africa/India/Middle East region, the market plummeted 31%, dragged down by the collapse in Indian demand (down 45%) in the wake of the country's bruising liquidity crisis.

Replacement

- The global Replacement market declined by 2% in 2019, mainly due to the fall-off in Asian tire imports in the North American market, which was partially offset by a slight increase in European demand led by the upturn in Asian tire sales.
- In Europe, the market ended the year up 3%. After declining by 1% in the first half, demand rebounded by a robust 7% in the second six months, led by imports across the region. This was particularly the case in Western Europe, where growth benefited from highly favorable prior year comparatives (reflecting the anti-dumping measures introduced in April 2018).
- In North America, demand plunged 13% over the year. Because retailers had stockpiled massive inventory in second half 2018 ahead of the mid-February 2019 introduction of customs duties on Chinese tires, the North American "non-pool" Replacement market saw steep inventory drawdowns in the first half, followed in the second by comparisons with very high prior-year figures. The "pool" market eased back only slightly over the year, mainly thanks to the very high demand in the OE segment until third quarter 2019.
- In Central America, demand declined by 1% over the year.
- South American markets were also down 1% overall, with persistently flat demand in Brazil but an 8% rebound in Argentina in the second half following a sharp 15% drop in the first. The Colombian and Peruvian markets cooled in the second half, dampened by the unstable political and economic environment.
- Replacement tire markets in Asia (excluding India) retreated by 1% in 2019. After declining by 2% in the first six months of the year, demand seems to have leveled off in the second half, particularly in China (down 2% in the first half then stable in the second). The Japanese market was stable, with highly volatile demand between the third and fourth quarters following an increase in the VAT rate.
- In the Africa/India/Middle East region, new tire demand contracted by 2%, with a 3% decline in the Indian market.

SPECIALTY TIRES

- **Mining tires:** the Mining tire market is still being driven by robust demand from mining companies, while the quarry tire segment is suffering from dealer inventory management policies.
- **Agricultural and Construction tires:** in the Agricultural segment, the cyclical contraction observed since the summer is continuing, especially in OE markets. Demand in the Construction segments is being dampened by global economic uncertainty.
- **Two-wheel tires:** the global motorcycle tire market declined during the year, dragged down by the sharp fall-off in demand in North America, which was only partially offset by growth in both the motorcycle and scooter segments in Europe. Demand in the commuting segment continued to trend upwards.
- **Aircraft tires:** the commercial Aircraft tire market is continuing to grow, with momentum still strongest in the radial segment. This reflects the sustained increase in air passenger traffic, which has slightly slowed recently as load factors improve.
- **Conveyor belts:** conveyor belt markets are continuing to expand, in line with global GDP trends.

2019 SALES AND RESULTS

SALES

Sales stood at €24,135 million for the year ended December 31, 2019, up 9.6% from 2018 due to the combined impact of the following factors:

- the 1.2% decline in volumes: the Group maintained its positions in softer Passenger car and Light truck and Truck markets, which were both heavily impacted by the fall-off in Original Equipment demand. The drop in volumes following the market downturn in Agricultural and Construction tires was almost entirely offset by the growth in Mining tire volumes.
- the highly positive 2.2% price-mix effect: prices added €230 million, reflecting an assertive pricing policy in the more competitive environment created by cooling markets. The €248 million positive mix effect was primarily led by the sustained success of the MICHELIN brand's premium strategy and a favorable market mix stemming from the relative sales performances in the Passenger car and Light truck OE and Replacement segments and the relative proportion of Mining and Off-the-road sales in the Specialty tire markets.
- the positive 1.8% currency effect, mainly due to the US dollar's rise against the euro, an impact that was dampened by the decline in certain currencies such as the Russian ruble, the Argentine peso, the Turkish lira and the Brazilian real over the period;
- the significantly favorable 6.8% impact from changes in the scope of consolidation, led by the seamless integration of (i) Fenner and Camso, which were acquired in 2018 to drive faster expansion in the tire business and in high-tech materials; and (ii) Multistrada and Masternaut, which were acquired in 2019.

RESULTS

Segment operating income amounted to €3,009 million or 12.5% of sales, versus €2,775 million and 12.6% in 2018.

The year's performance reflected:

- a €127 million increase from changes in the scope of consolidation following the inclusion of Fenner, Camso, Multistrada and Masternaut and the removal of TCi;
- a €213 million decrease from the 1.2% decline in volumes and the €108 million fixed cost shortfall, following the sudden drop in demand and the ensuing production adjustments required to reduce year end inventory;
- a robust €477 million increase from the price-mix effect thanks in particular to disciplined price management, which cushioned the €153 million adverse impact from raw materials costs (including customs duties);
- The €199 million increase in costs was more than offset by €260 million in competitiveness gains, resulting in €61 million net savings.
- Depreciation and amortization expense rose by €91 million and start-up costs by €37 million. Other factors totaled a positive €8 million for the year.
- Lastly, favorable currency movements added €55 million to the reported figure.

Other operating income and expenses amounted to an expense of €318 million, primarily corresponding to the amortization of intangible assets acquired in business combinations (€91 million) and to provisions for restructuring the plants in Bamberg and La Roche-sur-Yon (€249 million).

In all, net income came to €1,730 million, up €70 million.

NET FINANCIAL POSITION

Free cash flow amounted to €1,142 million in 2019, a €3,127 million improvement over the previous year, when it was impacted by the acquisitions of Fenner and Camso and the creation of the TBC joint venture with Sumitomo Corporation. Gearing stood at 39% at December 31, 2019, based on net debt of €5,184 million. Of the €1,128 million increase in debt from the restated December 31, 2018 position(1), €1,142 million is due to free cash flow for the year and €666 million to the payment of dividends. €837 million corresponded to the impact of applying IFRS 16, for the first time and recognizing new leases.

(1) As of 12/31/2018, the acquisition price of Camso had been presented as preliminary goodwill in the "Goodwill" item of the Group's consolidated balance sheet. Following Camso's price purchase allocation in the first half of 2019, the 2019 opening consolidated balance sheet has been restated.

SEGMENT INFORMATION

	Sales			Segment operating income			Segment operating margin		
(in € millions)	2019	2018 (restated)(1)	2018 (reported)	2019	2018 (restated)	2018 (reported)	2019	2018 (restated)	2018 (reported)
Automotive and related distribution	11,851	11,332	11,340	1,321	1,295	1,314	11.1%	11.4%	11.6%
Road transportation and related distribution	6,448	6,378	5,852	597	612	513	9.3%	9.6%	8.8%
Specialty businesses and related distribution	5,836	4,318	4,836	1,091	868	948	18.7%	20.1%	19.6%
GROUP	**24,135**	**22,028**	**22,028**	**3,009**	**2,775**	**2,775**	**12.5%**	**12.6%**	**12.6%**

(1) Following the acquisition of Camso and the merger of the Off-the-road businesses, certain minor adjustments have been made to the composition of the segments.

Automotive and related distribution

Sales in the Automotive and related distribution reporting segment rose by 4.6% to €11,851 million, from €11,332 million in 2018.

Automotive segment operating income amounted to €1,321 million or 11.1% of sales, versus €1,295 million and 11.4% in 2018.

The improvement primarily reflected (i) the 1% decline in volumes in markets down 2% for the year, the fixed cost shortfall and the rise in raw materials costs following the late 2018 increase in butadiene prices, which were offset by (ii) the highly positive price-mix effect stemming from the Group's disciplined price management and the growing proportion of 18-inch and larger tires in the sales mix. In addition, the consolidation of Multistrada reduced segment operating margin.

Road transportation and related distribution

In all, sales by the Road transportation and related distribution reporting segment increased by 1% year-on-year, to €6,448 million from €6,378 million in 2018.

Segment operating income amounted to €597 million or 9.3% of sales, compared with €612 million and 9.6% the year before.

The slight decline was attributable to (i) the 3% contraction in volumes in line with market trends, the fixed cost shortfall and the €30 million increase in customs duties, which were offset by (ii) the robust price-mix reflecting the Group's selective focus on value-creating market segments. The Group continued to expand its Services and Solutions business with the acquisition of Masternaut in Europe, and now manages more than one million vehicles under contract.

Specialty businesses and related distribution

Sales by the Specialty businesses segment stood at €5,836 million for the year, up 35% from €4,318 million in 2018.

Segment operating income amounted to €1,091 million or 18.7% of sales, versus €868 million and 20.1% the year before.

The increase in segment operating income was primarily attributable to the consolidation of Fenner and Camso, whose results were in line with expectations. However, their consolidation reduced SR3 segment operating margin by 2.5 points.

At constant scope of consolidation, segment operating margin improved to 21.2% from 20.1% a year earlier. Volumes eased back 0.6% during the year, as the strong performance in mining tires offset nearly all of the contraction in Off-the-road tire volumes. The fixed cost shortfall was absorbed by the robust price effect, with in particular a favorable business mix and a priority focus on margin integrity in the OE Agricultural tire segment.

2019 NON-FINANCIAL RATINGS

In 2019, Michelin was included in several non-financial performance indices in recognition of its sustainable development and mobility approach:

- **VigeoEiris:** Michelin maintained its position as the benchmark for environmental, social and governance (ESG) performance in the automotive industry and its presence in the Ethibel index (Excellence Europe and Excellence Global) and the Euronext VigeoEiris index (France 20, Europe 120, Eurozone 120, World 120).
- **EcoVadis:** Michelin retained its "Gold CSR Rating" for its environmental, social, human rights and sustainable procurement policies.
- **CDP Climate Change & Water Security:** Michelin confirmed its recognized status as a company at the forefront of the fight against worldwide climate change, with a grade of A- attesting to its leadership. The score serves as recognition of the Group's strategy, its success in reducing its CO_2 emissions and its long-term commitment to further shrinking its carbon footprint. For the first time in 2019, Michelin also earned a grade of A- for its leadership and sustained progress in managing water-related risks. Michelin's full response may be found on the CDP platform (https://www.cdp.net/en/responses) and on the Group's website. More than 7,000 companies were assessed by the CDP in 2019.

- **MCSI:** Michelin has been rated AA for 2019, with a score of 7.3 out of 10. The rating affirms the Group's very good performance in environmental, social and corporate governance (ESG) practices.
- **ISS oekom:** on July 5, 2019, Michelin was ranked at the top of the 66 manufacturing companies assessed for their ESG performance, with Prime Status in the ISS-oekom Corporate Ratings.
- **CDP Supply Chain:** Michelin was named "Supplier Engagement Leader 2019" for its initiatives and strategy to support the energy transition in its supply chain. Only 3% of the companies rated by the CDP were awarded a place on the leader board.
- **Responsible procurement:** in June 2019, Michelin was awarded the French government's "Responsible Supplier Relations and Procurement" label. To date, Michelin is the only company to have been recognized by the Label for all of its purchasing operations worldwide. At the same time, in May 2019, Michelin received certification that its purchasing practices were mature with regard to the new international ISO 20400 Sustainable Procurement standard.
- **Diversity:** in a commitment to combatting gender wage inequality, France's Secretary of State for Gender Equality and the Ministry of Labor introduced a gender equality index in 2019. With Michelin France rated 94/100, the index indicated that the company's gender equality in the workplace program has had a very positive impact.
- **Social responsibility:** Michelin has been honored with the Corporate Social Responsibility Award from French financial weekly AGEFI. The award recognizes the commitment of everyone across the organization, who demonstrate and embody Michelin's social responsibility in their behavior and decisions as they strive to make sustainable mobility a reality.
- **Governance:** in September 2019, AGEFI awarded Michelin its Corporate Governance Grand Prize.

COMPAGNIE GÉNÉRALE DES ÉTABLISSEMENTS MICHELIN

Compagnie Générale des Établissements Michelin ended the year with net income of €672 million, compared with net income of €813 million in 2018.

The financial statements were presented to the Supervisory Board on February 7, 2020. An audit was performed and the auditors' reports on the consolidated and company financial statements were issued on February 10.

The Managing Chairman will call an Annual Shareholders Meeting on Friday, May 15, 2020 at 9:00 am in Clermont-Ferrand.

He will ask shareholders to approve the payment of a dividend of €3.85 per share, compared with €3.70 in respect of the previous year.

2019 HIGHLIGHTS

- Michelin acquires 99.64% of leading Indonesian tire manufacturer Multistrada. (March 8, 2019 - April 16, 2019)
- Alliance between Faurecia and Michelin to create a future world leader in hydrogen fuel cell systems. (March 11, 2019)
- Investor Day held in Almeria and €500 million share buyback program announced, to be implemented between 2019 and 2023. (April 4, 2019)
- Gulf Air chooses Michelin as exclusive tire supplier. (May 3, 2019)
- Michelin acquires Masternaut, stepping up deployment of its telematics solutions across Europe. (May 16, 2019)
- Florent Menegaux, Managing General Partner, elected Managing Chairman of the Group. (May 17, 2019)
- Michelin acquires a 22.8% stake in a unique public-private partnership to create Hympulsion, whose mission is to encourage renewable hydrogen-powered mobility in the Auvergne-Rhône-Alpes region. (May 20, 2019)
- Michelin presents the safety, purchasing power and environmental benefits of its LONG LASTING PERFORMANCE approach in Vienna. The approach has been recognized by the European Parliament, which has added worn tire testing to EU safety regulations from 2022. (June 3, 2019)
- Inaugural edition of the MICHELIN Guide California, featuring 90 starred restaurants. (June 4, 2019)
- Fenner broadens its manufacturing footprint in Australia. (July 24, 2019)
- WWF France and Michelin renew their partnership. (July 26, 2019)
- The Group announces the gradual closure of its plant in Bamberg, Germany. (September 25, 2019)
- Michelin announces its intention to close its plant in La Roche-sur-Yon, in France. (October 10, 2019)
- Michelin files public offer to acquire all outstanding shares of Société Internationale de Plantation d'Hévéas (SIPH). (November 20, 2019)
- Faurecia and Michelin, including its Symbio subsidiary, formalize their joint venture and aim to create a world leader in hydrogen mobility. (November 21, 2019)
- The MICHELIN guide, TripAdvisor® and TheFork launch an international strategic partnership. (December 3, 2019)
- Compagnie Générale des Établissements Michelin has decided to cancel 1,345,821 treasury shares, representing 0.75% of the total shares outstanding. (December 9, 2019)

A full description of 2019 highlights may be found on the Michelin website: http://www.michelin.com/en

PRESENTATION AND CONFERENCE CALL

Full-year 2019 results will be reviewed with analysts and investors during a presentation today, Monday, February 10, 2020 at 6:30 pm CET. The event will be in English, with simultaneous interpreting in French.

Webcast

The presentation will be webcast live on: https://www.michelin.com/en/finance/

Conference call

Please dial-in on one of the following numbers from 6:20 pm CET:

- In France +33 (0)1 70 71 01 59 (French) PIN code: 23608427#
- In France +33 (0)1 72 72 74 03 (English) PIN code: 58250925#
- In the United Kingdom +44 (0) 207 194 3759 (English) PIN code: 58250925#
- In North America +1 646 722 4916 (English) PIN code: 58250925#
- From anywhere else +44 (0) 207 194 3759 (English) PIN code: 58250925#

The presentation of financial information for the year ended December 31, 2019 (press release, presentation, financial report) may also be viewed at http://www.michelin.com/en, along with practical information concerning the conference call.

INVESTOR CALENDAR

- **Quarterly information for the three months ending March 31, 2020:** Wednesday, April 29, 2020 after close of trading

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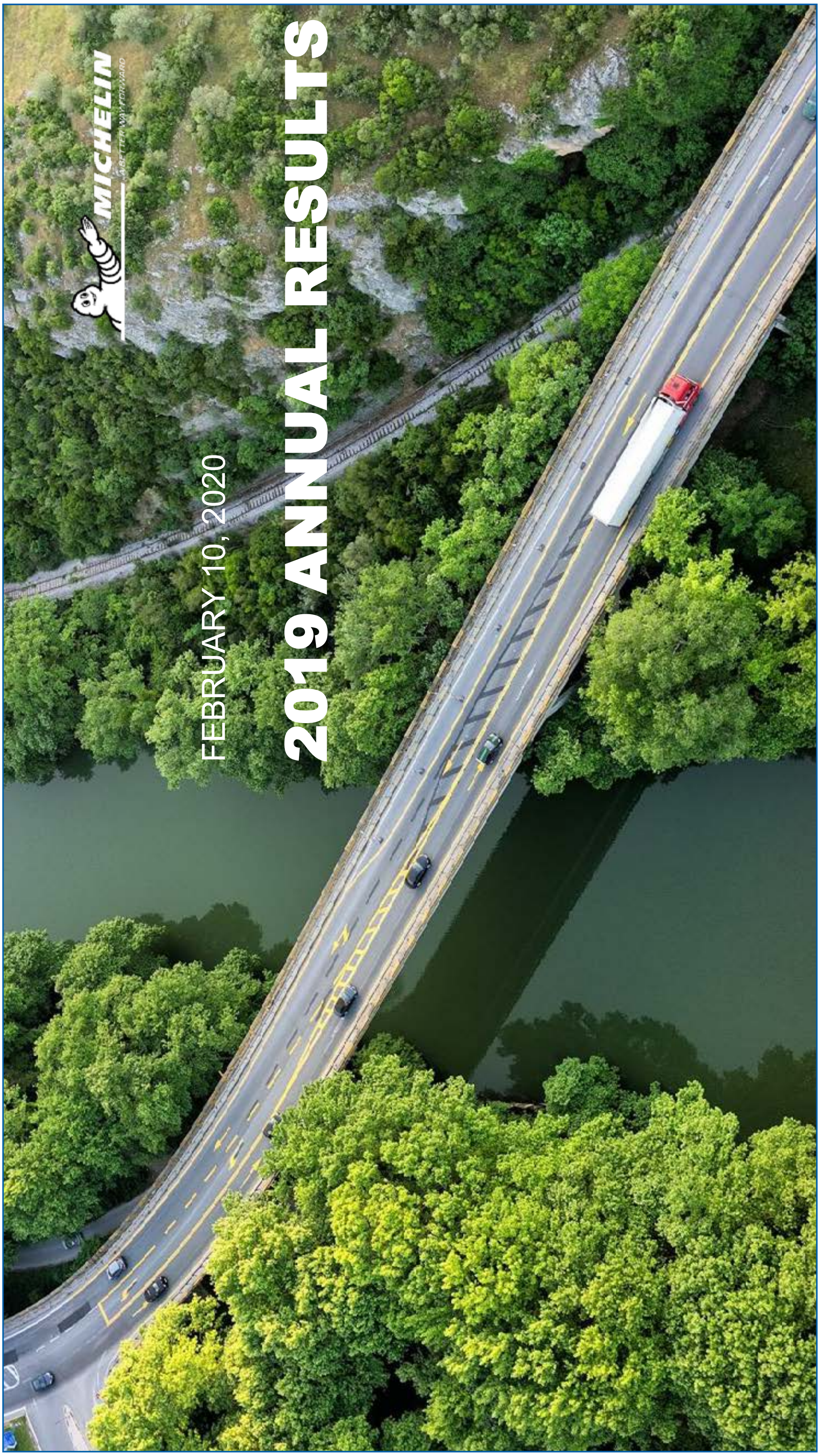
02. SLIDESHOW


MICHELIN
2019 ANNUAL RESULTS
FEBRUARY 10, 2020


2019: a year shaped by heightened awareness of a world in flux
///TRADE WARS
///MIGRATION FLOWS
///CLIMATE EMERGENCY
///SOCIAL UNREST
///GEOPOLITICAL CONFLICTS
///CIRCULAR ECONOMY
MICHELIN
A BETTER WAY FORWARD
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2019 Annual Results – February 10, 2020

Backed by its technological leadership, Michelin is delivering breakthrough solutions to the challenges of a changing world

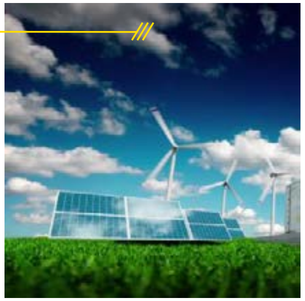
LLP*

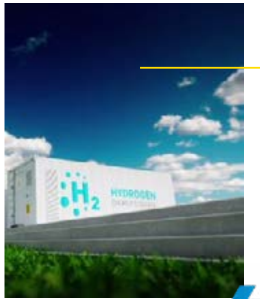
The European Parliament approves worn tire testing

In 2022, long-lasting performance will be a prerequisite for every tire sold in Europe

FIRST CARBON-FREE PRODUCTION PLANT

All the electricity used at the Les Gravanches facility in France is generated from guaranteed renewable sources





HYDROGEN

Faster deployment of zero-emission mobility

SYMBIO
A FAURECIA MICHELIN HYDROGEN COMPANY

UPTIS

Presentation of the new puncture-proof airless concept tire

BIOSOURCED MATERIALS

BIOBUTTERFLY

Construction of France's first demonstrator unit capable of producing butadiene using biosourced ethanol

ResiCare

Creation of a new adhesive resin without any Substances of Very High Concern (SVHC)

* The Long Lasting Performance approach

3 2019 Annual Results – February 10, 2020

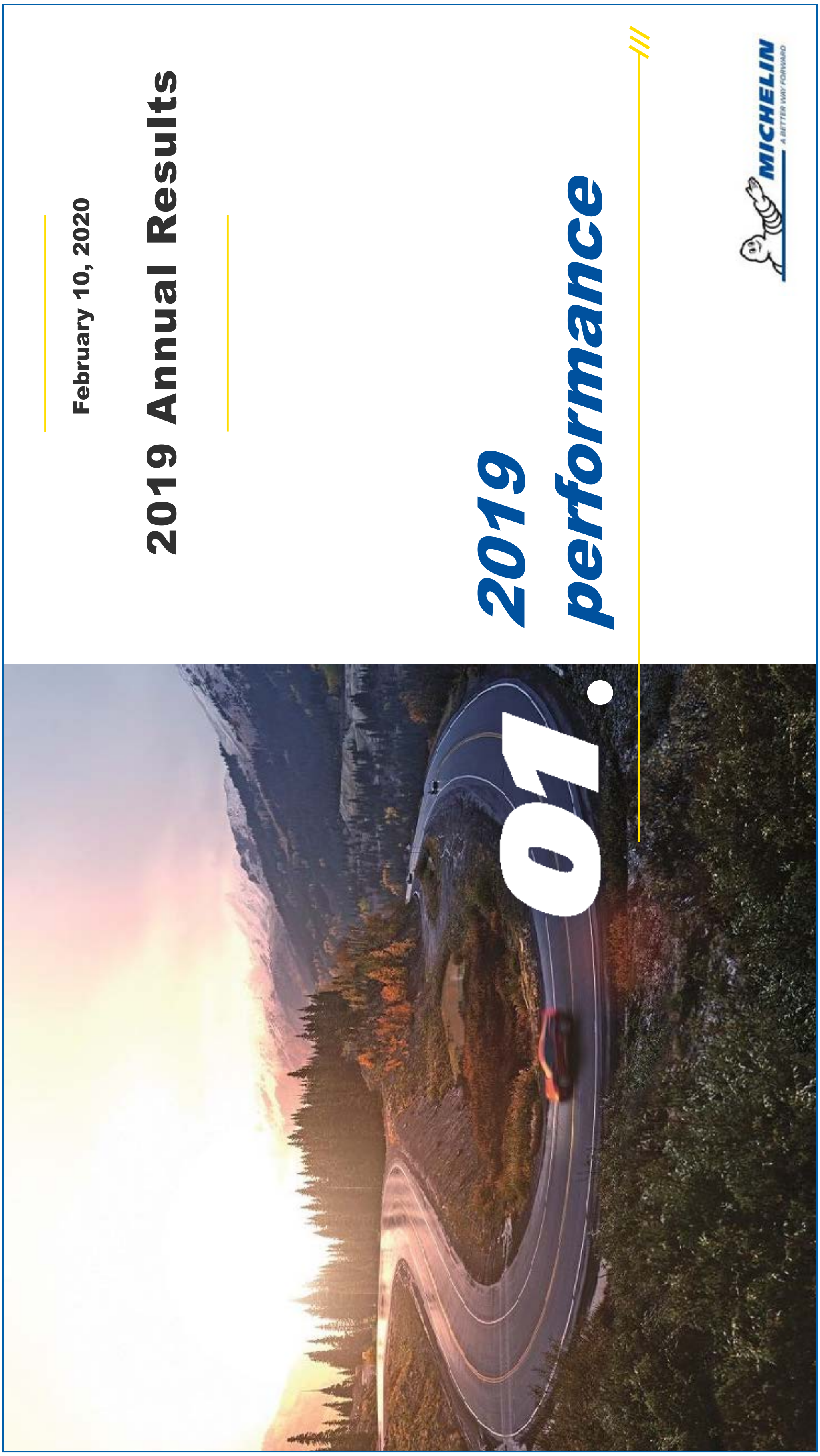
MICHELIN A BETTER WAY FORWARD

€3,009m in SOI*, up €179m (6.5%) at constant exchange rates; €1,615m in structural FCF**

- In a turbulent environment and shrinking markets, the Group improved its performance, led by its acquisitions and tight operations' steering
- SOI at constant exchange rates rose by €179m and segment operating margin held firm at 12.5%:
  - 1.2% decline in volumes, reflecting the Group's ability to maintain its positions in declining markets;
  - €324m in gains from the price-mix/raw materials effect, confirming the Group's disciplined price management and the still positive mix;
  - €61m in competitiveness gains, net of inflation;
- Integration of Fenner/Camso in line with expectations
- €1,615m in structural FCF, confirming the progress made in prior years
  - €112m reduction in inventories at constant scope of consolidation, reflecting tight production management in declining markets
- Recommended dividend of €3.85 per share
- Aligning the Group with the world of tomorrow:
  - Sustained transformation of the Group's manufacturing footprint;
  - Supporting sustainable mobility with innovation: Uptis, Hydrogen, biosourced materials

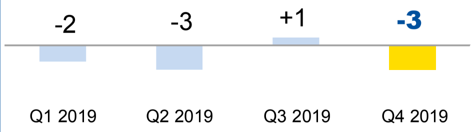
* *Segment Operating Income* ** *Free Cash Flow*

4 2019 Annual Results – February 10, 2020


February 10, 2020
2019 Annual Results
2019 performance
01.
MICHELIN
A BETTER WAY FORWARD

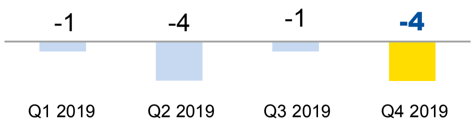
Markets declined in 2019, hit by weaker OE demand in every business

PC/LT: -2%



- OE: worldwide demand down 6% (down 6% in Q4 despite 1% growth in China)
- RT: demand trending upwards in North America, led by imports, and declining in Europe (structural inventory adjustments and a warm winter), robust growth in China, up 4%, as expected

TRUCK: -3%



- OE: falling demand in every region around the world, with a faster drop in North America in Q4
- RT: steep plunge in North American demand, mainly due to imports; European market up, lifted by imports

SPECIALTIES: ~ +0%

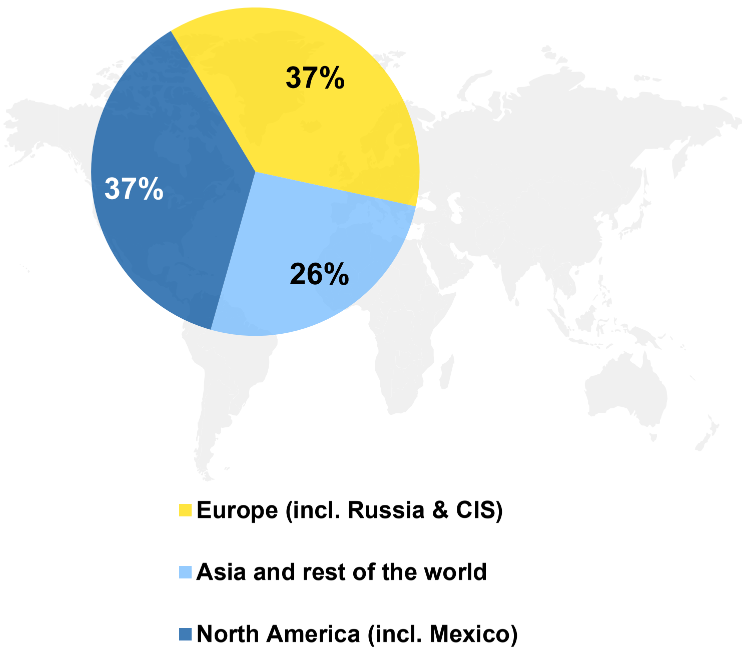
- Mining tires: demand up 3%, but momentum slowing at year-end
- Off-Road: sharp fall-off in OE demand in Construction and Agricultural tires; RT demand down slightly, mainly due to unfavorable weather conditions
- Growth in the Two-wheel commuting and Aircraft segments

Source: Michelin

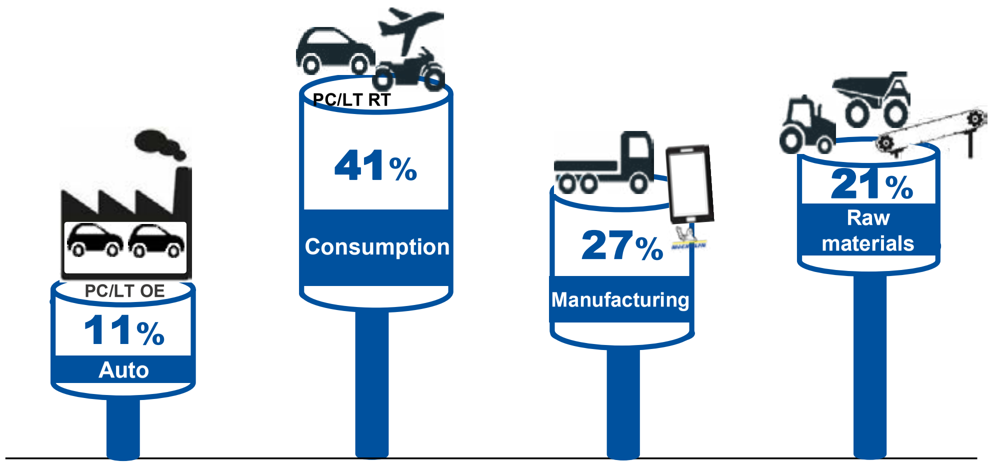
6 2019 Annual Results – February 10, 2020

A diversified, global offering to capture pockets of growth in a challenging environment

2019 sales by region



2019 sales by growth driver

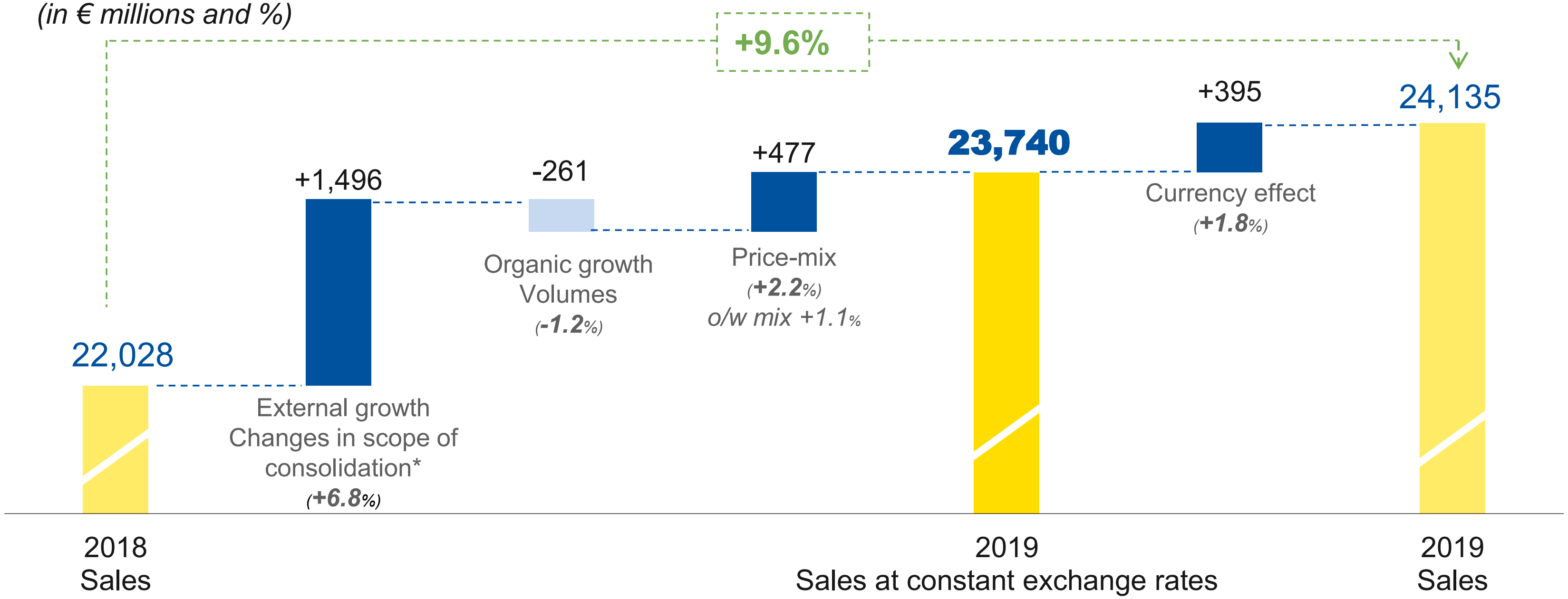


PC/LT OE/RT: Passenger Car and Light Truck tires sold as Original Equipment (TC/LT OE) or in Replacement markets (PC/LT RT)

7 2019 Annual Results – February 10, 2020

Sales up 9.6%, led by the smooth integration of acquisitions, higher prices and steady improvement in the mix

YoY change
(in € millions and %)

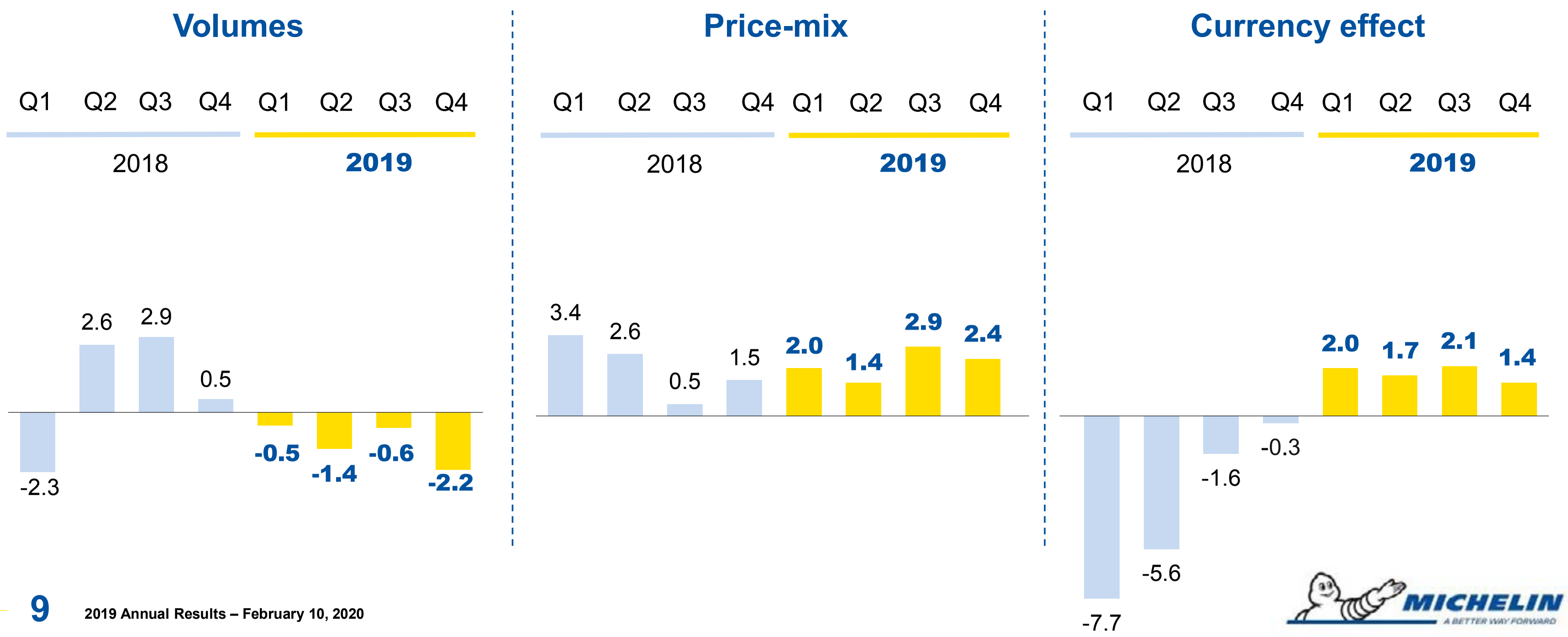


* *In particular Fenner, Camso, Multistrada, Masternaut and the deconsolidation of TCi*

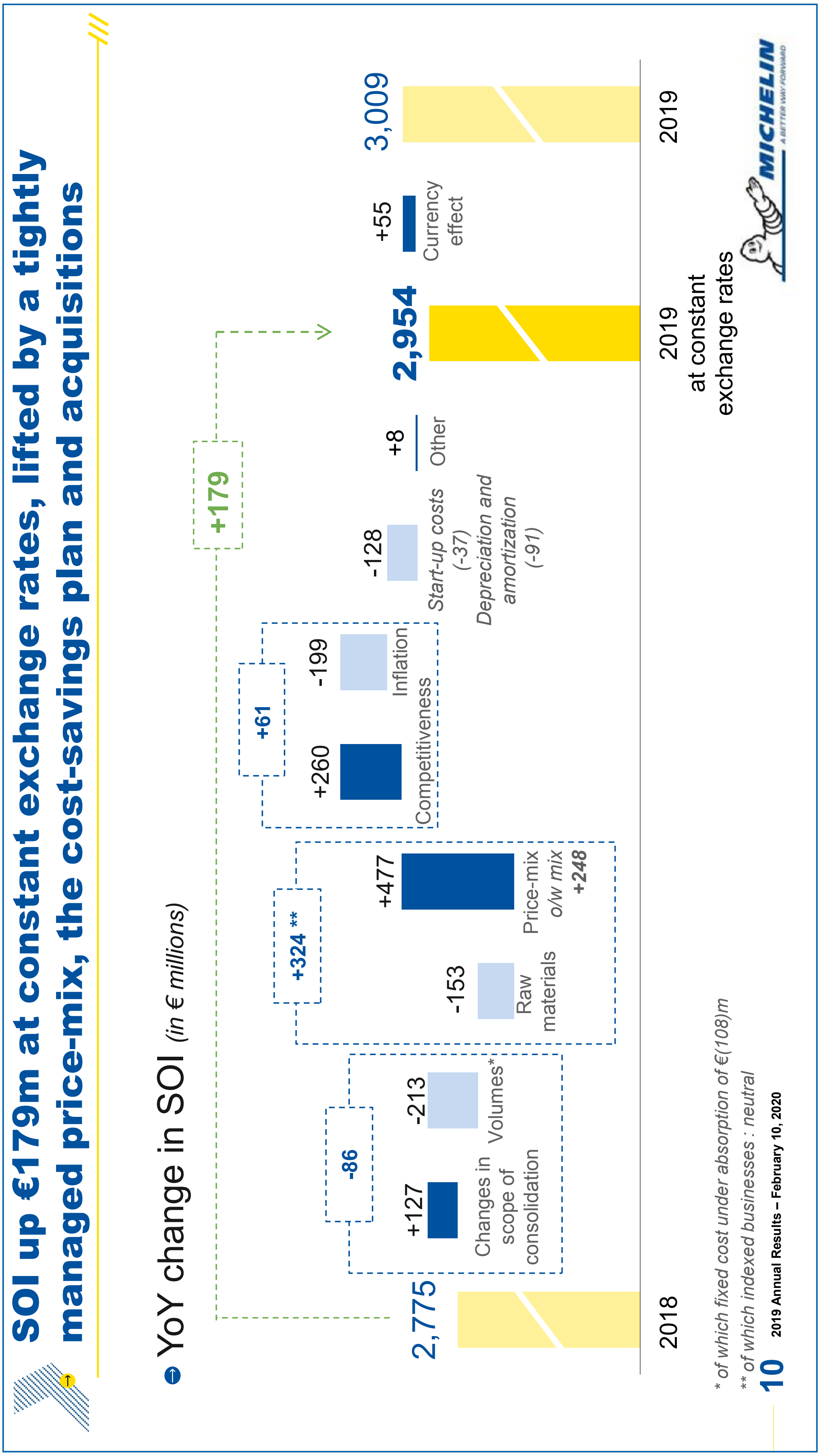
8 2019 Annual Results – February 10, 2020

Q4: Robust price-mix, thanks to an assertive margin protection strategy and volumes in line with the markets

- YoY change, by quarter
  (in %)



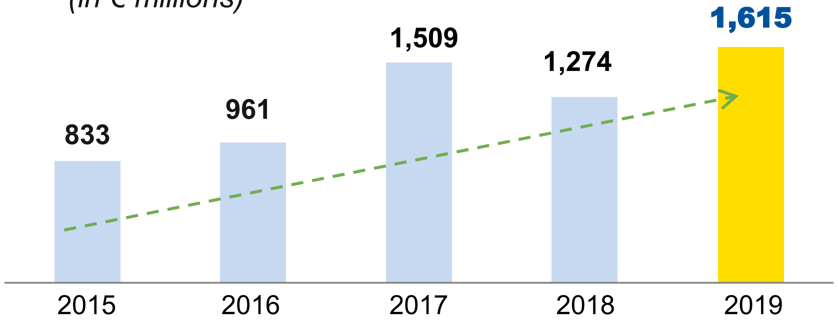
9 2019 Annual Results – February 10, 2020


SOI up €179m at constant exchange rates, lifted by a tightly managed price-mix, the cost-savings plan and acquisitions
YoY change in SOI (in € millions)
2,775
2018
+127
-213
-86
Changes in scope of consolidation
Volumes*
-153
Raw materials
+477
Price-mix
o/w mix
+248
+324 **
+260
-199
+61
Competitiveness
Inflation
-128
Start-up costs
(-37)
Depreciation and amortization
(-91)
+8
Other
+179
2,954
2019
at constant exchange rates
+55
Currency effect
3,009
2019
* of which fixed cost under absorption of €(108)m
** of which indexed businesses : neutral
10
2019 Annual Results – February 10, 2020
MICHELIN
A BETTER WAY FORWARD

Sustained improvement in structural free cash flow, supported in 2019 by higher EBITDA and working capital management

Structural free cash flow

(in € millions)



	2018*	2019
Free cash flow[(1)]	**(1,985)**	**1,142**
Acquisitions[(2)]	(3,199)	(464)**
Working capital impact of raw materials costs[(3)]	(60)	(9)
Structural free cash flow[(1) – (2) – (3)]	**1,274**	**1,615**

** As part of the PPA of Camso in the 2019 opening balance sheet, free cash flow and acquisition cash out were restated in an amount of €26m in 2018*

Change in structural free cash flow

(in € millions)

2018 structural free cash flow	**1,274**
Change in EBITDA	+644
o/w IFRS 16	*+223*
Change in trade working capital	+52
Change in tax and interest paid	-265
o/w IFRS 16	*-28*
Change in capital expenditure	-98
Change in other	+8
2019 structural free cash flow	**1,615**

*** Excluding the €58m paid to acquire non-controlling interests in Multistrada through a mandatory tender offer, recognized in equity*

11 2019 Annual Results – February 10, 2020

MICHELIN A BETTER WAY FORWARD

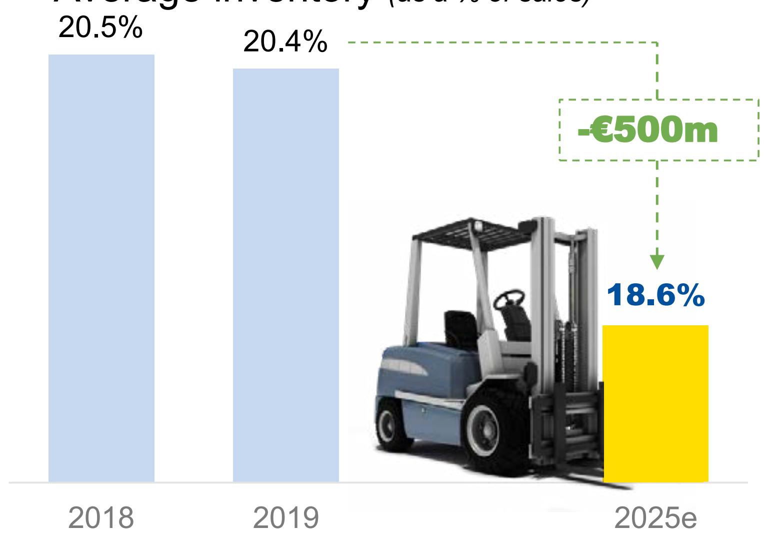
Optimizing average Michelin inventory to free up €500m in cash flow between 2019 and 2025

Clearly identified levers...

- **Local sourcing**: better service, lower inventory, reduced carbon footprint and less dependency on regulations
- **Operational excellence**: improving customer service and inventory quality, leveraging AI to optimize demand forecasts
- **Industrial flexibility**: increase factory flexibility with digitization to better meet growing markets complexity
- **Lean upstream**: semi-finished production on demand
- **Supply chain models**: improving supply chain business model (make to order, extended supply)

...to reduce average inventory between 2019 and 2025

Average inventory *(as a % of sales)*



12 2019 Annual Results – February 10, 2020

A disciplined pricing policy and moving the mix upmarket helped to offset the decline in volumes in steeply falling markets

(in € millions)	2019	2018**	Change
RS1 sales	**11,851**	11,332	+5%
Operating income*	***1,321***	*1,295*	+2%
Operating margin*	11.1%	11.4%	-0.3 pt
RS2 sales	**6,448**	6,378	+1%
Operating income*	***597***	*612*	-2%
Operating margin*	9.3%	9.6%	-0.3 pt
RS3 sales	**5,836**	4,318	+35%
Operating income*	***1,091***	*868*	+26%
Operating margin*	18.7%	20.1%	-1.4 pt

** For the segment* *** 2018 restated*

- RS1: sales up at constant perimeter; market share gains and unit margin supported by the price/mix
- RS2: an agile pricing policy and enhanced mix helped to cushion the deep fixed under absorption
- RS3: higher income despite the decline in OHT markets, lifted by Mining, integration of Fenner and Camso and a robust price-mix

13 2019 Annual Results – February 10, 2020

Automotive: market share gains, recognition of Michelin's technological leadership

Percentage of ≥18" tires in total MICHELIN-brand sales
(in tonnes)

2015	2016	2017	2018	2019
25%	29%	35%	39%	**43%**

MICHELIN OE/RT loyalty rate in Europe*:

18"	19"	20" and +
>50%	>65%	>89%

* 1st replacement

MICHELIN
A BETTER WAY FORWARD

14 2019 Annual Results – February 10, 2020

The new challenges facing road transportation: opportunities to showcase the value added of Michelin solutions

NEW ENVIRONMENTAL STANDARDS

- Reducing CO_2 emissions
  - Vecto UE 2020 standard for new vehicles
    Cut CO_2 emissions by 15% by 2025
    Cut CO_2 emissions by 30% by 2030
  - Greenhouse Gas Protocol applied to company upstream/downstream operations
- Circular economy
  Preference for retreaded or retreadable tires in government contracts (French legislation)

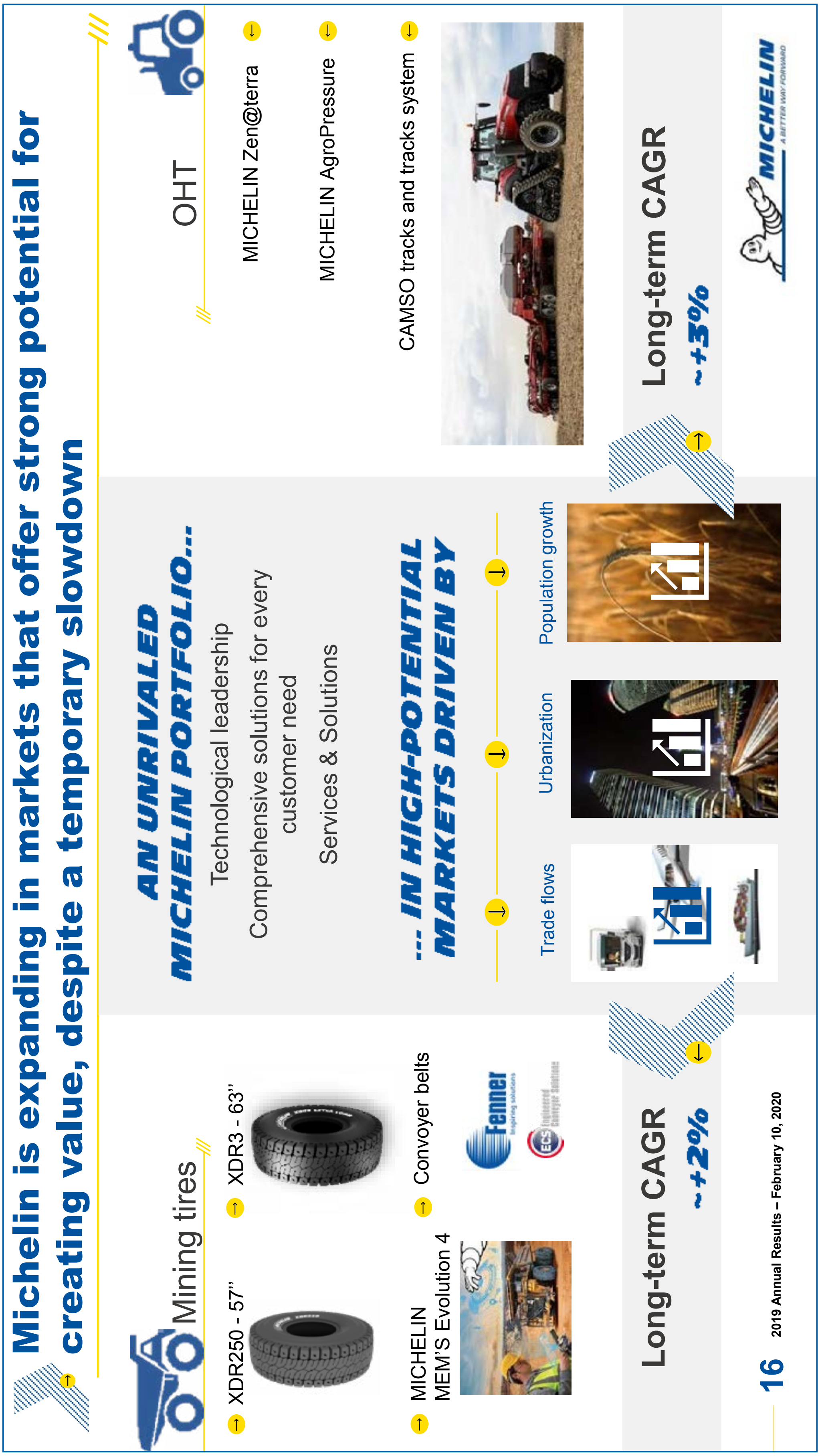
BUSINESS ISSUES

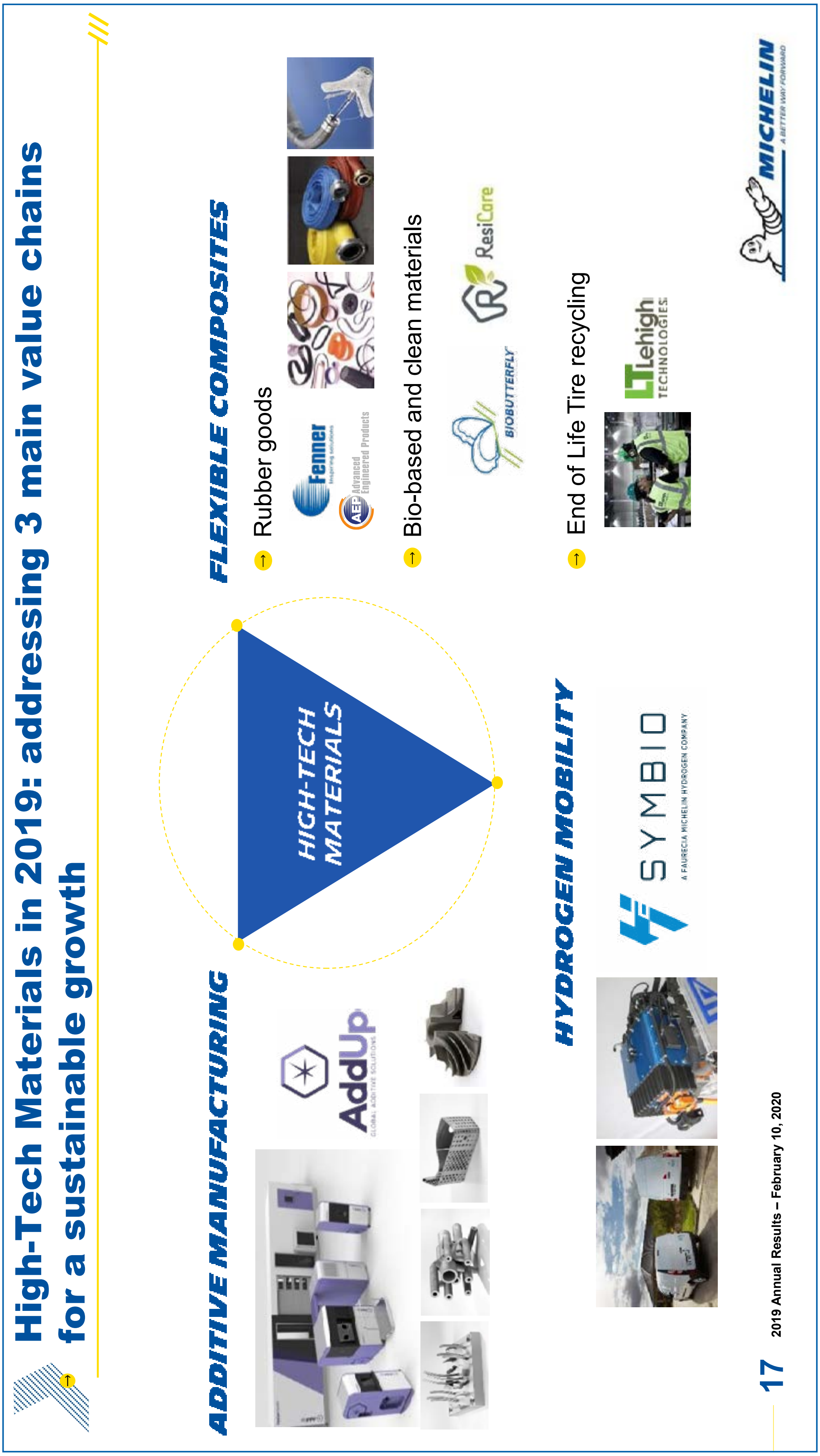
- Focus on fuel efficiency
- Shortage of drivers and rising wages
- Optimizing asset use

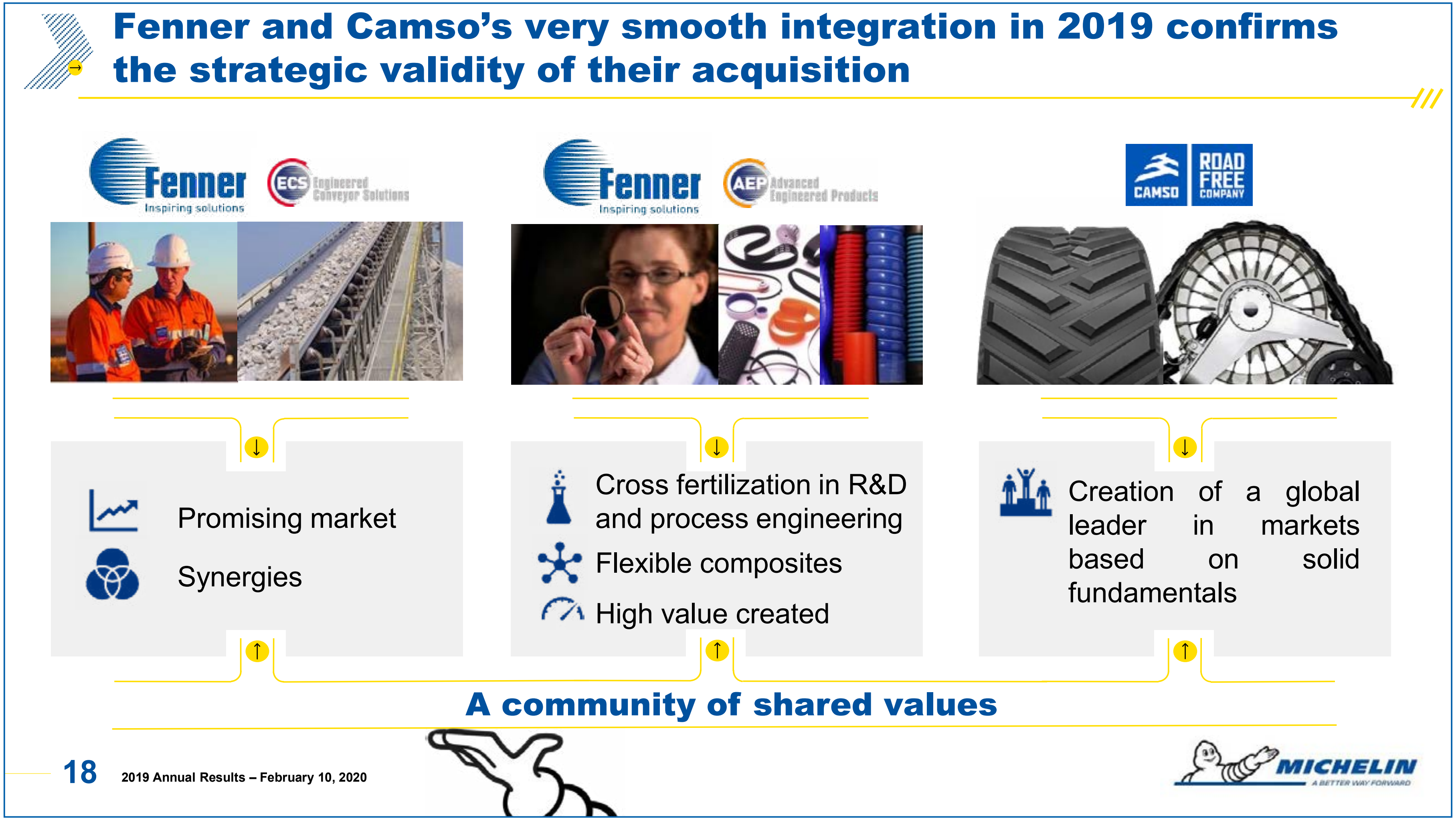
A HIGHLY DIVERSIFIED LINE-UP

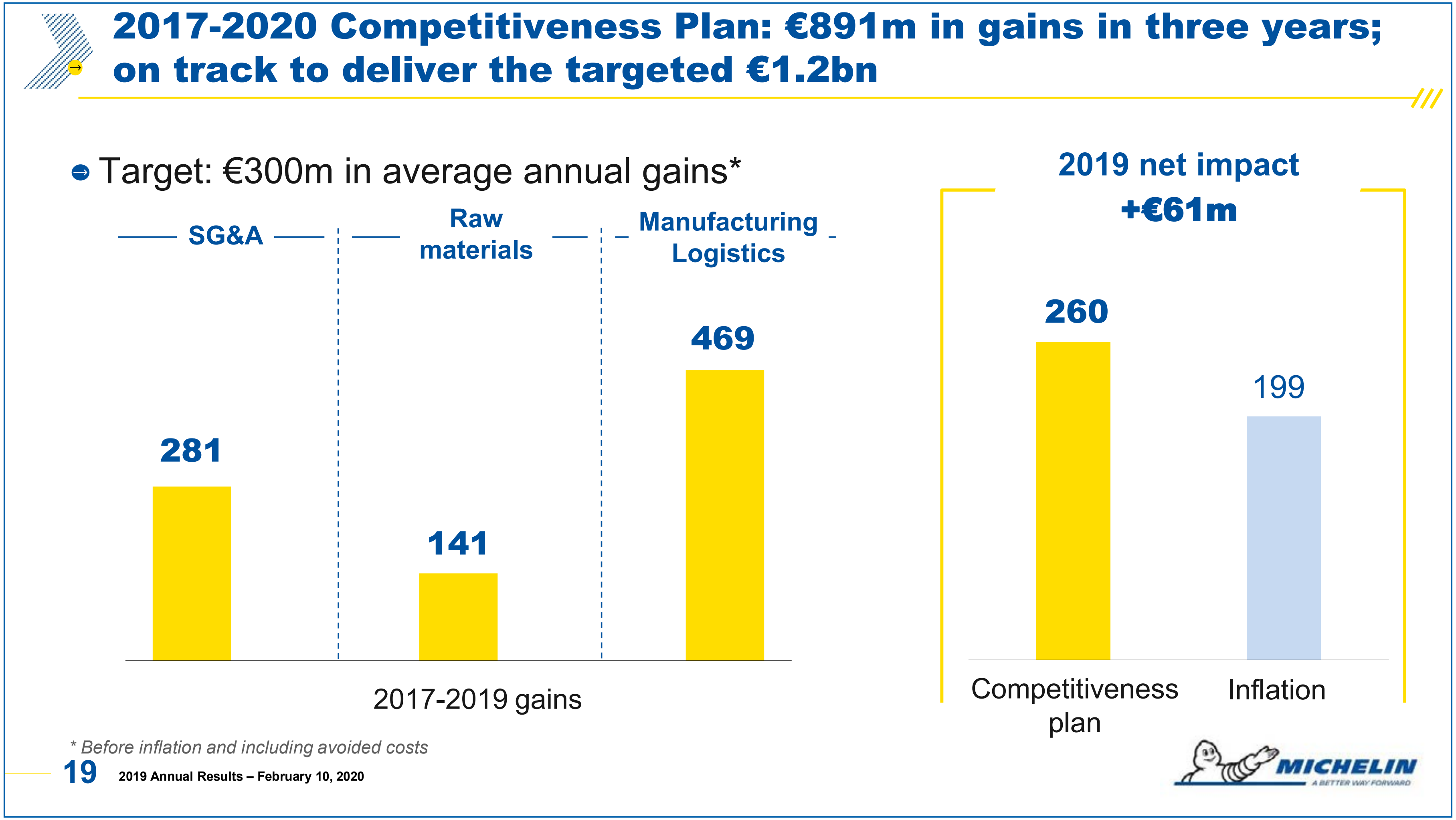
- Tires offering the lowest TCO over time
- Innovative solutions to improve the productivity and environmental footprint of trucking companies
- Products with low environmental impact to support truckers in transitioning to zero-emission operation

15 2019 Annual Results – February 10, 2020


Michelin is expanding in markets that offer strong potential for creating value, despite a temporary slowdown
Mining tires
XDR250 - 57''
XDR3 - 63''
MICHELIN MEM'S Evolution 4
Convoyer belts
Fenner
Long-term CAGR
~+2%
AN UNRIVALED MICHELIN PORTFOLIO...
Technological leadership
Comprehensive solutions for every customer need
Services & Solutions
... IN HIGH-POTENTIAL MARKETS DRIVEN BY
Trade flows
Urbanization
Population growth
OHT
MICHELIN Zen@terra
MICHELIN AgroPressure
CAMSO tracks and tracks system
Long-term CAGR
~+3%
MICHELIN
16
2019 Annual Results – February 10, 2020


High-Tech Materials in 2019: addressing 3 main value chains for a sustainable growth
ADDITIVE MANUFACTURING
AddUp
GLOBAL ADDITIVE SOLUTIONS
HIGH-TECH MATERIALS
FLEXIBLE COMPOSITES
Rubber goods
Fenner
AEP Advanced Engineered Products
Bio-based and clean materials
BIOBUTTERFLY
ResiCare
End of Life Tire recycling
LT Lehigh TECHNOLOGIES
HYDROGEN MOBILITY
SYMBIO
A FAURECIA MICHELIN HYDROGEN COMPANY
MICHELIN
A BETTER WAY FORWARD
17
2019 Annual Results – February 10, 2020


Fenner and Camso's very smooth integration in 2019 confirms the strategic validity of their acquisition
Fenner Inspiring solutions
ECS Engineered Conveyor Solutions
Fenner Inspiring solutions
AEP Advanced Engineered Products
CAMSO
ROAD FREE COMPANY
Promising market
Synergies
Cross fertilization in R&D and process engineering
Flexible composites
High value created
Creation of a global leader in markets based on solid fundamentals
A community of shared values
18
2019 Annual Results – February 10, 2020
MICHELIN
A BETTER WAY FORWARD


2017-2020 Competitiveness Plan: €891m in gains in three years; on track to deliver the targeted €1.2bn
Target: €300m in average annual gains*
SG&A
Raw materials
Manufacturing Logistics
281
141
469
2017-2019 gains
2019 net impact
+€61m
260
199
Competitiveness plan
Inflation
* Before inflation and including avoided costs
19
2019 Annual Results – February 10, 2020
MICHELIN
A BETTER WAY FORWARD

Beyond 2020: set up our manufacturing efficiency, boosting competitiveness gains

/// INDUSTRIAL FOOTPRINT

- Produce locally and increase flexibility
- Multistrada conversion from Tier 3 to Tier 2 production
- Increase the number and utilization of large plants (>100k tonnes)

/// PRODUCTIVITY GAINS

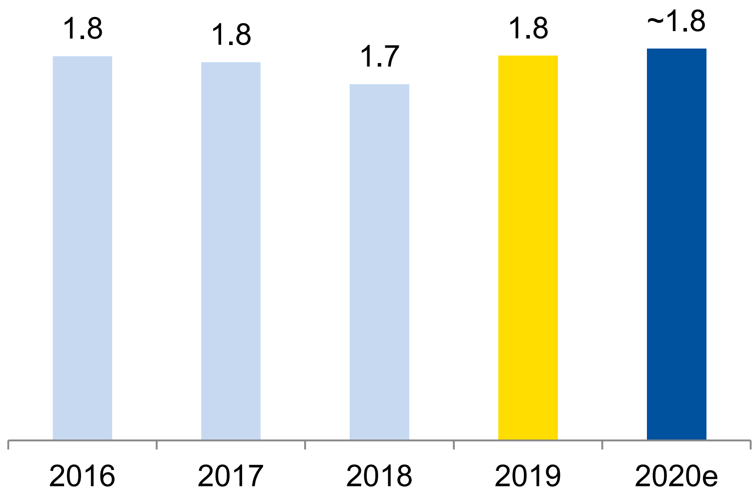
- Process standardization
- Empowerment deployment
- Simplexity
- Digital manufacturing

20 2019 Annual Results – February 10, 2020

MICHELIN A BETTER WAY FORWARD

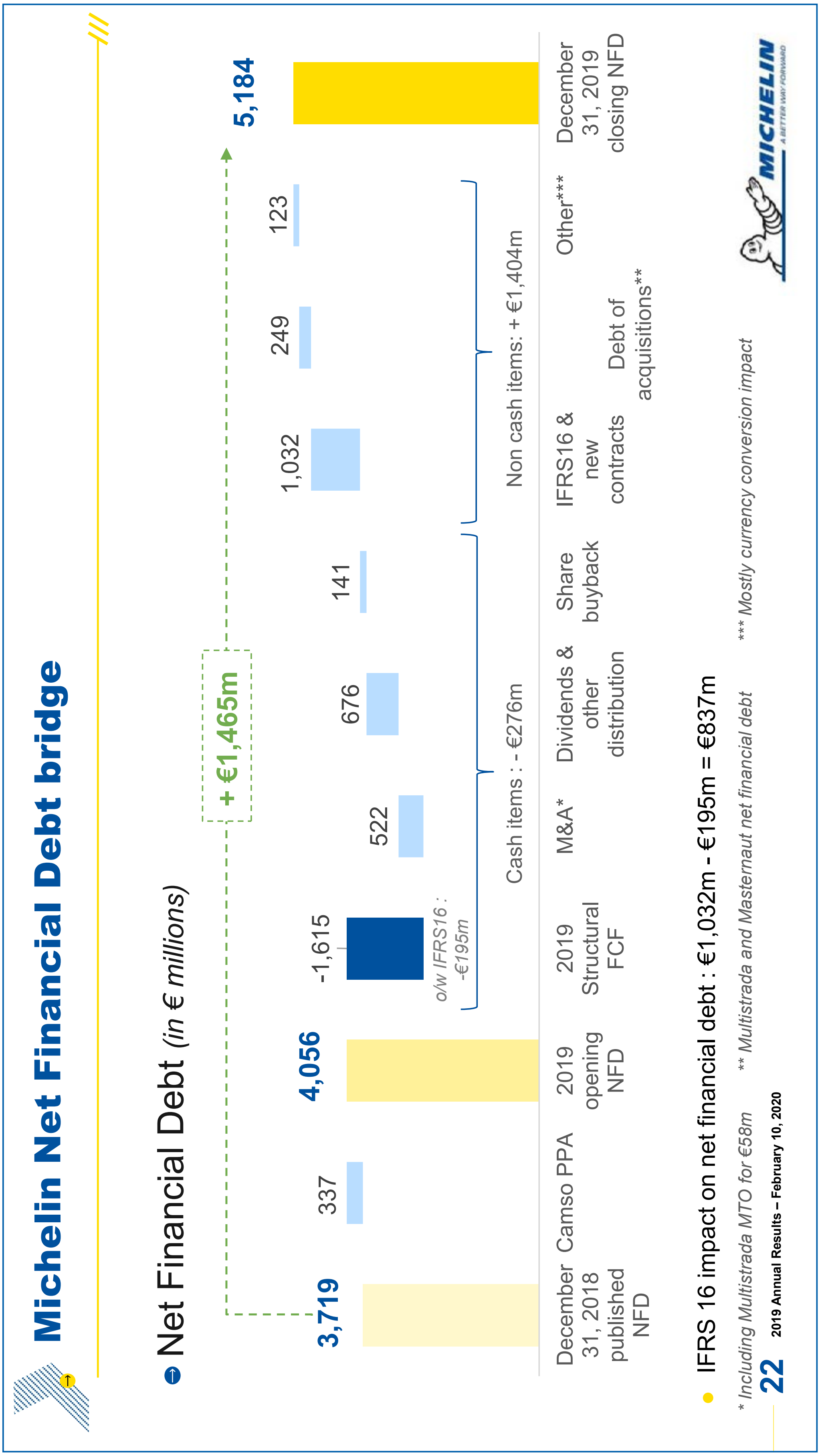
CAPEX strategy: priority given to productivity and new territories ; capacity capex to decrease

CAPEX *(in € billions)*



21 2019 Annual Results – February 10, 2020

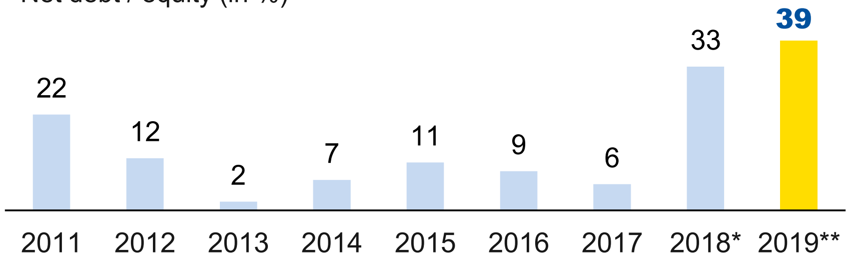
MICHELIN A BETTER WAY FORWARD


Michelin Net Financial Debt bridge
Net Financial Debt (in € millions)
+ €1,465m
3,719
337
4,056
-1,615
522
676
141
1,032
249
123
5,184
o/w IFRS16 : -€195m
Cash items : - €276m
Non cash items: + €1,404m
December 31, 2018 published NFD
Camso PPA
2019 opening NFD
2019 Structural FCF
M&A*
Dividends & other distribution
Share buyback
IFRS16 & new contracts
Debt of acquisitions**
Other***
December 31, 2019 closing NFD
IFRS 16 impact on net financial debt : €1,032m - €195m = €837m
* Including Multistrada MTO for €58m
** Multistrada and Masternaut net financial debt
*** Mostly currency conversion impact
22
2019 Annual Results – February 10, 2020
MICHELIN
A BETTER WAY FORWARD

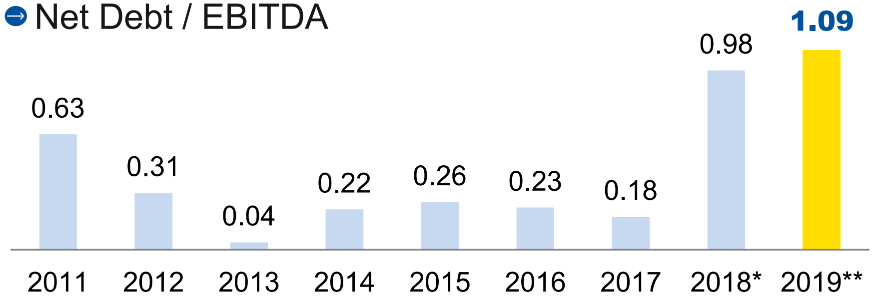
A robust balance sheet after recent acquisitions, confirmed by the rating agencies

- Gearing

Net debt / equity (in %)



- Net Debt / EBITDA



- Long-term ratings confirmed following the Multistrada acquisition

Short-term	S&P Moody's Fitch	**A-2** **P-2** **F-2**
Long-term	S&P Moody's Fitch	**A-** **A3** **A-**
Outlook	S&P Moody's Fitch	**Stable** **Stable** **Stable**

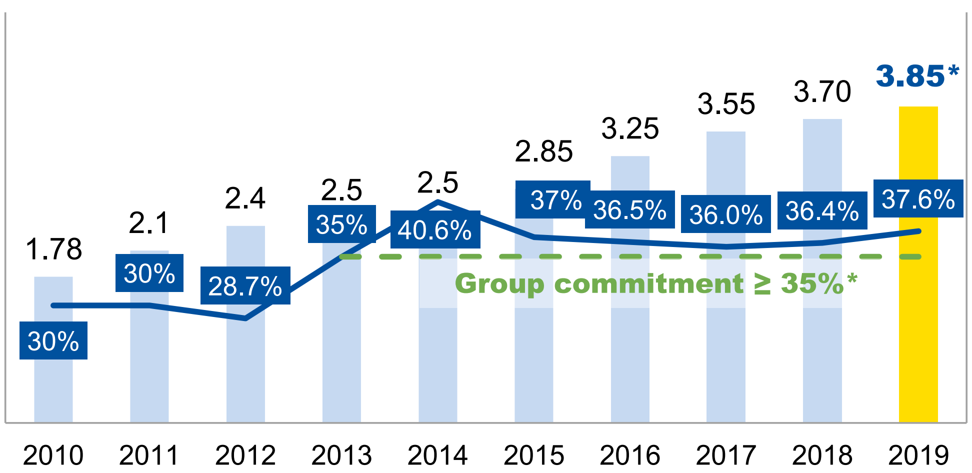
* 2018 restated for Camso PPA impact on the balance sheet

** including IFRS 16

23 2019 Annual Results – February 10, 2020

Sustained shareholder return policy

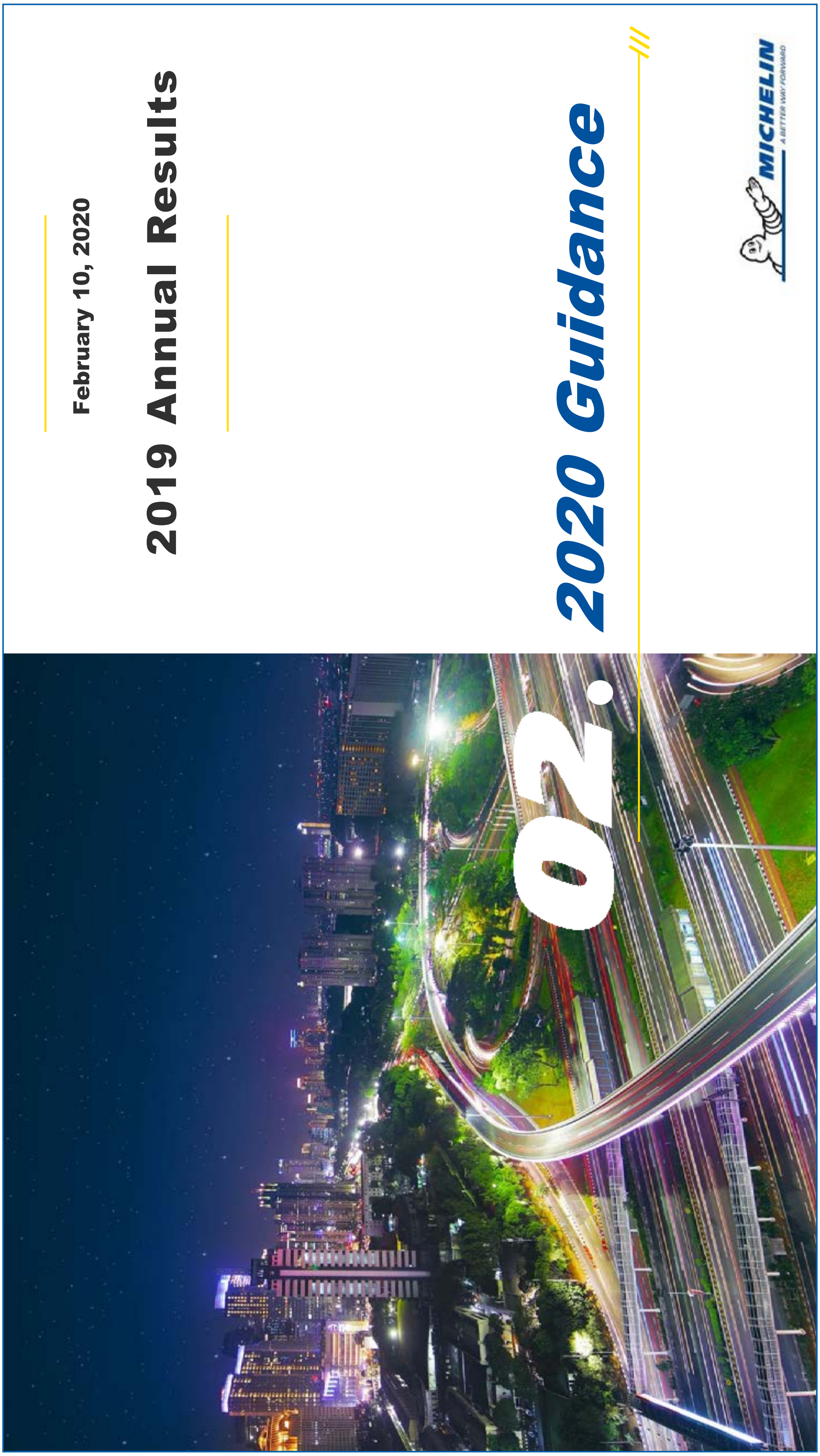
- 2019 dividend of €3.85 per share*, representing a payout of 37.6%**



- Share buyback programs
  - 2015-2016: €750m in buybacks and 4.5% of outstanding shares canceled
  - 2017: €101m in buybacks and 0.5% of outstanding shares canceled
  - 2018: €75m in buybacks and 0.4% of outstanding shares canceled to offset the dilutive impact of share-based compensation
  - 2019: €141m in buybacks and 0.75% of outstanding shares canceled

* Subject to shareholder approval at the Annual Meeting on May 15, 2020 - ** Of consolidated net income before non-recurring items

24 2019 Annual Results – February 10, 2020


February 10, 2020
2019 Annual Results
2020 Guidance
02.
MICHELIN
A BETTER WAY FORWARD

2020 market scenario: lower global demand, dampened by OE markets

PC/LT: -1%/0%

- OE: Demand down by around 3% in the leading markets (China, Europe and North America)
- RT: Market stable in the mature regions and expanding in China.
- ≥18" demand up by around 10%

TRUCK: -3%/-2%

- OE: further declines in the European and North American markets; expanding demand in the emerging markets
- RT: markets up slightly, lifted by sustained growth in freight demand
- Unfavorable geo-mix

SPECIALTIES: ~ -3%

- Mining tires: while tire consumption remains stable, decline in demand due to inventory adjustment
- Off the Road: sustained steep drop in OE Agricultural and Infrastructure tire demand; RT markets up slightly
- Growth in the Two-wheel commuting and Aircraft segments

26 2019 Annual Results – February 10, 2020

MICHELIN A BETTER WAY FORWARD

2020 scenario*

	2020
Cost impact of raw materials prices and customs duties	**Slightly positive**
Currency effect	**Neutral** based on January 2020 rates**
Net price-mix/raw materials effect	**Positive** Price / Raw material: neutral
Competitiveness plan gains vs. inflation	**Positive**

** Based on the following average prices and exchange rates for 2020: Natural rubber: $1.471/kg; butadiene (US, Europe and Asia): $894/t; Brent: $60/bbl; EUR/USD: 1.12*

*** See slide 58*

2020 guidance*

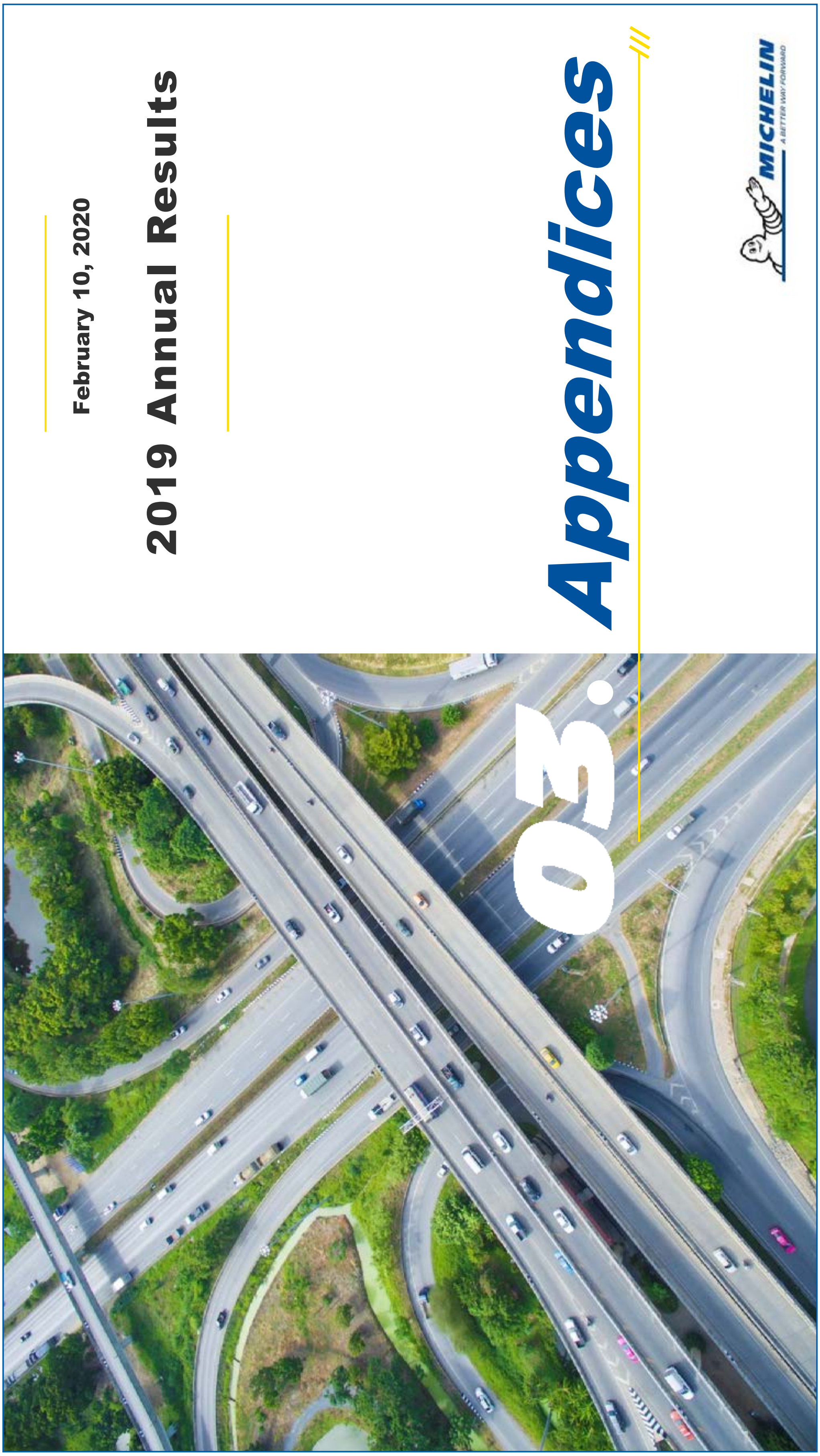
	2020
Volumes	In line with markets
Segment operating income at constant exchange rates	Slight decrease vs. 2019
Structural FCF	> €1,500M

* excluding the systemic effect of the coronavirus crisis in China

28 2019 Annual Results – February 10, 2020

MICHELIN A BETTER WAY FORWARD


Our purpose:
OFFERING EVERYONE A BETTER WAY FORWARD
“Because we believe that mobility is essential for human development, we are innovating passionately to make it safer, more efficient and more environmentally friendly.
Our priority and firm commitment is to offer our customers uncompromising quality(…)”


February 10, 2020
2019 Annual Results
Appendices
03.
MICHELIN
A BETTER WAY FORWARD

Investor Calendar

- Coming events :
  - April 29, 2020 **(after close of trading)** : First-quarter 2020 sales
  - **May 15, 2020** : Annual Shareholders Meeting
  - **July 27, 2020 (after close of trading)** : First-half 2020 results
  - **October 22, 2020 (after close of trading)** : Third-quarter and 9 months 2020 sales
  - **December 8, 2020**: Investor Day
- Dividend dates:
  - **May 19, 2020**: Ex-dividend date
  - **May 20, 2020**: Record date
  - **May 22, 2020**: Payment date

31 2019 Annual Results – February 10, 2020

MICHELIN
A BETTER WAY FORWARD

Reported 2019 and 2018 financial highlights

	2019*	2018**
Sales	24,135	22,028
Segment EBITDA	4,763	4,119
Segment EBITDA margin	19.7 %	18.7 %
Segment Operating income	3,009	2,775
Segment Operating margin	12.5 %	12.6 %
Other Operating income and expenses	-318	-225
Net income	1,730	1,660
Basic earnings per share (in €)	9.69	9.30
Capital expenditure	1,801	1,669
Free cash flow ***	1,142	- 1,985
Gearing	39 %	33 %

** Including IFRS16 impact*

*** The consolidated statement of financial position for the year ended December 31, 2018 did not include the opening balance sheet for Camso, whose acquisition price was accounted for as preliminary goodwill. Following Camso's consolidation in first-half 2019, the opening balance sheet was restated.*

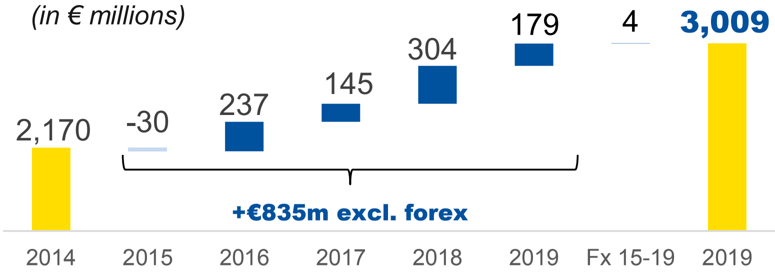
****Net cash from operating activities less net cash used in investing activities less net cash from other current financial assets, before distributions.*

32 2019 Annual Results – February 10, 2020

Resilient margins, underlying strengths and robust drivers support confidence in sustainable FCF growth

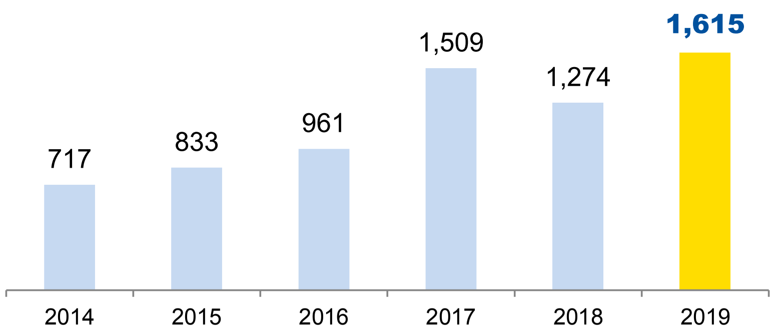
- Change in segment operating income 2014 – 2019

(in € millions)



- Structural free cash flow 2014 – 2019

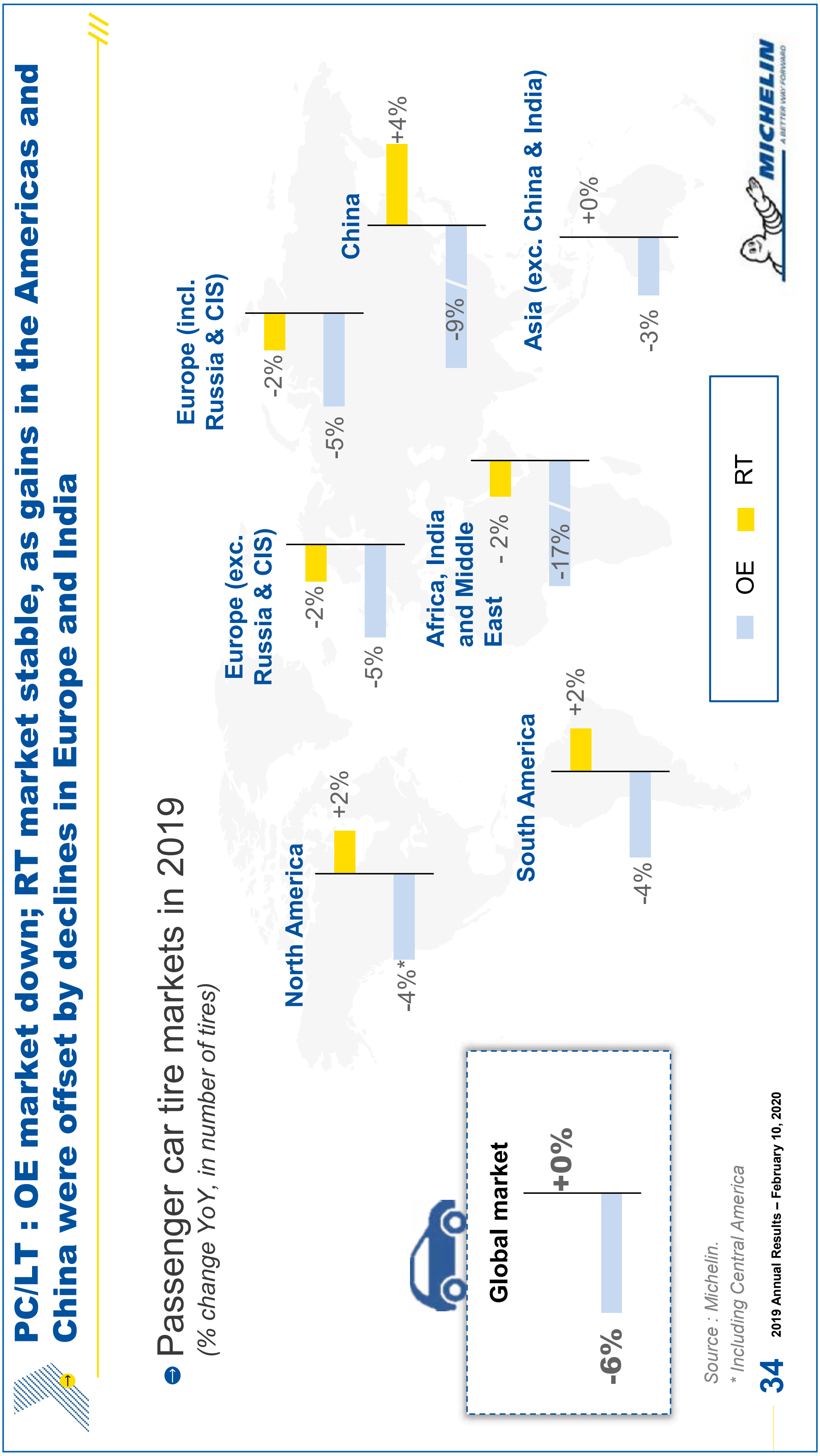
(in € millions)



- Beyond 2019: Michelin's strengths and drivers for more value creation
  - A powerful **brand** operating in structurally growing markets
  - **Innovation** for better performing, more environmentally friendly products
  - Tires becoming more **technology** rich
  - Business **expansion** leveraging our customer base and our unique expertise
  - **Competitiveness** plan deployment
  - **Working capital** optimization

MICHELIN A BETTER WAY FORWARD

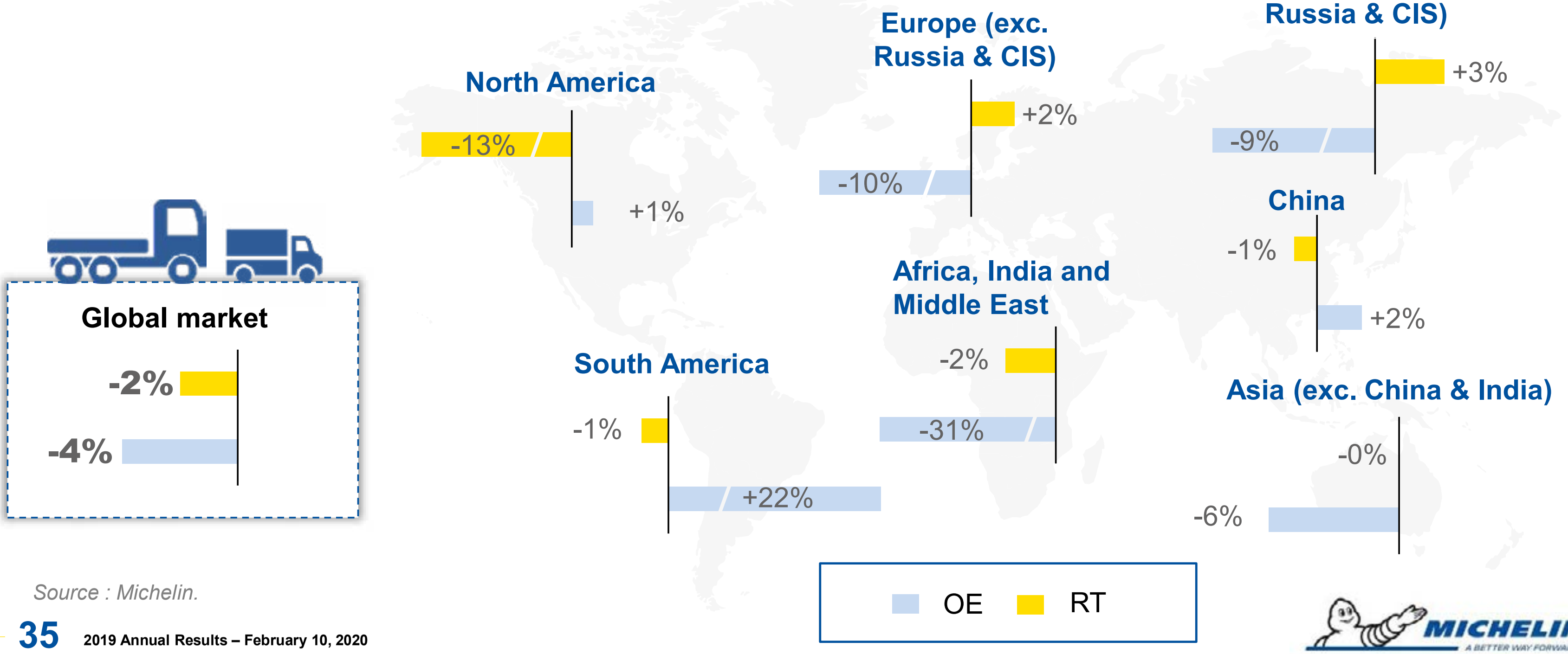
33 2019 Annual Results – February 10, 2020


PC/LT : OE market down; RT market stable, as gains in the Americas and China were offset by declines in Europe and India
Passenger car tire markets in 2019
(% change YoY, in number of tires)
Global market
-6%
+0%
North America
-4%*
+2%
South America
-4%
+2%
Europe (exc. Russia & CIS)
-5%
-2%
Europe (incl. Russia & CIS)
-5%
-2%
Africa, India and Middle East
-17%
- 2%
China
-9%
+4%
Asia (exc. China & India)
-3%
+0%
OE
RT
Source : Michelin.
* Including Central America
34
2019 Annual Results – February 10, 2020
MICHELIN
A BETTER WAY FORWARD

Truck : global demand down, heavily impacted by OE markets, and collapsing imports on the RT market in North America

- Truck tire markets in 2019

(% change YoY, in number of tires)



Source : Michelin.

35 2019 Annual Results – February 10, 2020

Leverage on Group’s strengths, in four domains of growth, to enhance customers mobility and create value

- Michelin’s strengths

Michelin brand leadership

Michelin Man named "Icon of the Millennium"*

High-tech materials leadership

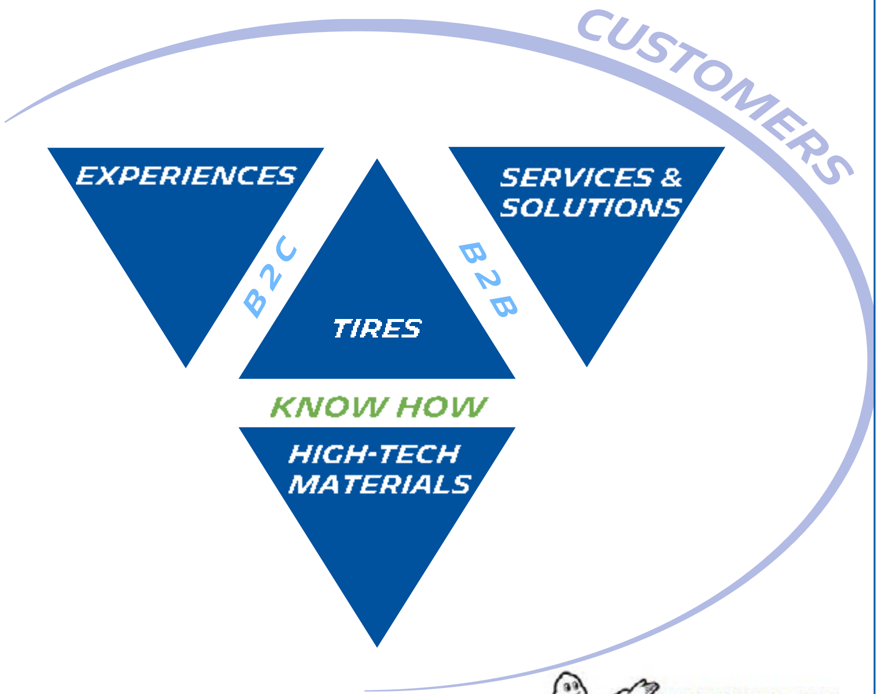
125 years of competencies and innovations in flexible composite materials and transformation processes

Employee engagement

In 2019, 81% of employees say they are proud and happy to work at Michelin

**By Advertising week*

- Four areas of growth



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Recognition for the economic and environmental benefits of Michelin tires' long-lasting performance

- By offering customers tires that deliver high performance until 1.6mm wear indicators appear

Michelin is improving the tire industry's environmental footprint

by avoiding raw material waste

by reducing carbon emissions

Michelin is improving consumer purchasing power

by increasing the time between tire changes

*by improving, with worn tires, the fuel efficiency**

* Up to a 20% reduction in rolling resistance

- Michelin's approach is supported by:
  - The automotive industry
  - The European Parliament

2019

The European Parliament approves worn tire testing

2022

In Europe, long-lasting performance will be a prerequisite for every tire

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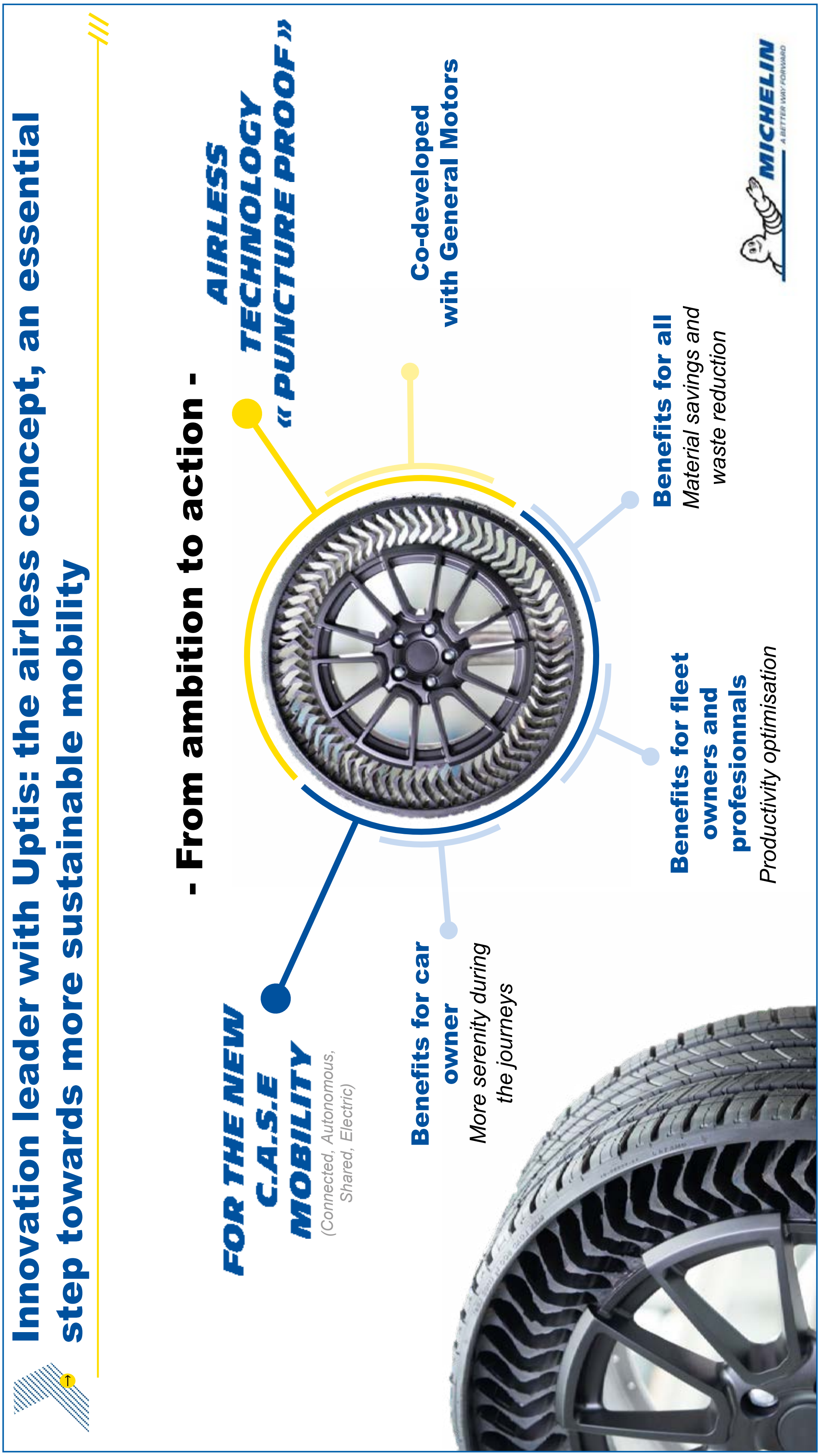
Innovation leader with Uptis: the airless concept, an essential step towards more sustainable mobility
- From ambition to action -
FOR THE NEW C.A.S.E MOBILITY
(Connected, Autonomous, Shared, Electric)
AIRLESS TECHNOLOGY « PUNCTURE PROOF »
Co-developed with General Motors
Benefits for car owner
More serenity during the journeys
Benefits for fleet owners and profesionnals
Productivity optimisation
Benefits for all
Material savings and waste reduction
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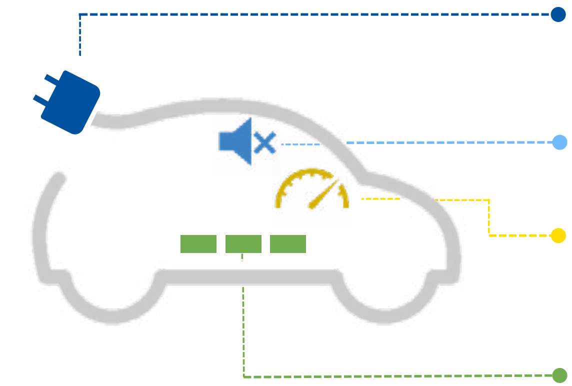
Michelin is meeting the EV challenge



Increasing range the major challenge for EVs	*By reducing rolling resistance, with the right materials, and aerodynamic drag, with the right tire design (Slimline)*
Reducing cockpit noise	*By using Michelin Acoustic Technology and adjusting tread design*
Coping with torque	*By improving tread rigidity and contact patch friction*
Supporting heavy batteries	*By designing tires capable of both carrying heavier loads and reducing rolling resistance*

Consumer and commercial EVs

- Renault Zoé – MICHELIN Energy E-V
- Tesla, en position de leader – MICHELIN Pilot Sport
- Renault Kangoo Z.E. et Z.E.H2 – MICHELIN Energy Saver
- GM Bolt / Volt
- Peugeot e-2008 – MICHELIN Primacy 4
- Mercedes EQC – MICHELIN Pilot Sport 4 SUV…

Asia

- Certified by a large number of Chinese OEMs*
- Partnership with Hyundai for its EV line

Racing

- Formula E – MICHELIN Pilot Sport

** Xiaopeng, WM Motors, Human Horizons, Iconiq, SAIC, BAIC, Guangzhou Autos, FAW*

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Michelin's OE position is unique

	SPORT PASSION	LUXURY PREMIUM	GENERALISTS	NEW ENTRANTS (OEM & Mobility)
OEM BRANDS (examples)				
Who are they	Extreme emotions & passionate drivers	Premium brand focus on consumer experience	WW players mass-market oriented	New OEMs & new offers of mobility
Market weight (Volumes of tires)	2% > in € and image	13% > in € and image	65% =	20% < in € but > in speed
Main competitors	Pirelli	Continental Pirelli	Bridgestone, Goodyear, Continental, Dunlop, Hankook	All
Michelin position	**Leader**	**Amongst the Top 3**	**Amongst the Top 3 Overall & WW presence**	**Leadership Position amongst non Chinese**

... with the overall objective of achieving

- a benchmark position in each segment & each geography
- sales growth at least in line with the market
- profitability on a par with the best auto suppliers

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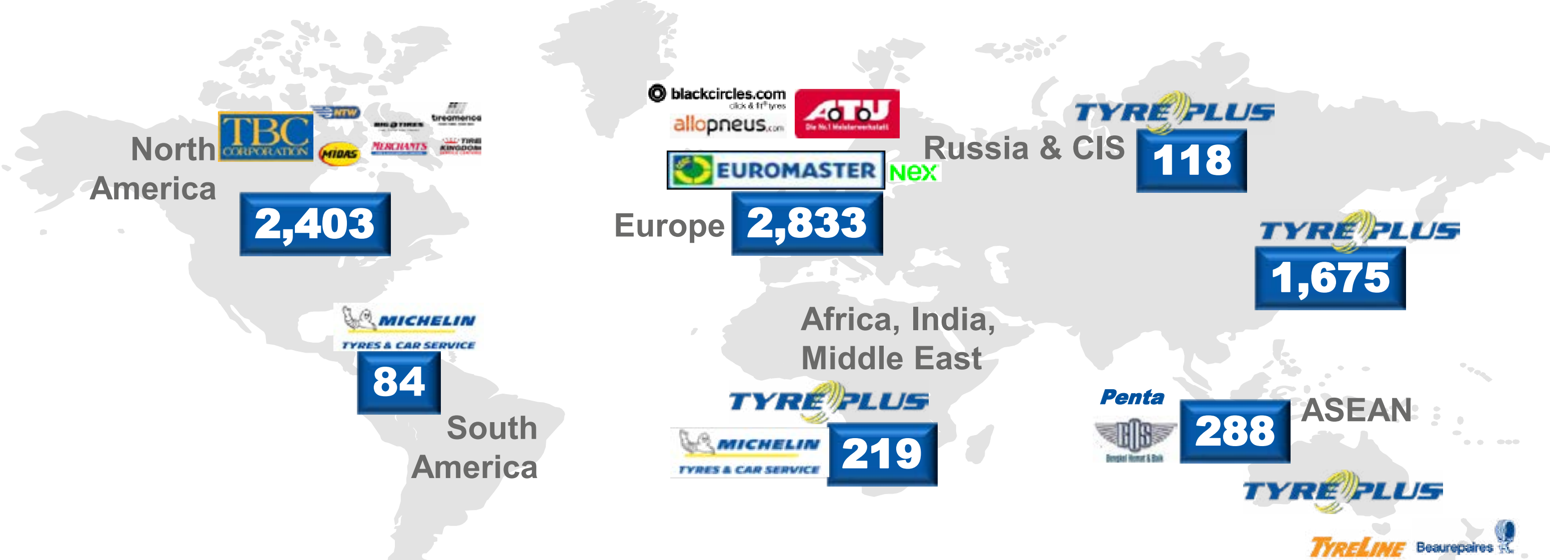
Partner dealership chains* that showcase the Group's products

- Michelin boasts industry-leading global coverage



- Partner wholesalers: NTW, Ihle, Meyer Lissendorf
- A vast network of strategic retailers* as of late 2019: ~ 7,620 including Penta in Indonesia following the acquisition of Multistrada

*Proprietary or franchised dealers, plus minority stakes in partners

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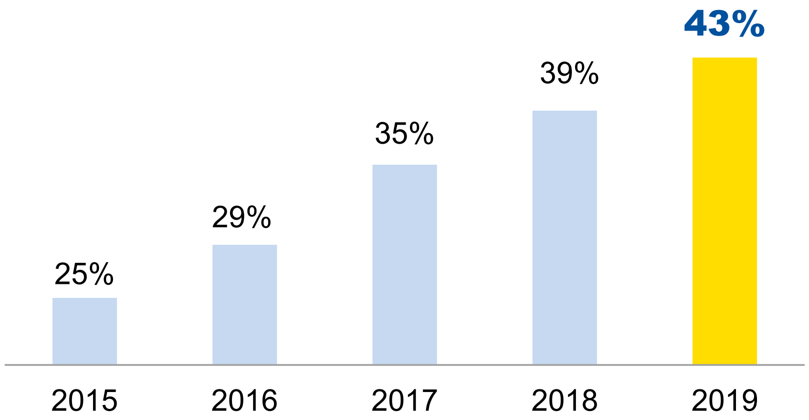
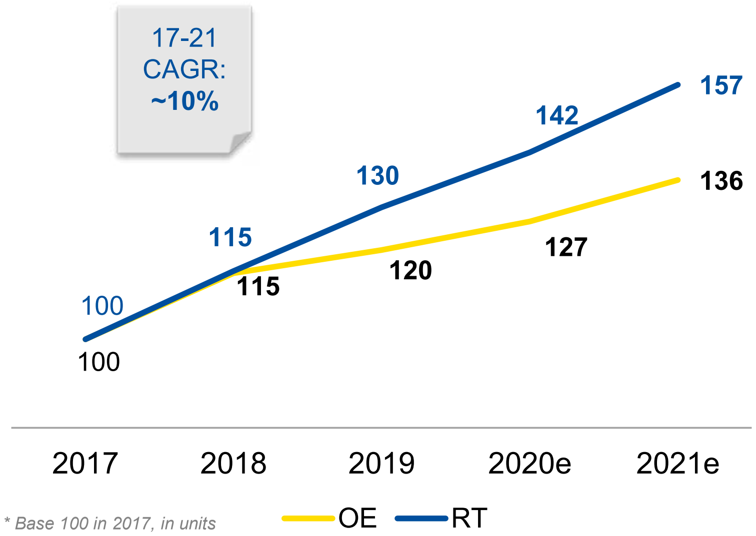
Growing exposure to the very buoyant, high-margin ≥18” PC/LT tire market

- Percentage of ≥18” tires in total MICHELIN-brand sales
  (in tonnes)



- Growth in the ≥18’’ PC/LT tire market*



* Base 100 in 2017, in units

- The Group generates more than 40% of its MICHELIN-brand PC/LT sales volumes in a premium market with a 2017-2021 CAGR of 10%

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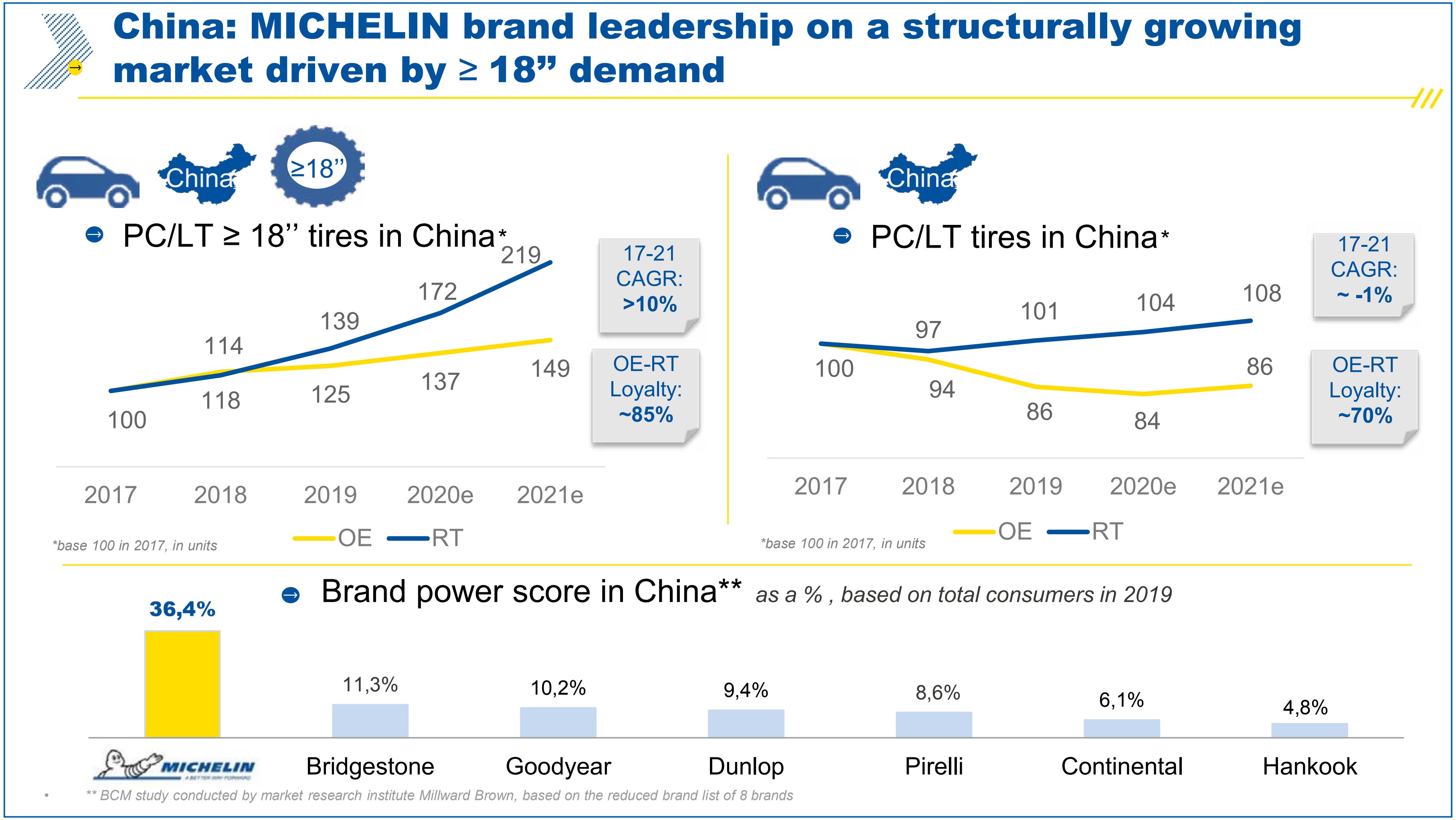
China: MICHELIN brand leadership on a structurally growing market driven by ≥ 18” demand
China
≥18’’
PC/LT ≥ 18’’ tires in China*
100
114
139
172
219
118
125
137
149
2017
2018
2019
2020e
2021e
17-21 CAGR: >10%
OE-RT Loyalty: ~85%
*base 100 in 2017, in units
OE
RT
China
PC/LT tires in China*
100
97
101
104
108
94
86
84
86
2017
2018
2019
2020e
2021e
17-21 CAGR: ~ -1%
OE-RT Loyalty: ~70%
*base 100 in 2017, in units
OE
RT
Brand power score in China** as a % , based on total consumers in 2019
36,4%
11,3%
10,2%
9,4%
8,6%
6,1%
4,8%
MICHELIN
Bridgestone
Goodyear
Dunlop
Pirelli
Continental
Hankook
** BCM study conducted by market research institute Millward Brown, based on the reduced brand list of 8 brands


Mining: a successful product offering for a demanding industry focused on productivity
The most efficient tire line-up in the marketplace
XDR250 - 57”
25% (1) more productive with no trade-off on tire life
XDR3 - 63”
12.6 % (2) more load on the KOMATSU 930-E4
Digital services improving efficiency
MEMS Evolution 4
Comprehensive offering with conveyor belts
Fenner
Inspiring solutions
ECS Engineered Conveyor Solutions
Engineered Drive Systems
Conveyor Components
Conveyor Diagnotics
Conveyor Service
Belt
(1) Compared to BRIDGESTONE 46/90 R 57 VRDP and VRPS. Data gathered from 2012 BS databook. And compared to MICHELIN 40.00 R 57 XDR2
(2) Based on comparisons of maximum load capacity with the MICHELIN® XDR® 3 Extra Load to the MICHELIN® XDR® 3, size 53 80 R 63, as set out in the 2018 Michelin Data Book, taking the technical data of the Komatsu 930-E4 truck as a reference. Actual results may vary, and may be impacted by many factors, including road conditions, weather, environment, driving habits, tire size, equipment and maintenance.
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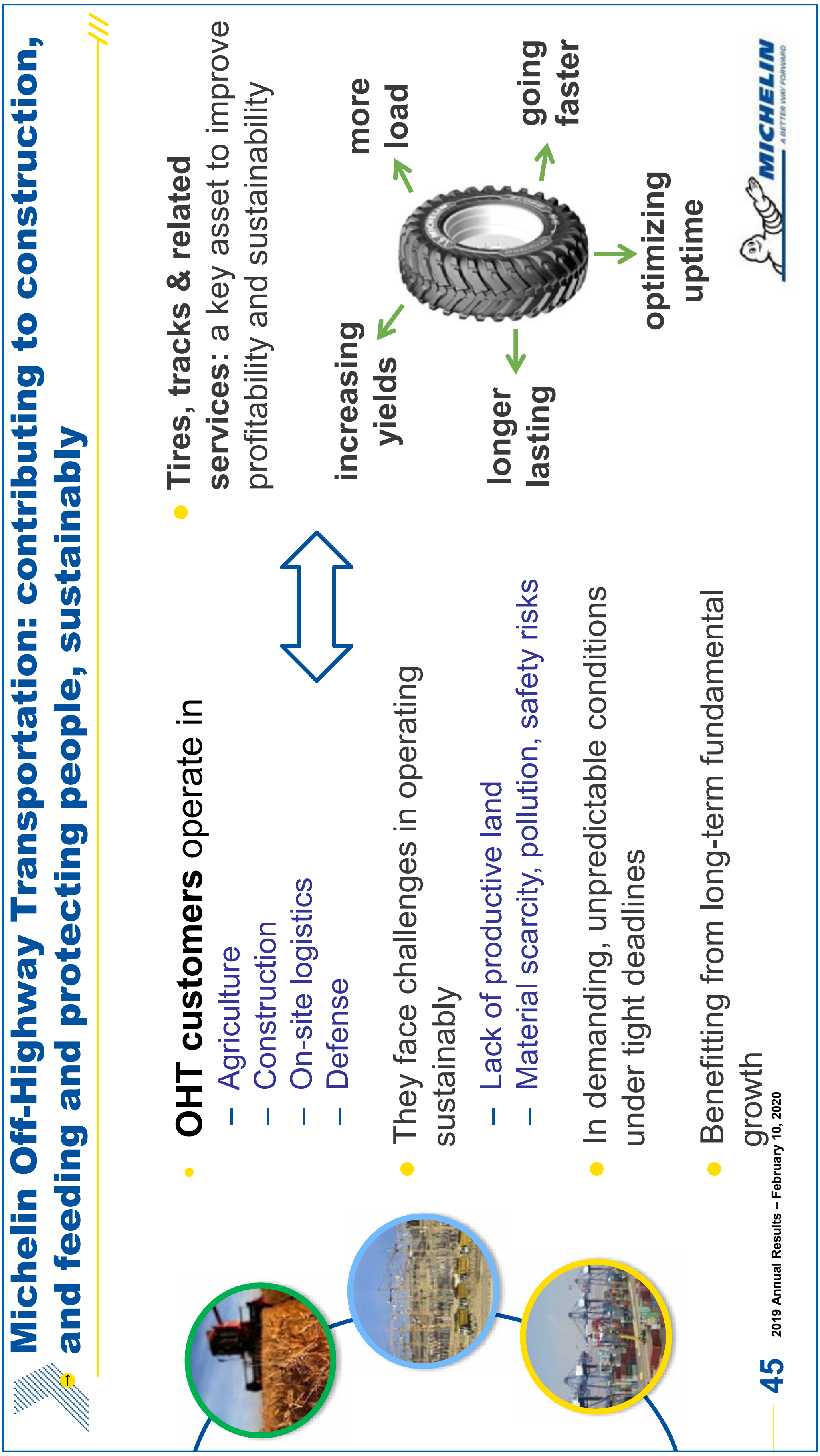
Michelin Off-Highway Transportation: contributing to construction, and feeding and protecting people, sustainably
OHT customers operate in
– Agriculture
– Construction
– On-site logistics
– Defense
They face challenges in operating sustainably
– Lack of productive land
– Material scarcity, pollution, safety risks
In demanding, unpredictable conditions under tight deadlines
Benefiting from long-term fundamental growth
Tires, tracks & related services: a key asset to improve profitability and sustainability
increasing yields
more load
going faster
optimizing uptime
longer lasting
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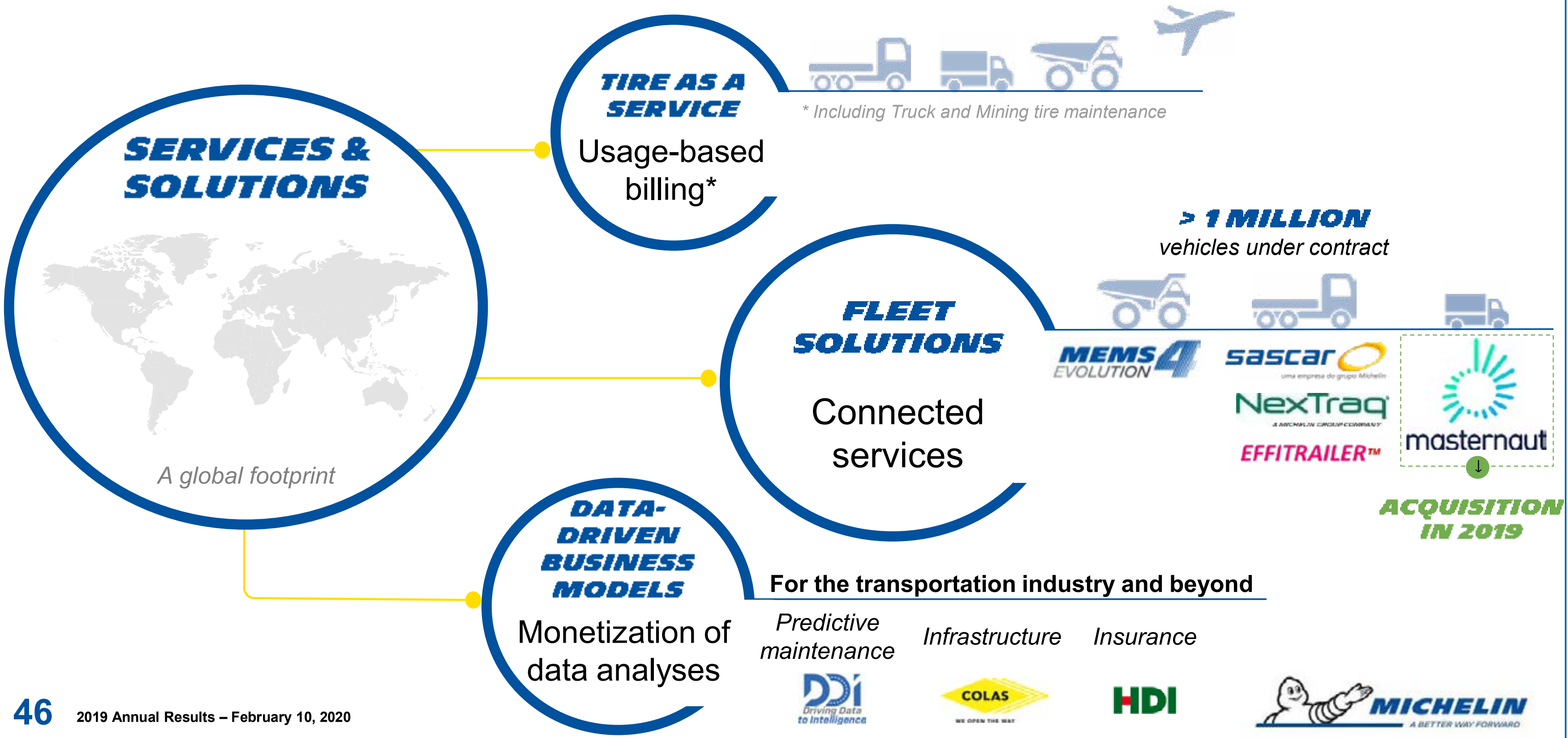
2019 Annual Results – February 10, 2020

Services & Solutions: an expansive offering suited to B2B customer needs, up 10% year-on-year



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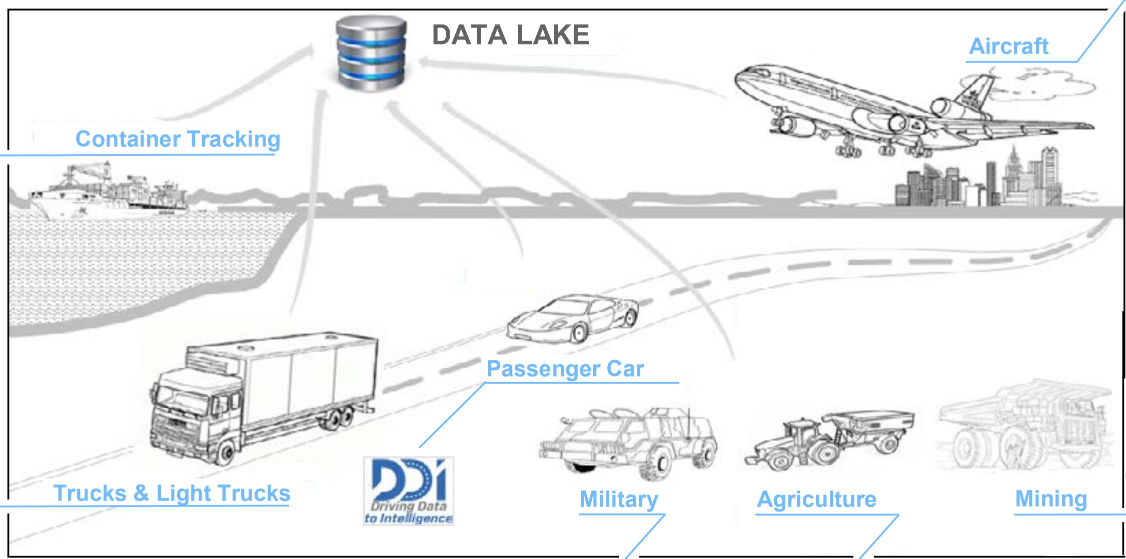
Our aim: deeply understand our customers to provide solutions that create greater value for all

- Data collection: a pre-requisite to building **predictive** capabilities
- Michelin begins this journey with a data lake that merges **unique historical data sets**
- Michelin will go much further, ultimately **connecting every single asset**

Safecube
- JV with Sigfox & Argon Consulting -

sascar
NexTraq
masternaut
EFFITRAILER™
100% tires with RFID



PRESSENSE PROJECT
with Safran

MEMS 4 EVOLUTION

DDi Driving Data to Intelligence

Téléflow

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Maintaining our brand leadership and strengthening our B2C connection

NURTURING OUR STATUS AS A PREMIUM BRAND

8th most reputable company worldwide
Ranked **no.1** in the automotive sector

*BY 2019 GLOBAL REPTRACK®100**

DEVELOPING CURATION ACTIVITIES
that enable our customers to enjoy a unique mobility experience and make Michelin a trusted partner

Tablet.

"BY MICHELIN"

In 2019, a strategic international partnership agreement was signed with the aim of combining:

- *The gastronomic selection expertise of the **Michelin Guide***
- *The power of **TripAdvisor**'s global customer audience*
- ***TheFork**'s leading online restaurant booking platform*

tripadvisor · THE MICHELIN GUIDE · lafourchette a TripAdvisor company · MICHELIN A BETTER WAY FORWARD

* Reputation Institute

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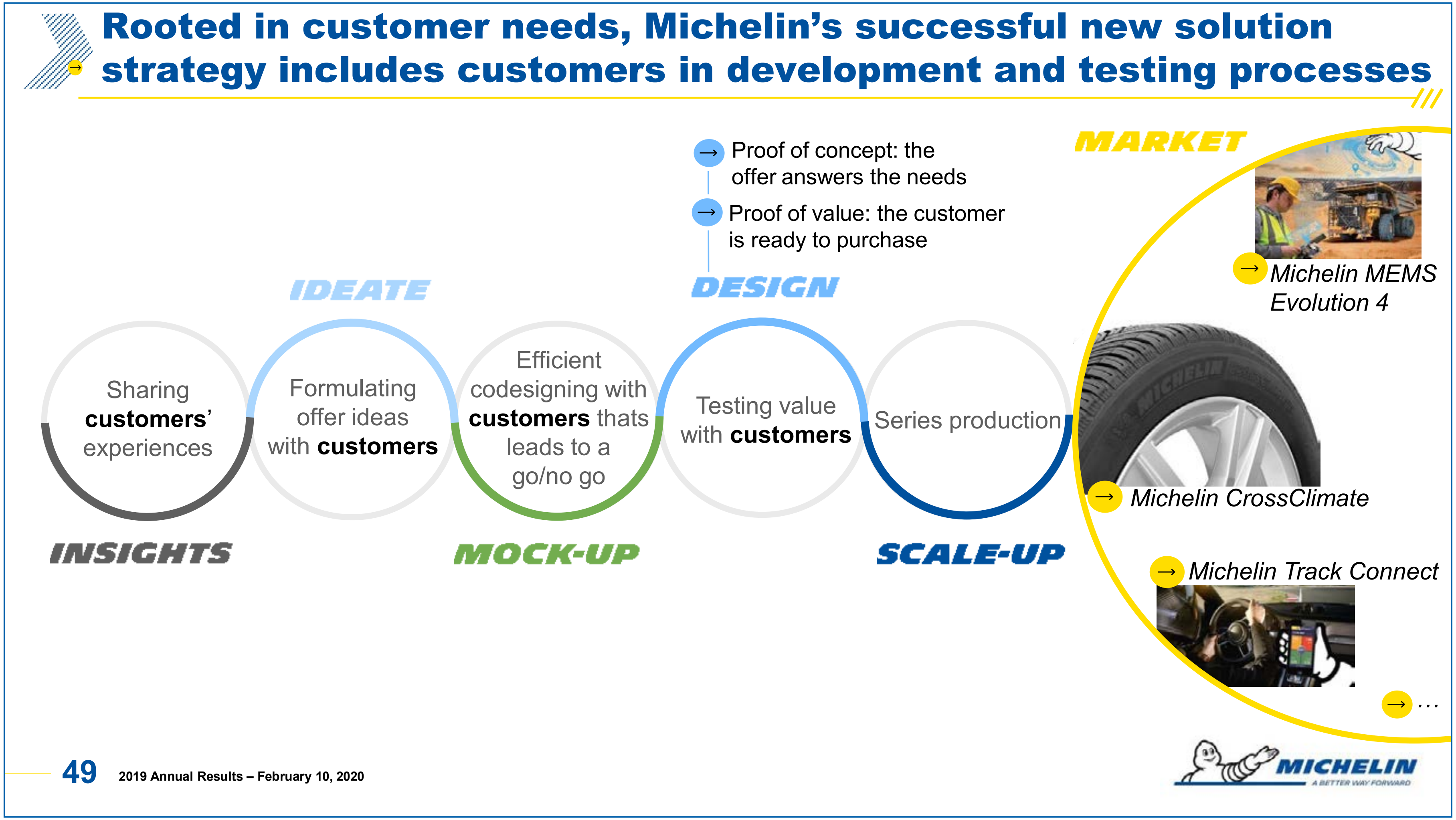
Rooted in customer needs, Michelin's successful new solution strategy includes customers in development and testing processes
Proof of concept: the offer answers the needs
Proof of value: the customer is ready to purchase
IDEATE
DESIGN
MARKET
Sharing customers' experiences
Formulating offer ideas with customers
Efficient codesigning with customers thats leads to a go/no go
Testing value with customers
Series production
INSIGHTS
MOCK-UP
SCALE-UP
Michelin MEMS Evolution 4
Michelin CrossClimate
Michelin Track Connect
…
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Biosourced materials: with its unique expertise in materials and its culture of innovation, Michelin is breaking new ground with BioButterfly and BioImpulse

BIOBUTTERFLY

Construction of France's first demonstrator unit capable of producing butadiene using biosourced ethanol

Project in partnership with IFP Energies Nouvelles and Axens

With support from ADEME (1)

BIOIMPULSE

Creation of a new adhesive resin without any Substances of Very High Concern (SVHC)

Collaborative project coordinated by Michelin through ResiCare, that brings together France's FCBA(2), INRA(3), INSA(4) and Leaf, a business unit of Lesaffre.

With support from ADEME (1)

FROM AMBITION TO ACTION

(1)ADEME: French Environment & Energy Management Agency
(2) FCBA: France's Institute of Technology for Forest-based and Furniture Sectors ; (3) INRA : National Institute for Agricultural Research
(4) INSA: National Institute of Applied Sciences

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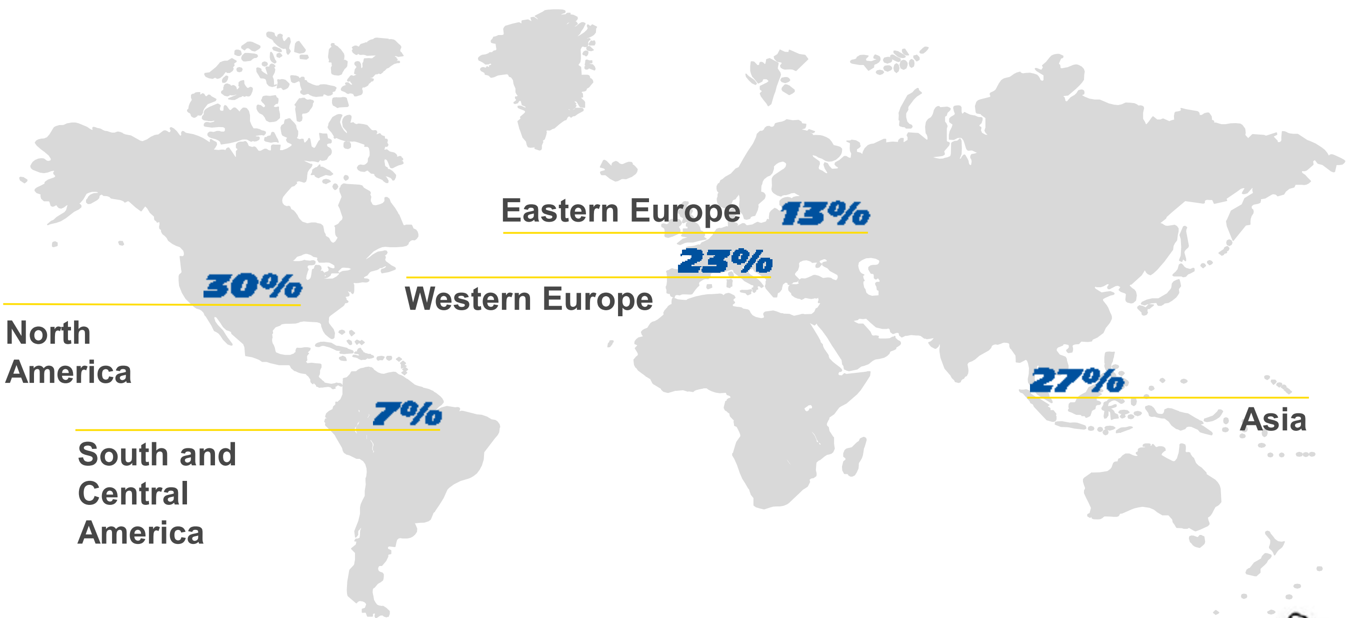
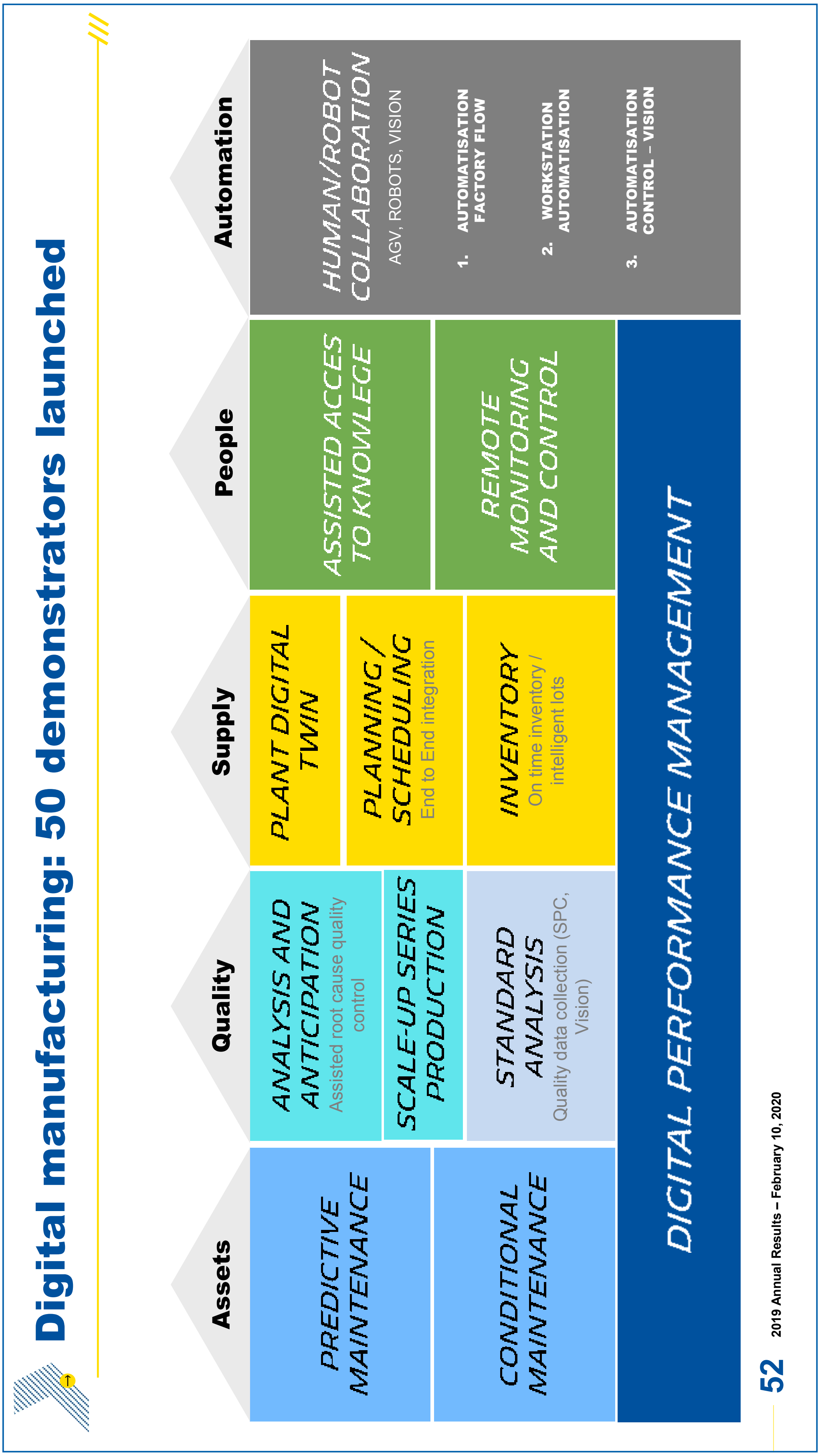
Continuing to rightsize Michelin's manufacturing footprint

- 2023 production capacity by region (in kt)

  Including Camso and Multistrada




Digital manufacturing: 50 demonstrators launched
Assets
Quality
Supply
People
Automation
PREDICTIVE MAINTENANCE
CONDITIONAL MAINTENANCE
ANALYSIS AND ANTICIPATION
Assisted root cause quality control
SCALE-UP SERIES PRODUCTION
STANDARD ANALYSIS
Quality data collection (SPC, Vision)
PLANT DIGITAL TWIN
PLANNING / SCHEDULING
End to End integration
INVENTORY
On time inventory / intelligent lots
ASSISTED ACCES TO KNOWLEGE
REMOTE MONITORING AND CONTROL
HUMAN/ROBOT COLLABORATION
AGV, ROBOTS, VISION
1. AUTOMATISATION FACTORY FLOW
2. WORKSTATION AUTOMATISATION
3. AUTOMATISATION CONTROL – VISION
DIGITAL PERFORMANCE MANAGEMENT
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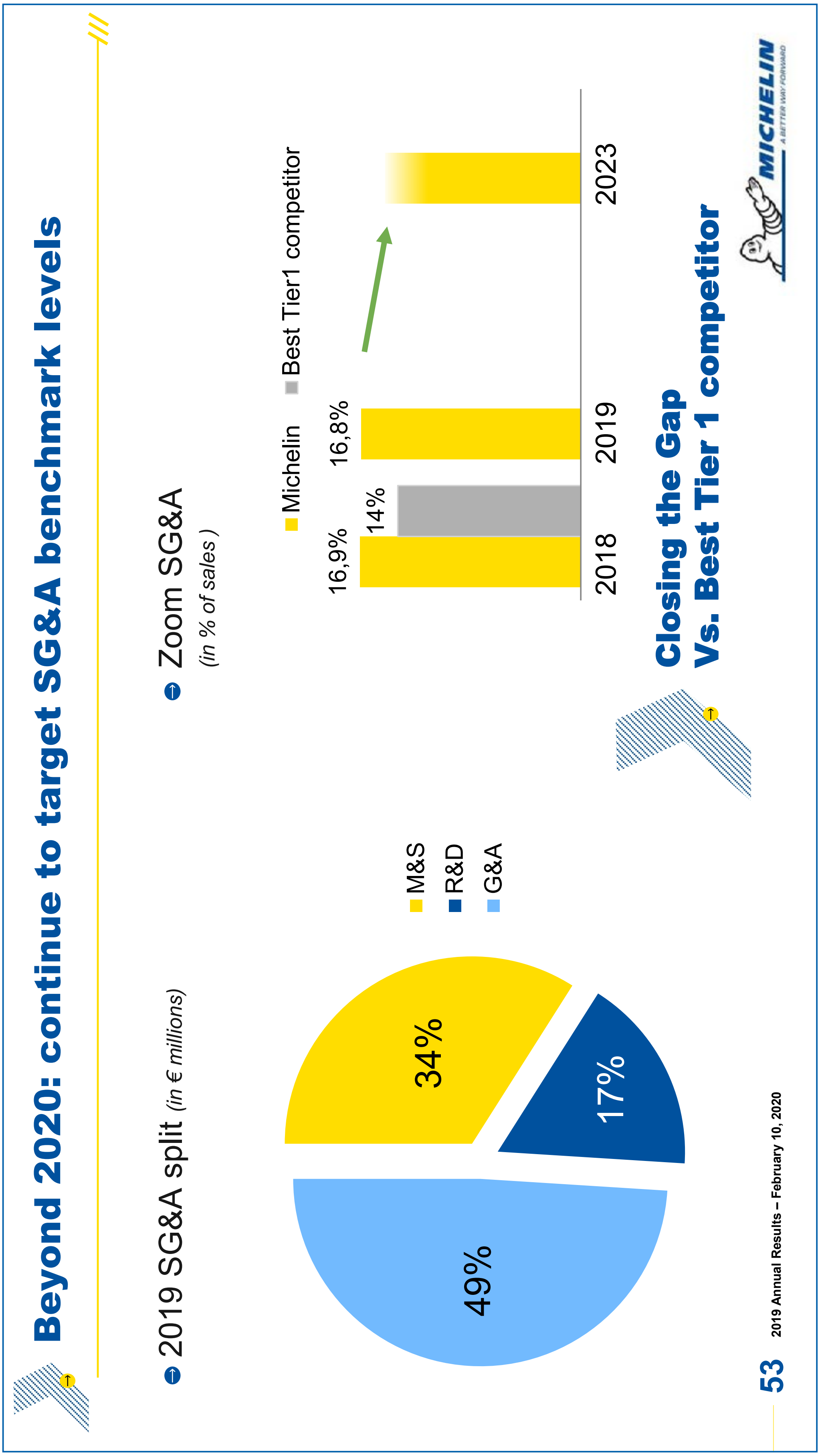
Beyond 2020: continue to target SG&A benchmark levels
2019 SG&A split (in € millions)
34%
17%
49%
M&S
R&D
G&A
Zoom SG&A
(in % of sales)
Michelin
Best Tier1 competitor
16,9%
14%
16,8%
2018
2019
2023
Closing the Gap
Vs. Best Tier 1 competitor
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Levers to improve our SG&A structure
CORPORATE BUSINESS SERVICE IN BUCHAREST (EUROPE), QUERETARO (AMERICAS) AND, SHENYANG AND BANGKOK (ASIA)
STRENGTHENING OF OUR PURCHASING ORGANIZATION AND PROCESSES
CULTURAL TRANSFORMATION: SIMPLIFICATION AND FRUGALITY
VALUE STREAM MAPPING FOR LARGE CROSS-FUNCTIONAL PROCESSES
COMPLETE THE DEPLOYMENT OF OUR BUSINESS MANAGEMENT PROGRAM (OPE)
DIGITIZATION OF HR AND CRM PROCESSES
CREATION OF MICHELIN TECHNOLOGY AND INNOVATION CENTER IN PUNE (INDIA)
inTouch
ENGAGE
MICHELIN
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Michelin's non-financial ratings: a leading, and recognized player in sustainable mobility

- Major sustainability rating (As of December 2019)

	CDP 2019	ECOVADIS 2019	ISS-OEKOM 2019	MSCI 2019	VIGEO EIRIS 2018	SUSTAINALYTICS 2018
Status	LEADERSHIP	GOLD	PRIME	AA	A1+	OUTPERFORMER
Rating	A-	78/100	B-	7.3/10	68/100	77/100
Ranking / *Distribution of ratings*	*Climate change*: A- (MICHELIN score), C (Light manufacturing), C (Europe), C (Global Average); *Water security*: A- (MICHELIN score), B (Light manufacturing), B (Europe), B- (Global Average)	*Top 1%(natural rubber)*		CCC 8%, B 21%, BB 24%, BBB 16%, A 24%, AA 8%, AAA 3%	*1er of 31 in the sector*	*7ème of 54 in the sector*

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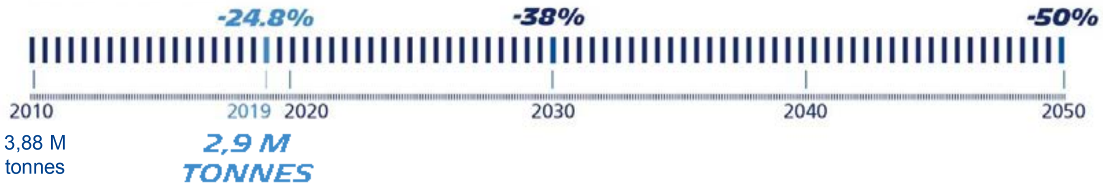
Decarbonization: Michelin's strong commitment to reducing its carbon footprint

MICHELIN'S AMBITIONS AND RESULTS IN CO_2 EMISSIONS REDUCTION

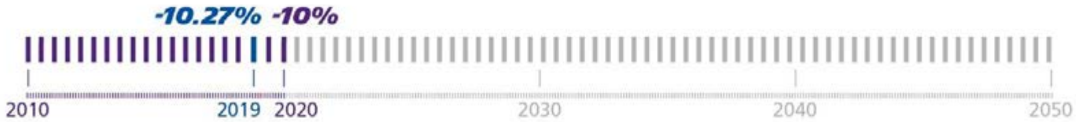
- **Manufacturing:** *ambition is to achieve a 50% reduction by 2050. In response to the urgent need, the Group has introduced an intermediate and ambitious target: a 38% reduction by 2030*

TONNES OF CO_2



- **Logistics:** *ambition is to achieve a 10% reduction by 2020*

KILOGRAMS OF CO_2 PER TONNE OF TIRES SOLD



NB : 'Use of products' CO2 emissions in 2019 will be publish in the 2019 universal registration document

LES GRAVANCHES, CLERMONT-FERRAND FRANCE

- First zero CO_2 emissions Michelin plant, 100% powered by Renewable Energy
- First zero emission valley site: First hydrogen refueling station in Auvergne-Rhône-Alpes, France

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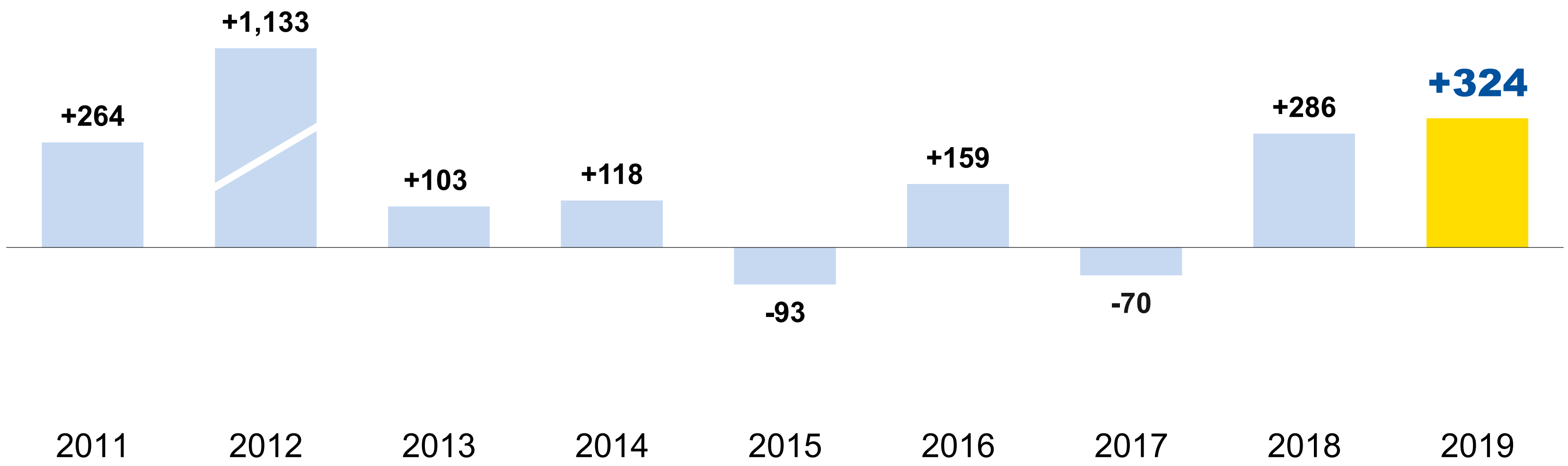
Proven ability to improve unit margin in a highly competitive market environment

- Net impact of changes in the price-mix and raw materials prices

(in € millions)



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2019 net sales by currency and SOI impact

% of sales		2019 FY € change vs. currency	Dropthrough sales/SOI*
ARS	0.4%	+70%	80% - 85%
AUD	3%	+2%	80% - 85%
BRL	3%	+3%	-20% / - 30%
CAD	3%	-3%	25% - 30%
CNY	5%	-1%	25% - 30%
EUR	31%	NA	-
GBP	3%	-1%	25% - 30%
INR	1%	-2%	25% - 30%
JPY	1%	-7%	80% - 85%

% of sales		2019 FY € change vs. currency	Dropthrough sales/SOI*
MXN	1%	-5%	25% - 30%
PLN	0.4%	+1%	25% - 30%
RUB	1%	-2%	25% - 30%
SEK	1%	+3%	80% - 85%
THB	1%	-9%	-100% / -130%
TRY	1%	+15%	80% - 85%
USD	38%	-5%	25% - 30%
ZAR	0.5%	+4%	80% - 85%
Other	4.9%		80% - 85%

*actual dropthrough linked to the export/manufacturing/sales base

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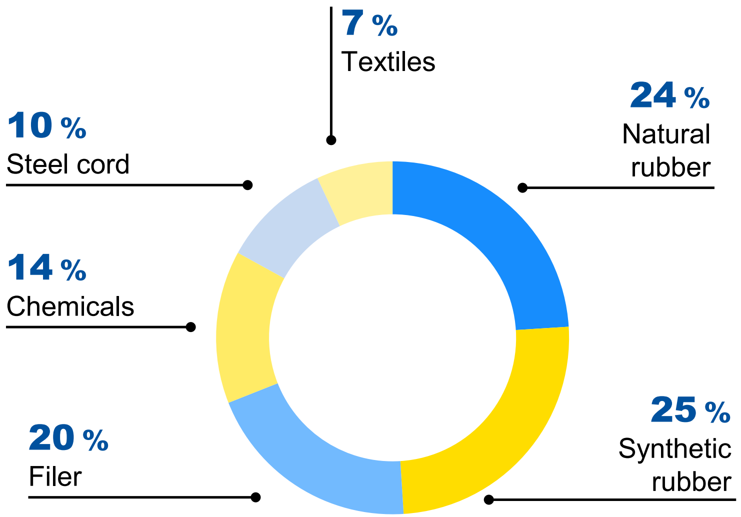
Raw materials in 2019

- Raw material purchases in 2019 *(€5.1bn)*

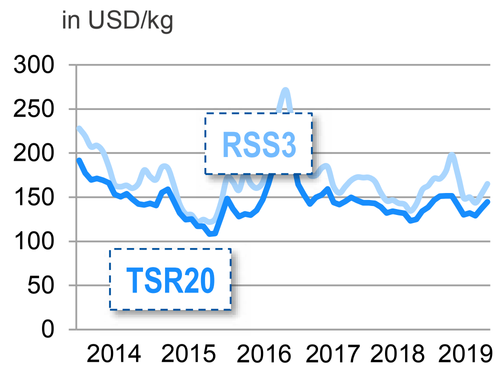


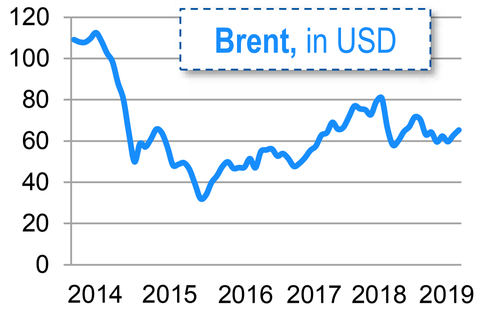
€/$ exchange rate:

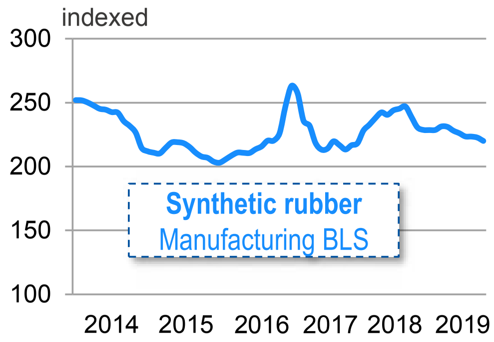
Average 2018 : **1.182**

-5.2 %

Average 2019 : **1.120**







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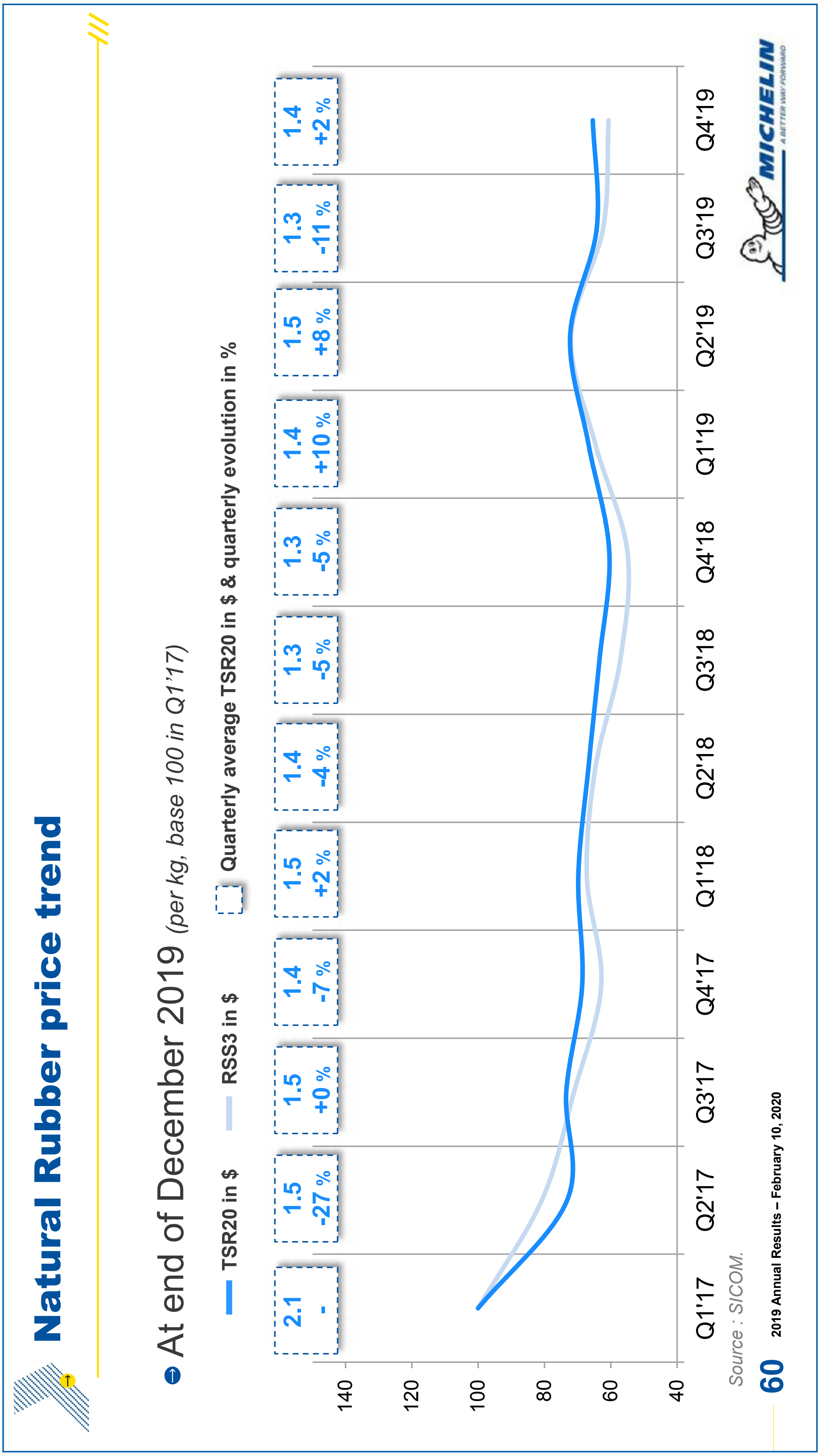
Natural Rubber price trend
At end of December 2019 (per kg, base 100 in Q1'17)
TSR20 in $
RSS3 in $
Quarterly average TSR20 in $ & quarterly evolution in %
2.1
-
1.5
-27 %
1.5
+0 %
1.4
-7 %
1.5
+2 %
1.4
-4 %
1.3
-5 %
1.3
-5 %
1.4
+10 %
1.5
+8 %
1.3
-11 %
1.4
+2 %
140
120
100
80
60
40
Q1'17
Q2'17
Q3'17
Q4'17
Q1'18
Q2'18
Q3'18
Q4'18
Q1'19
Q2'19
Q3'19
Q4'19
Source : SICOM.
60
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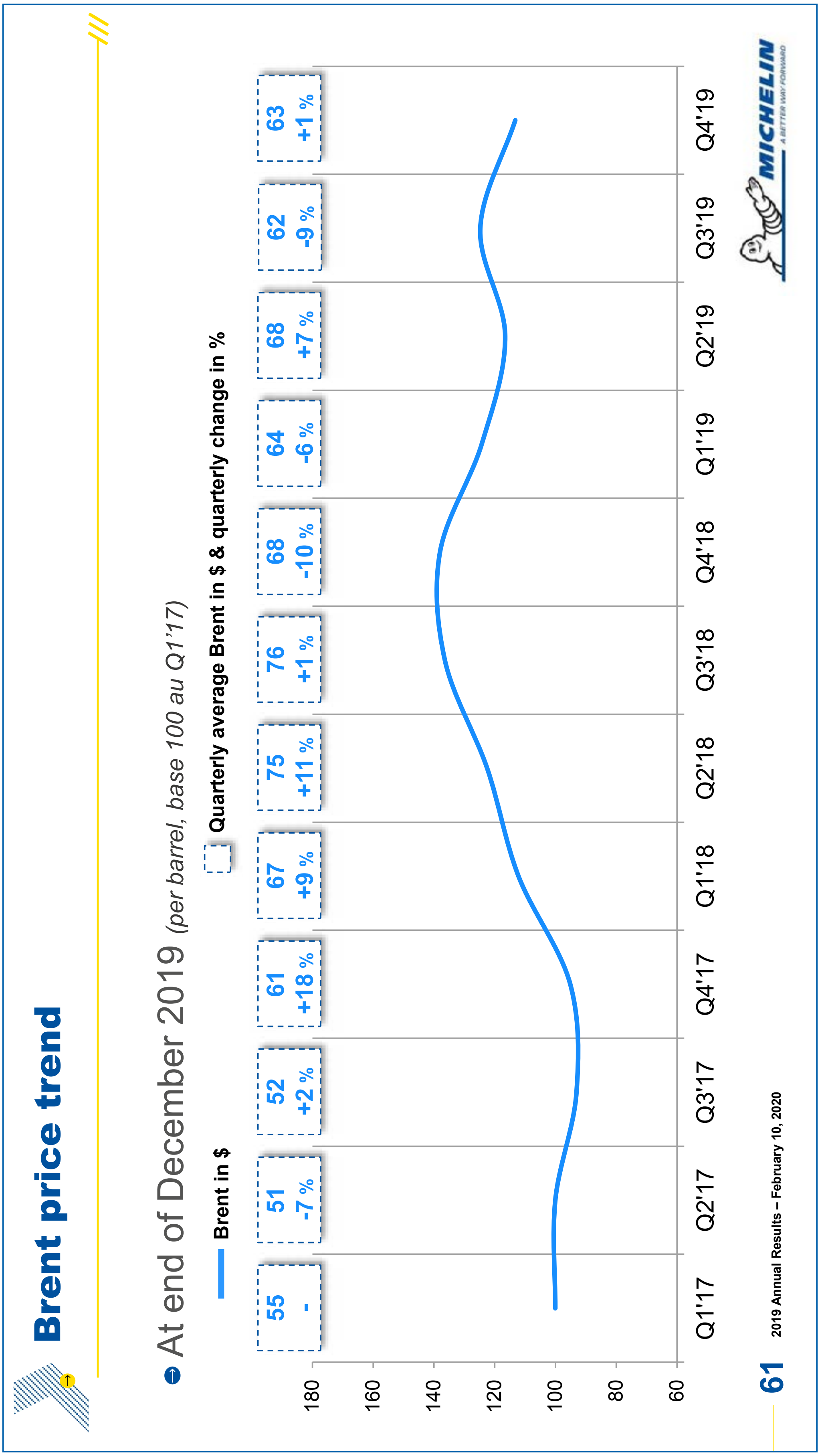
Brent price trend
At end of December 2019 (per barrel, base 100 au Q1'17)
Brent in $
Quarterly average Brent in $ & quarterly change in %
55
-
51
-7 %
52
+2 %
61
+18 %
67
+9 %
75
+11 %
76
+1 %
68
-10 %
64
-6 %
68
+7 %
62
-9 %
63
+1 %
180
160
140
120
100
80
60
Q1'17
Q2'17
Q3'17
Q4'17
Q1'18
Q2'18
Q3'18
Q4'18
Q1'19
Q2'19
Q3'19
Q4'19
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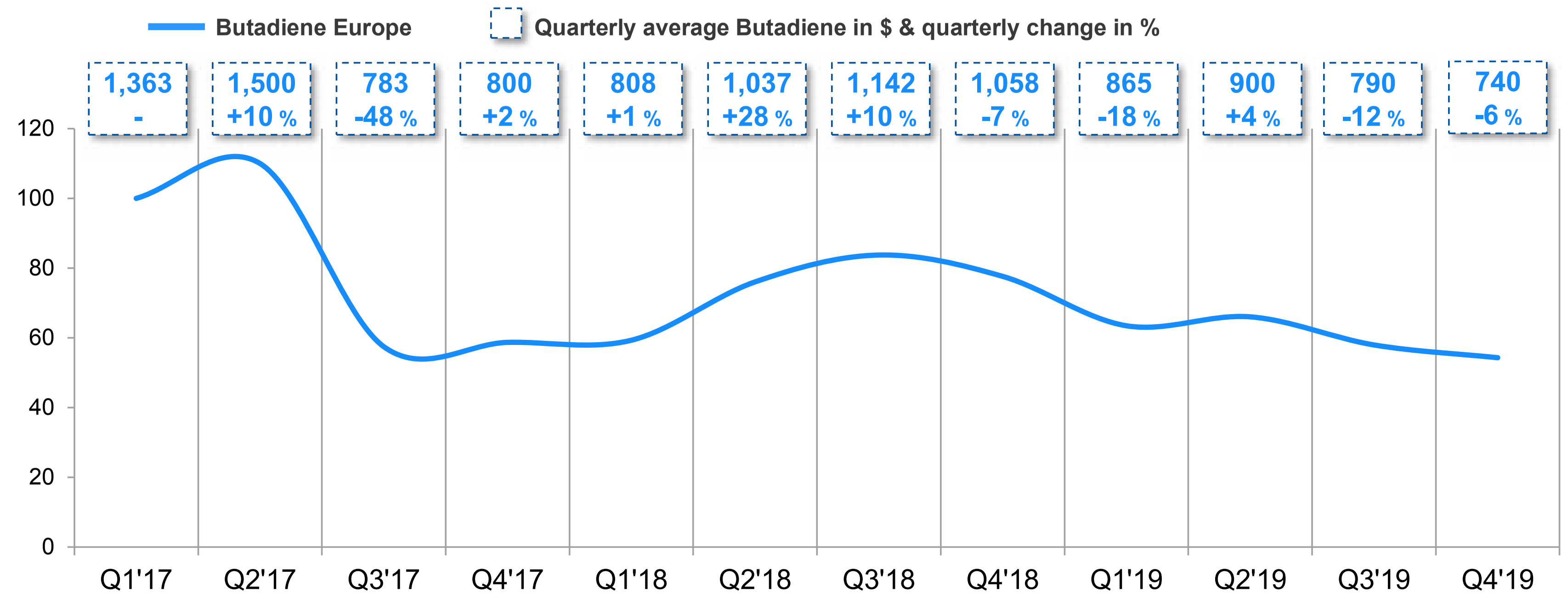
Butadiene price trend

- At end of December 2019 *(per ton, base 100 in Q1'17)*



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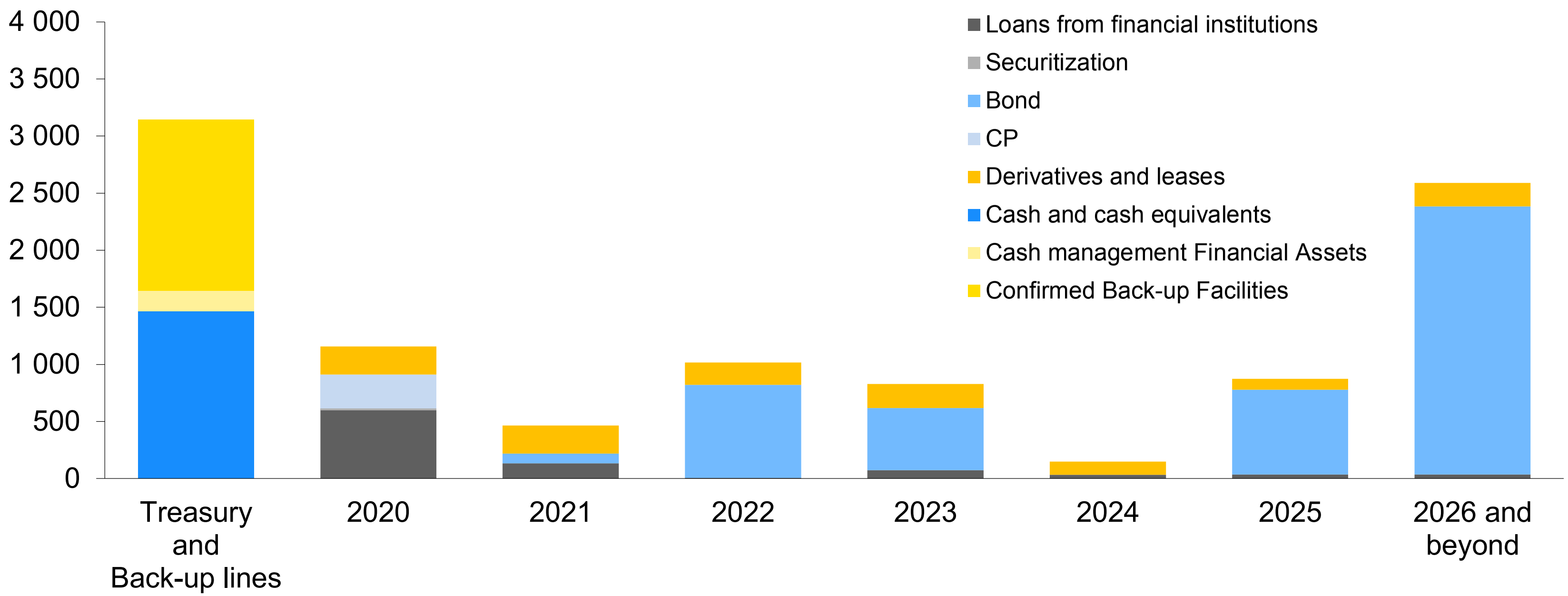
A confortable cash position

Debt maturities at Dec. 31, 2019 *(carrying amount, in € millions)*



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Outstanding bond issues (as of December 31, 2019)

Issuer	Compagnie Générale des Etablissements MICHELIN	Compagnie Générale des Etablissements MICHELIN	Compagnie Générale des Etablissements MICHELIN	Compagnie Générale des Etablissements MICHELIN	Compagnie Générale des Etablissements MICHELIN	MICHELIN Luxembourg	MICHELIN Luxembourg	MICHELIN Luxembourg
Issue	Senior Note	Senior Note	Senior Note	Senior Note	Senior Note	Senior Note	Senior Note	Senior Note
Type	Bond	Bond	Bond	Convertible	Convertible	Bond	Bond	Bond
Principal Amount	€ 750 mn	€ 1'000 mn	€ 750 mn	$ 600 mn	$ 500 mn + TAP $100 mn	€ 302 mn	€ 300 mn	€ 300 mn
Offering price	99,099%	99,262%	99,363%	95,50%	100% & 103,85%	98,926%	99,967%	99,081%
Rating corporation at Issuance date	A- (S&P) A3 (Moody's)	A- (S&P) A3 (Moody's)	A- (S&P) A3 (Moody's)	A- (S&P) A3 (Moody's)	A- (S&P) A3 (Moody's)	A- (S&P) A3 (Moody's)	BBB+ (S&P) A3 (Moody's)	BBB+ (S&P) A3 (Moody's)
Current corporation rating	A- (S&P) ; A3 (Moody's) ; A- (Fitch)							
Coupon	0,875% p.a	1,75% p.a	2,50% p.a	ZERO Conv premium 130%	ZERO Conv premium 128%	3,25% p.a	1,125% p.a	1,75% p.a
Issue Date	3-sept.-18	3-sept.-18	3-sept.-18	05/jan/2018	05/jan/2017 & 25/apr/2017	21/sep/2015 & 27/sep/2016	19-mai-15	19-mai-15
Maturity	3-sept.-25	3-sept.-30	3-sept.-38	10-nov.-23	10-janv.-22	30-sept.-45	28-mai-22	28-mai-27
Interest payment	Annual Sept 03	Annual Sept 03	Annual Sept 03	N/A	N/A	Annual Sept 30	Annual May 28	Annual May 28
ISIN	FR0013357845	FR0013357852	FR0013357860	FR0013309184	FR0013230745	XS1298728707	XS1233732194	XS1233734562
Denomination	€ 100'000 with min. tradable amount € 100'000	€ 100'000 with min. tradable amount € 100'000	€ 100'000 with min. tradable amount € 100'000	$ 200'000 with min. tradable amount $ 200'000	$ 200'000 with min. tradable amount $ 200'000	€ 1'000 with min. tradable amount € 1'000	€ 1'000 with min. tradable amount € 1'000	€ 1'000 with min. tradable amount € 1'000

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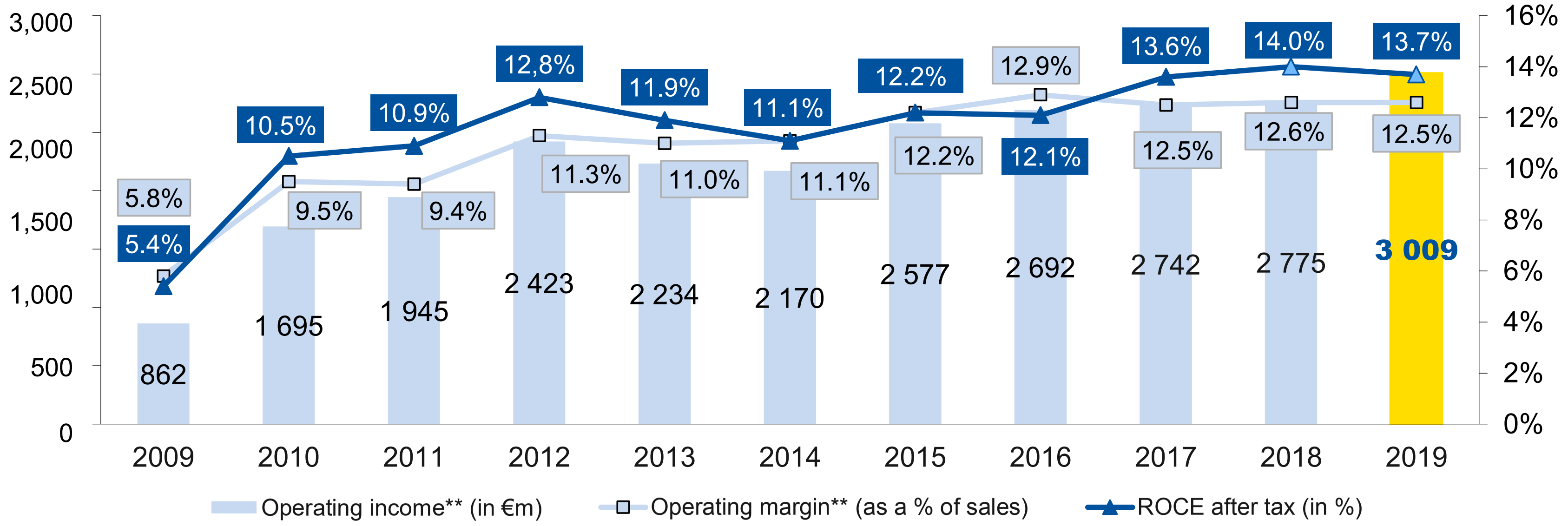
Resilient margin in an adverse environment

Group segment operating income and margin & ROCE*



With standard taxe rate at 28% for 2017 and 26% for 2018 & 2019 and excluding goodwill, acquired intangibles, associates and joint ventures for 2017, 2018 & 2019

*** Segment operating income / margin*

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"This presentation is not an offer to purchase or a solicitation to recommend the purchase of Michelin shares. To obtain more detailed information on Michelin, please consult the documents filed in France with Autorité des marchés financiers, which are also available from the http://www.michelin.com/eng/ website.

This presentation may contain a number of forward-looking statements. Although the Company believes that these statements are based on reasonable assumptions as at the time of publishing this document, they are by nature subject to risks and contingencies liable to translate into a difference between actual data and the forecasts made or inferred by these statements."

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03. REPORT OF THE MANAGERS

3.1 TIRE MARKETS

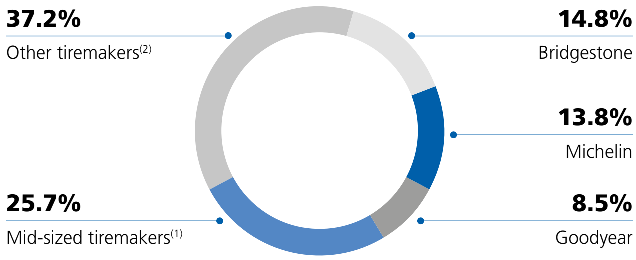
3.1.1 A GLOBAL MARKET WORTH SOME $170 BILLION[(1)] IN 2018

The global tire market totaled $170 billion in 2018[(1)], with light-vehicle tires accounting for around 60% of sales and truck tires 30%[(2)]. By volume, it represented more than 1.5 billion car and light truck tires and a little more than 220 million truck and bus tires[(2)]. In all, three out of four tires were sold in the replacement market.

Beyond 2020, Michelin expects new tire demand to grow by an average of 2% a year in the Passenger car and Light truck segment and 0-1% a year in the new Truck tire segment. Over the same period, the specialty tire market is forecast to expand by around an average 3% a year, led by the structural growth in the world's population and the ongoing outmigration from rural to urban areas.

Longer term, tire demand is likely to expand by 1-2% a year in mature markets and by 5-10% a year in the new markets.

THE GLOBAL TIRE MARKET BY MANUFACTURER IN 2018



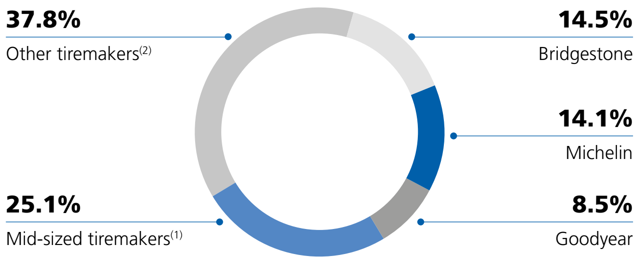
Source: 2018 sales in US dollars, published in Tire Business, August 2019.
(1) Tiremakers with a 2-7% market share according to the Tire Business ranking.
(2) Tiremakers with less than a 2% market share according to the Tire Business ranking.

Changes in standards for tires

Tire performance ratings displayed on standardized labels have been mandatory across the European Union since November 2012, with stricter standards introduced in November 2016 and upgraded in November 2018. Similar legislation has been in effect in South Korea since 2012 (labeling) and 2013 (thresholds) for Passenger car tires and since 2014 for Light truck tires, while the standardized labeling introduced in Japan in 2010 is being extended to other parameters, such as rolling noise. Regulated tire labeling systems are also under consideration in China.

Along with the new environmental legislation requiring automakers to reduce carbon and particulate emissions, these tire-related standards are driving demand for low rolling resistance tires, of which Michelin is a world-leading manufacturer.

THE GLOBAL TIRE MARKET BY MANUFACTURER IN 2017



Source: 2017 sales in US dollars, published in Tire Business, August 2018.
(1) Tiremakers with a 2-7% market share according to the Tire Business ranking.
(2) Tiremakers with less than a 2% market share according to the Tire Business ranking.

3.1.2 TIRE MARKETS IN 2019

Tire markets generally declined in 2019.

In the Passenger car and Light truck segment, Original Equipment demand fell steeply in every market around the world. The Replacement market was stable, as gains in the Americas and China were offset by declines in Europe and India.

In Truck tires, markets contracted sharply in every region, with the slight growth in OE demand in the Americas and in Replacement markets in Europe offset by the decline in OE demand in Europe and India and the significant drop in the US Replacement market.

In the Specialty Businesses, the mining, two-wheel and aircraft tire markets remained on a growth trend, while demand for agricultural and construction tires fell sharply throughout the year.

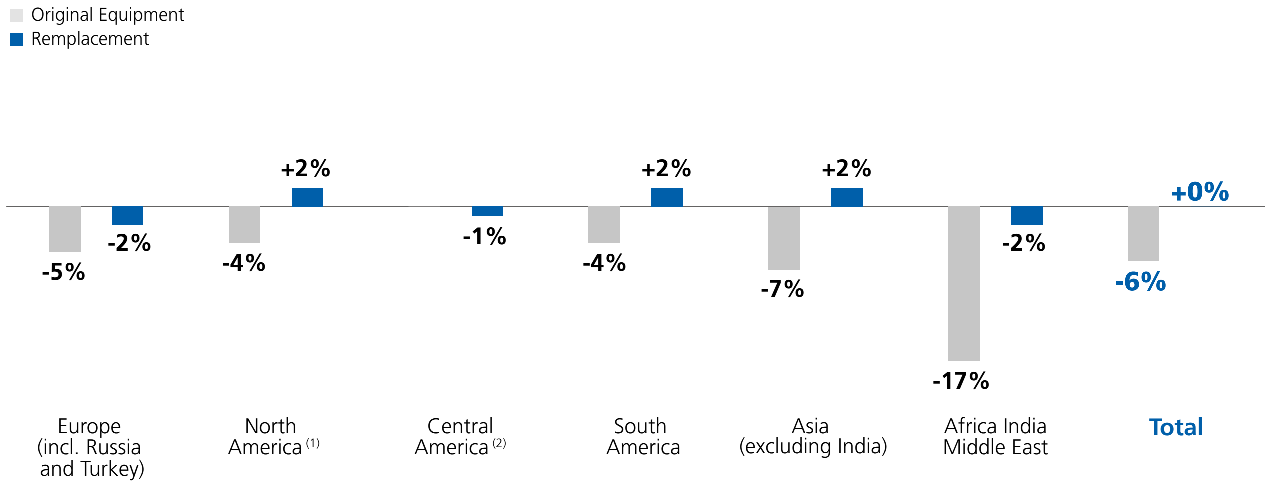
Methodological note: Tire market estimates reflect sell-in data published by local tiremaker associations, plus Michelin's own estimates of sales by tire manufacturers that do not belong to any association. These estimates are based primarily on import-export statistics and are expressed in the number of tires sold. They are regularly adjusted and may be updated following their initial publication.

(1) Source: Tire Business, August 2019.
(2) Michelin estimates.

3.1.3 PASSENGER CAR AND LIGHT TRUCK TIRE MARKETS IN 2019

In 2019, the global Original Equipment and Replacement **Passenger car and Light truck** tire market was down 2% in number of tires sold.

THE GLOBAL PASSENGER CAR AND LIGHT TRUCK TIRE MARKET, 2019 VS. 2018



Michelin estimates
(1) For Original Equipment, North America is: United States, Canada, Central America.
(2 Replacement data only.

3.1.3 a) Original Equipment

Worldwide unit sales of Original Equipment tires declined by 6% in 2019. In line with second-half 2018 trends, demand fell 8% in the first six months of the year before easing to a 5% decline in the second half, buoyed by the fourth-quarter upturn in the Chinese market.

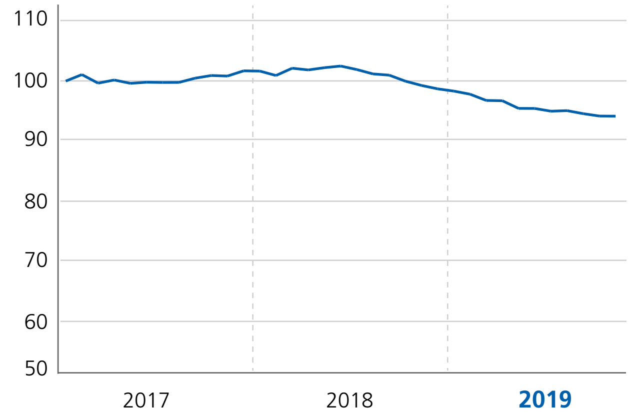
Passenger car and Light truck tire markets Original equipment *(in millions of tires)*	**2019**	**2018**	**2019/2018**	**Second half 2019/2018**	**Fourth quarter 2019/2018**	**Third quarter 2019/2018**	**First half 2019/2018**	**Second quarter 2019/2018**	**First quarter 2019/2018**
Europe[1]	100.0	105.2	-5%	-3%	-4%	-2%	-7%	-8%	-5%
North America[2]	78.9	82.3	-4%	-5%	-9%	-0%	-4%	-3%	-5%
South America	16.3	17.0	-4%	-5%	-5%	-5%	-4%	-2%	-5%
Asia (excluding India)	195.1	208.7	-7%	-4%	-4%	-4%	-9%	-11%	-8%
Africa/India/Middle East	30.2	36.4	-17%	-19%	-17%	-21%	-15%	-18%	-12%
TOTAL	**420.4**	**449.6**	**-6%**	**-5%**	**-6%**	**-4%**	**-8%**	**-9%**	**-7%**

(1) Including Russia and Turkey.
(2) United States, Canada and Central America.
Michelin estimates.

In Europe, demand declined by 5% overall during the year, reflecting a 5% contraction in Western Europe due to the significant impact of weaker automobile sales caused by (i) weaker vehicle exports to the United States and China; and (ii) flat domestic demand. Eastern Europe also saw demand shrink by 5%.

THE OE PASSENGER CAR AND LIGHT TRUCK MARKET IN EUROPE

(in millions of tires – moving 12 months – excluding Russia)

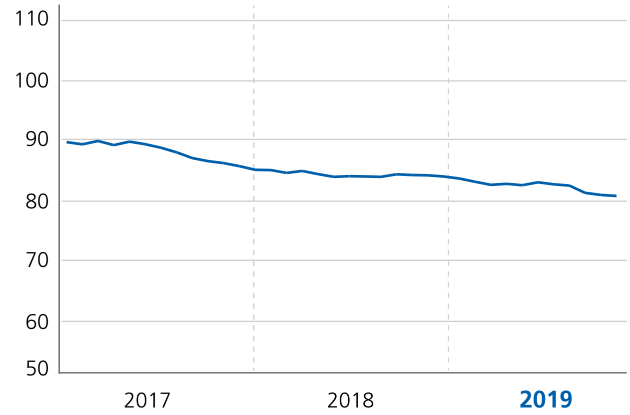


Michelin estimates.

The **North American** market ended the year down 4%. After declining by 4% in the first half, demand dropped by another 5% in the second six months, heavily impacted by the General Motors strike in the fourth quarter, as well as by inventory drawdowns across the auto industry.

THE OE PASSENGER CAR AND LIGHT TRUCK MARKET IN NORTH AMERICA

(in millions of tires – moving 12 months)



Michelin estimates.

Markets in **South America** ended the year down 4% overall, reflecting the heavily adverse effects of the economic crisis in Argentina.

In Asia (excluding India), total demand fell by 7% over the year, with an 9% drop in the Chinese market. From 15% in the first half, the fall-off in demand slowed to 2% in the second, thanks to more favorable prior-year comparatives and purchases made ahead of the Chinese New Year in the fourth quarter. Overall, the Chinese market was hard hit by a decline in consumption caused by the Chinese-American trade war and the more lackluster economic environment.

The **Africa/India/Middle East** market dropped 17% over the year, as demand was severely dampened by the plunge in domestic spending in India with, in particular, a drop in new vehicle sales of more than 13% in 2019 (due to the liquidity crunch and new regulations) and the geo-political crisis in the Middle East.

3.1.3 b) Replacement

The global Replacement market was stable over the year, as gains in the Americas (up 2%) and China (up 4%) were offset by declines in Europe (down 2%) and in India/Middle East (down 2%).

Passenger car and Light truck tire markets Replacement *(in millions of tires)*	**2019**	**2018**	**2019/2018**	**Second half 2019/2018**	**Fourth quarter 2019/2018**	**Third quarter 2019/2018**	**First half 2019/2018**	**Second quarter 2019/2018**	**First quarter 2019/2018**
Europe[(1)]	373.6	380.7	-2%	-1%	-2%	-0%	-3%	-3%	-2%
North America[(2)]	280.4	274.2	+2%	+1%	-0%	+3%	+4%	+1%	+7%
Central America	36.5	36.9	-1%	-2%	-6%	+3%	-0%	-2%	+1%
South America	66.2	65.0	+2%	+8%	+9%	+6%	-4%	-1%	-7%
Asia (excluding India)	282.3	276.9	+2%	+2%	-4%	+8%	+2%	+4%	+1%
Africa/India/Middle East	103.9	106.3	-2%	-2%	-2%	-2%	-2%	-2%	-2%
TOTAL	**1,142.9**	**1,140.0**	**+0%**	**+0%**	**-2%**	**+3%**	**+0%**	**-0%**	**+0%**

(1) Including Russia and Turkey.
(2) United States and Canada.
Michelin estimates.

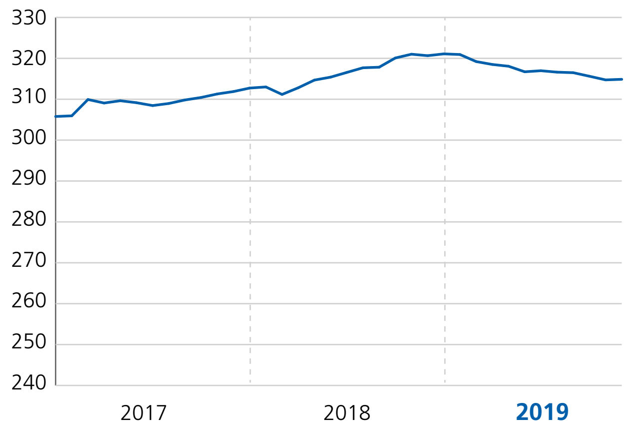
In Europe, the market contracted by 2% overall during the year. After declining 3% in the first half under the highly negative impact of the Turkish economic crisis and inventory drawdowns in Western Europe, demand remained on a downward trend in the second six months, losing 1% primarily because warm winter weighed on winter tire demand. In this environment, the all-season segment continued to enjoy robust demand and remained the leading market growth driver across Europe.

The following table shows the change in demand by major country, with growth varying in the non-euro geographies depending on export sales.

Passenger car and Light truck tires – Replacement	Change vs. 2018
WESTERN EUROPE	**-2%**
▶ France	+0%
▶ Spain	-3%
▶ Italy	-4%
▶ United Kingdom	-1%
▶ Germany	-5%
▶ Poland	-4%
▶ Turkey	-0%
EASTERN EUROPE	**-2%**
▶ Russia	-6%

THE REPLACEMENT PASSENGER CAR AND LIGHT TRUCK TIRE MARKET IN EUROPE

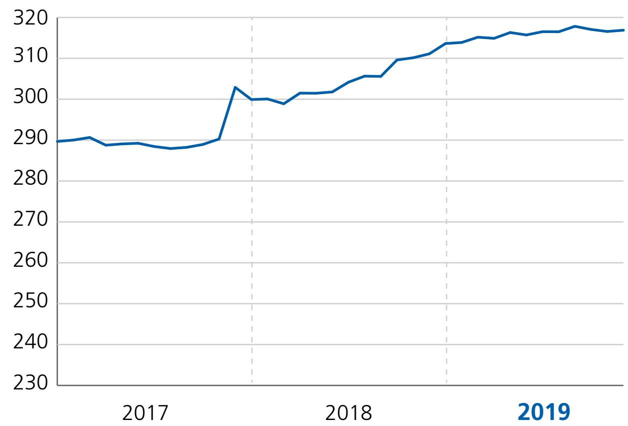
(in millions of tires – moving 12 months – excluding Russia)



Michelin estimates.

THE REPLACEMENT PASSENGER CAR AND LIGHT TRUCK TIRE MARKET IN NORTH AMERICA

(in millions of tires – moving 12 months)



Michelin estimates.

In a favorable economic environment, demand in **North America** rose by 2% overall, as a 5% contraction in the Canadian market was offset by a sustained 3% gain in the United States, led by rising sales of Asian tire imports.

In Central America, the market narrowed by 1% over the year, primarily due to the decline in Mexican demand in the second half.

In South America, demand rose by 2% over the year. After being severely impacted in the first half by the economic crisis in Argentina (down 13%) and the decline in Brazilian demand (down 3%), the market rebounded by 8% in the second half, lifted by import tire sales in Brazil and Argentina.

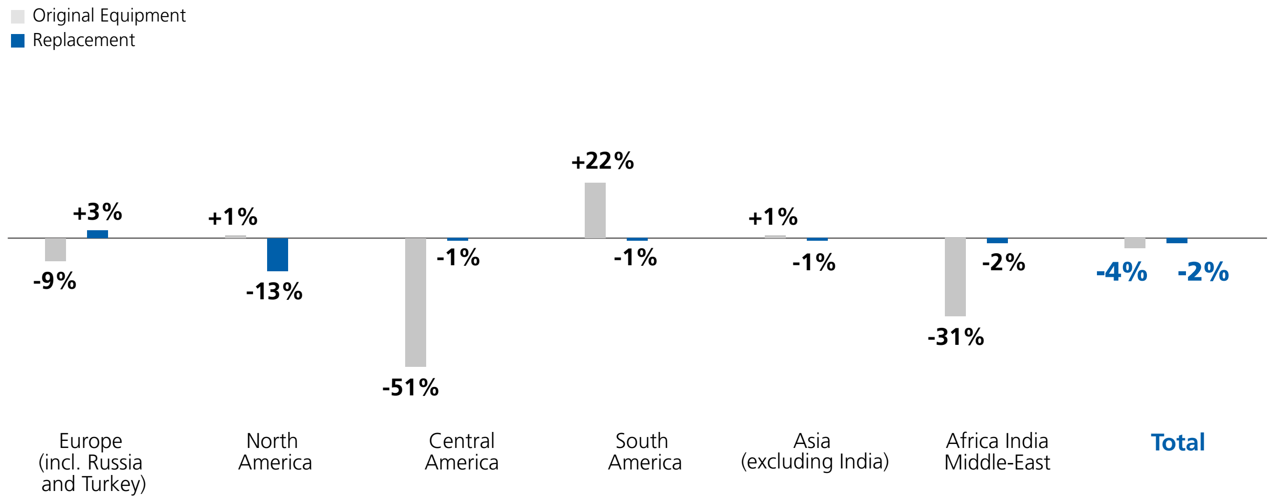
Demand in **Asia (excluding India)** ended 2019 up 2% overall. The sustained strong gains in China (up 4%) were considerably attenuated by the flatness of demand in Southeast Asia. The Japanese market was hurt by the fourth-quarter increase in the VAT rate and, more seriously, by a particularly warm winter season. The other countries in the region showed modest growth over the year.

In the Africa/India/Middle East region, demand slipped 2% over the year. The 17% collapse in the Indian market as the liquidity crunch weighed on consumer spending was partially offset by rising demand in the Middle East (up 5%) and Africa.

3.1.4 TRUCK TIRE MARKETS IN 2019

The number of new **Truck** tires sold worldwide declined by 3% in 2019, with a second-half performance in line with first-half trends. The 4% downturn in OE demand and the 13% plunge in the North American Replacement market were only partially offset by the 3% increase in the European Replacement market.

THE GLOBAL **TRUCK** TIRE MARKET, 2019 VS. 2018



Michelin estimates – new tire market only.

3.1.4 a) Original Equipment

The **global Original Equipment Truck tire market,** as measured by the number of new tires sold, contracted by 4% in 2019. After declining by 2% in the first six months, demand fell by a faster 6% in the second half following the downturn in North America.

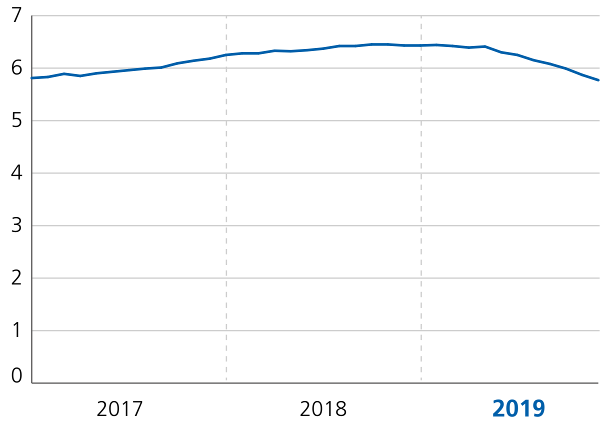
Truck tire markets Original equipment *(in millions of tires)*	**2019**	**2018**	**2019/2018**	**Second half 2019/2018**	**Fourth quarter 2019/2018**	**Third quarter 2019/2018**	**First half 2019/2018**	**Second quarter 2019/2018**	**First quarter 2019/2018**
Europe(1)	6.7	7.3	-9%	-15%	-17%	-12%	-4%	-7%	-0%
North America(2)	6.8	6.7	+1%	-8%	-14%	-2%	+9%	+6%	+12%
Central America	0.1	0.1	-51%	-60%	-68%	-53%	-40%	-69%	-13%
South America	1.9	1.6	+22%	+12%	+3%	+22%	+33%	+35%	+31%
Asia (excluding India)	27.3	27.1	+1%	+4%	+9%	-2%	-2%	-5%	+2%
Africa/India/Middle East	4.2	6.2	-31%	-38%	-44%	-33%	-24%	-21%	-26%
TOTAL	**46.9**	**49.0**	**-4%**	**-6%**	**-6%**	**-7%**	**-2%**	**-4%**	**-0%**

(1) Including Russia and Turkey.
(2) United States and Canada.
Michelin estimates.

In Europe, the Original Equipment market fell by 9% over the year. The first half saw a 4% decline, caused by the highly adverse impact of the economic crisis in Turkey (down 23%) and of Brexit uncertainties in the UK (down 17%). The contraction further tightened in the second half, with a 15% drop led by the fall-off in automaker demand in Germany (down 32%), as well as in France (down 12%) and Spain (down 19%). However, the Turkish market began to level off during the period (down 4% in the second half).

THE OE TRUCK TIRE MARKET IN EUROPE

(in millions of new tires – moving 12 months – excluding Russia)

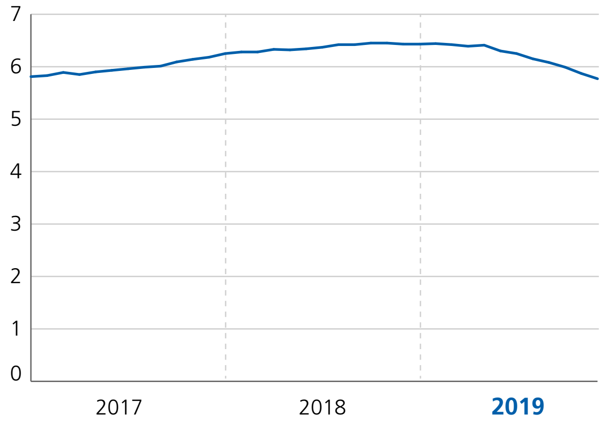


Michelin estimates.

In a still buoyant economic environment, the **North American** OE market delivered very strong 9% growth in the first half before turning downwards in the second, with an 8% decline off of very high prior-year comparatives.

THE OE TRUCK TIRE MARKET IN NORTH AMERICA

(in millions of new tires – moving 12 months)



Michelin estimates.

In South America, the market grew by 22% over the full year, but slowed to a 12% gain in the second half.

Demand **in Asia (excluding India)** edged up 1% overall in 2019. After declining by 2% in the first half, the market rebounded by 4% in the second six months, lifted by Chinese demand and a favorable basis of comparison. Demand in the rest of Asia declined by 11% over the second half, with a 5% contraction in Japan (after an increase in the first half led by regulatory changes) and a 31% drop in Indonesia.

In the **Africa/India/Middle East** region, the market plummeted 31%, dragged down by the collapse in Indian demand (down 45%) in the wake of the country's bruising liquidity crisis.

3.1.4 b) Replacement

The **global Replacement market** declined by 2% in 2019, mainly due to the fall-off in Asian tire imports in the North American market, which was partially offset by a slight increase in demand in Europe led by the upturn in Asian tire sales.

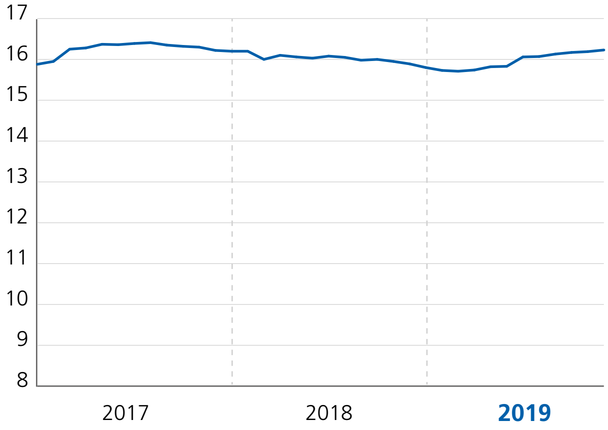
Truck tire markets Replacement *(in millions of tires)*	**2019**	**2018**	**2019/2018**	**Second half 2019/2018**	**Fourth quarter 2019/2018**	**Third quarter 2019/2018**	**First half 2019/2018**	**Second quarter 2019/2018**	**First quarter 2019/2018**
Europe[1]	24.3	23.5	+3%	+7%	+6%	+9%	-1%	+2%	-5%
North America[2]	20.6	23.7	-13%	-15%	-16%	-14%	-10%	-13%	-7%
Central America	6.0	6.1	-1%	+1%	-5%	+7%	-3%	-1%	-4%
South America	12.5	12.6	-1%	-1%	+1%	-2%	-1%	-2%	-0%
Asia (excluding India)	80.5	81.3	-1%	-0%	-3%	+3%	-2%	-4%	+1%
Africa/India/Middle East	31.0	31.7	-2%	-2%	-3%	-2%	-2%	-2%	-2%
TOTAL	**174.9**	**178.8**	**-2%**	**-2%**	**-3%**	**+0%**	**-3%**	**-4%**	**-2%**

(1) Including Russia and Turkey.
(2) United States and Canada.
Michelin estimates.

In Europe, the market ended the year up 3%. After declining by 1% in the first half, demand rebounded by a robust 7% in the second six months, led by imports across the region coming from Thailand and Vietnam. This was particularly the case in Western Europe, where growth benefited from highly favorable prior-year comparatives (reflecting the anti-dumping measures introduced in April 2018 on tires coming from China).

THE REPLACEMENT TRUCK TIRE MARKET IN EUROPE

(in millions of new tires – moving 12 months – excluding Russia)

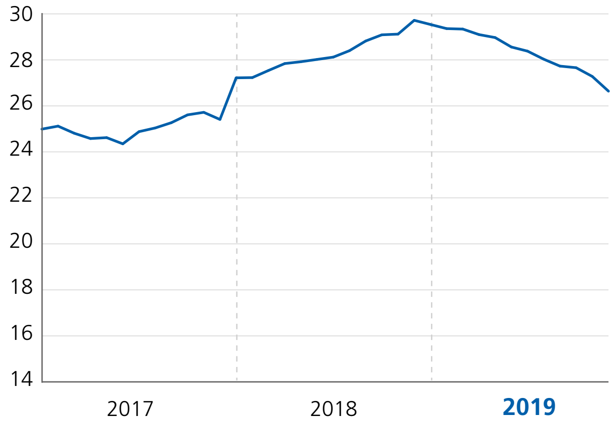


Michelin estimates.

In North America, demand plunged 13% over the year. Because retailers had stockpiled massive inventory in second-half 2018 ahead of the mid-February 2019 introduction of customs duties on Chinese tires, the North American non-pool Replacement market saw steep inventory drawdowns in the first half, followed in the second by comparisons with very high prior-year figures. The pool market eased back only slightly over the year, mainly thanks to the very high demand in the OE segment until third-quarter 2019.

THE REPLACEMENT TRUCK TIRE MARKET IN NORTH AMERICA

(in millions of new tires – moving 12 months)



Michelin estimates.

In Central America, demand declined by 1% over the year.

South American markets were also down 1% overall, with persistently flat demand in Brazil but an 8% rebound in Argentina in the second half following a sharp 15% drop in the first. The Colombian and Peruvian markets cooled in the second half, dampened by the unstable political and economic environment.

Replacement tire markets **in Asia (excluding India)** retreated by 1% in 2019. After declining by 2% in the first six months of the year, demand seems to have leveled off in the second half, particularly in China (down 2% in the first half then stable in the second). The Japanese market was stable, with highly volatile demand between the third and fourth quarters following an increase in the VAT rate.

In the Africa/India/Middle East region, new tire demand contracted by 2%, with a 3% decline in the Indian market.

3.1.5 SPECIALTY TIRE MARKETS IN 2019

Mining tires: the Mining tire market is still being driven by robust demand from mining companies, while the quarry tire segment is suffering from dealer inventory management policies.

Conveyor belt markets are continuing to expand, in line with global GDP trends.

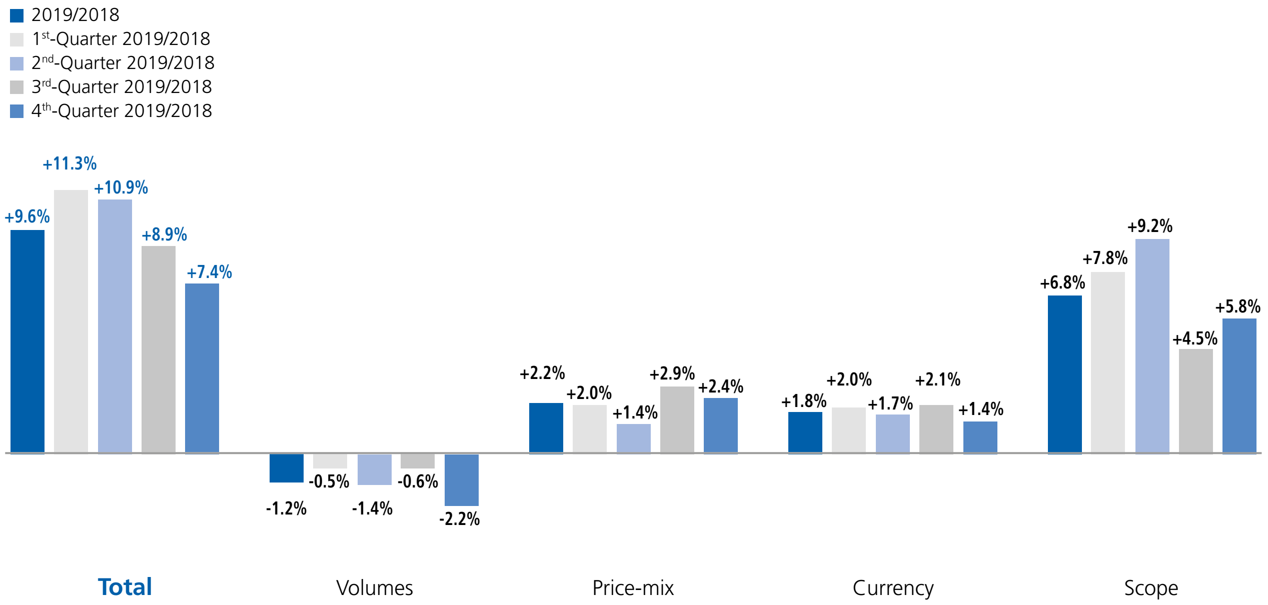
Agricultural and Construction tires: in the Agricultural segment, the cyclical contraction observed since the summer is continuing, especially in OE markets. Demand in the Construction segments is being dampened by global economic uncertainty.

Two-wheel tires: the global motorcycle tire market declined during the year, dragged down by the sharp fall-off in demand in North America, which was only partially offset by growth in both the motorcycle and scooter segments in Europe. Demand in the commuting segment continued to trend upwards.

Aircraft tires: the commercial Aircraft tire market is continuing to grow, with momentum still strongest in the radial segment. This reflects the sustained increase in air passenger traffic, which has slightly slowed recently as load factors improve.

3.2 SALES

3.2.1 ANALYSIS OF SALES



Sales stood at €24,135 million for the year, up 9.6% from €22,028 million in 2018, due to the combined impact of the following factors:

- a €261 million decrease from the 1.2% decline in volumes, reflecting the Group's ability to maintain its positions in contracting markets. This performance was primarily supported by the Group's well-balanced business base and the ongoing extension of its products and services portfolio;
- a €477 million or 2.2% increase from the price-mix effect, comprising €230 million (1.1%) from higher prices and €248 million (1.1%) from improvements in the mix. The price impact stemmed from (i) in the Replacement segment, assertive price management at a time of softening demand; and (ii) in the indexed businesses, adjustments following the application of raw materials indexation clauses. While the mix effect was favorable across the business base, the primary factors at the Group level were (i) in the Automotive business, the steady sales growth in the premium MICHELIN-brand 18-inch and larger segment and, to a lesser extent, the relative growth rates in Replacement and Original Equipment sales; and (ii) in the Specialty businesses, the sustained relative growth in mining tire sales and the decline in Off-the-road sales, hit by the steep fall-off in OE markets;
- a €395 million or 1.8% increase from the currency effect, which essentially reflected the US dollar's rise against the euro throughout the year. The positive impact was dampened, however, by the significant decline against the euro of emerging market currencies (mainly the Turkish lira and the Argentine peso);
- a €1,496 million or 6.8% increase from changes in the scope of consolidation, mainly corresponding to the consolidation of Fenner (over six months), Camso (acquired in December 2018 and consolidated as from January 1, 2019), and Multistrada and Masternaut (both acquired in 2019). The positive impacts were somewhat attenuated by the first-quarter 2019 deconsolidation of the TCi distribution network in North America, following its sale to the TBC wholesaling joint venture in April 2018.

Note that sales of tire-related services and solutions totaled €1,169 million in 2019, versus €1,113 million in 2018.

(in € millions and %)	2019	Second half 2019	Fourth quarter 2019	Third quarter 2019	First half 2019	Second quarter 2019	First quarter 2019
SALES	**24,135**	**12,354**	**6,239**	**6,115**	**11,781**	**5,972**	**5,809**
Change, year-on-year	**+2,107**	**+929**	**+429**	**+500**	**+1,179**	**+587**	**+591**
Volumes	-261	-163	-127	-36	-98	-74	-25
Price-mix	+477	+301	+137	+164	+176	+73	+104
Currency effect	+395	+197	+80	+117	+197	+94	+103
Scope of consolidation	+1,496	+592	+337	+255	+904	+495	+409
% change, year-on-year	**+9.6%**	**+8.1%**	**+7.4%**	**+8.9%**	**+11.1%**	**+10.9%**	**+11.3%**
Volumes	-1.2%	-1.4%	-2.2%	-0.6%	-0.9%	-1.4%	-0.5%
Price-mix	+2.2%	+2.6%	+2.4%	+2.9%	+1.7%	+1.4%	+2.0%
Currency effect	+1.8%	+1.7%	+1.4%	+2.1%	+1.9%	+1.7%	+2.0%
Scope of consolidation	+6.8%	+5.2%	+5.8%	+4.5%	+8.5%	+9.2%	+7.8%

3.2.2 SALES BY REPORTING SEGMENT

Segment information is presented according the following three operating segments:

- Automotive and related distribution;
- Road transportation and related distribution;
- Specialty businesses and related distribution.

The Specialty businesses include the Mining, Off-the-road, Two-wheel and Aircraft tire activities as well as the Conveyor Belts and High-Tech Materials activities. The above three operating segments are essentially the same as the ones presented in the prior year, with the exception of a few reallocations. The main change, which was prompted by the 2018 acquisition of Camso and the subsequent redefinition of the exclusively Off-the-road business unit, concerned the transfer of multi-purpose (on and off-the-road) construction truck tires from the Off-the-road unit in the "Specialty businesses" segment to the "Road transportation" segment. The 2018 segment reporting has been restated accordingly. Operating segment performance is measured primarily on the basis of sales and segment operating income, calculated according to the same measurement principles used in the consolidated income statement.

(in € millions)	2019	Second half 2019	Fourth quarter 2019	Third quarter 2019	First half 2019	Second quarter 2019	First quarter 2019
GROUP	**24,135**	**12,354**	**6,239**	**6,115**	**11,781**	**5,972**	**5,809**
Automotive and related distribution	11,851	6,193	3,217	2,976	5,658	2,871	2,788
Road transportation and related distribution	6,448	3,304	1,615	1,689	3,144	1,594	1,550
Specialty businesses and related distribution	5,836	2,857	1,406	1,451	2,979	1,508	1,471
% change, year-on-year	**+9.6%**	**+8.1%**	**+7.4%**	**+8.9%**	**+11.1%**	**+10.9%**	**+11.3%**
Automotive and related distribution	+4.6%	+8.1%	+7.1%	+9.2%	+1.0%	+1.8%	+0.2%
Road transportation and related distribution	+1.1%	-0.8%	-2.7%	+1.0%	+3.2%	+1.3%	+5.3%
Specialty businesses and related distribution	+35.2%	+20.9%	+22.6%	+19.2%	52.5%	+52.2%	+52.8%

3.2.2 a) Automotive and related distribution – Analysis of sales

Volumes in the Automotive and related distribution reporting segment declined by 1% over the year. After retreating 2% in the first half, which saw a very sharp slowdown in global OE demand and a particularly weak Replacement market in Europe, sales returned to growth in the second six months, gaining 1% despite the still adverse market impact of softening OE demand and persistently weak Replacement demand. Over the full year, the Group successfully maintained its market positions overall, even as it diligently applied a disciplined pricing policy and continued to enhance the value of the mix by increasing sales in the premium 18-inch and larger segment, in particular by broadening the product portfolio.

In **Europe,** OE sales ended the year down in a market hard hit by cooling new vehicle demand in an increasingly restrictive regulatory environment, but also by the plunge in new vehicle exports due to trade tensions between China and the United States. In Replacement markets, Michelin strengthened its positions over the year, while diligently applying its pricing policy. The product mix moved further upmarket, led by growth in the 18-inch and larger segment. In addition, the Group continued to benefit from its strong positions in the all-season segment, with its MICHELIN Cross Climate line, and from the robust sales of its Tier 2 brands (KLEBER and BFGoodrich) and Tier 3 lines in Central Europe. Sales rose sharply in Eastern Europe, lifted by the success of the new MICHELIN X Ice North 4 line of winter tires.

In a **North American** OE market dampened by the decline in automobile production and the General Motors strike in the final quarter, the Group maintained its positions over the year. In the Replacement segment, where growth is being driven primarily by Asian tire imports, Group sales declined, in particular due to the dealership network rationalization program deployed in 2019 by TBC, the joint venture created with Sumitomo Corporation of Americas in 2018, that lead to some destocking. UNIROYAL brand sales climbed sharply, lifted by the end-to-end product line refresh in 2019.

Sales in **South America** rose over the year, especially in the 17-inch and larger segments, where the Group is gaining market share while diligently managing prices in a highly volatile currency environment. OE sales contracted, primarily due to the decline in demand, which was severely impacted by the economic crisis in Argentina.

In **Asia (excluding India),** the Group maintained its positions in markets that saw weak growth in the Replacement segment and a sharp decline in OE demand. In China, transforming the Replacement market access model helped to enhance the sales mix, which remained stable overall, with in particular a steadily growing proportion of 18-inch and larger tires. Replacement sales rose in Southeast Asia, led by MICHELIN-brand 18-inch tires and BF GOODRICH-brand all-terrain solutions. OE demand fell precipitously across the region. In this environment, the Group maintained its positions by capitalizing on its diversified customer base, which enabled it to seize growth opportunities wherever they arose.

In the **Africa/India/Middle East** region, the Group broadened its market share in both the OE and Replacement segments, even as they weakened during the year.

Michelin Experiences' sales performance was shaped by strong growth in B2B revenue, led by the monetization of Michelin Guide launches in an ever-widening array of destinations, and by an increase in digital revenue thanks more effective content monetization. On December 3, Michelin signed an agreement with TripAdvisor that included the sale of BookaTable to online restaurant booking platform TheFork, as well as a licensing partnership with TheFork aimed at improving access to the some 4,000 restaurants selected by Michelin Guide inspectors in Europe. In addition, on December 10, Michelin Travel Partner (MTP) and Media Participation announced their plans to create a joint venture, with MTP contributing its B2C Print operations and taking a 40% minority stake in the operation. In its ongoing commitment to offering every customer an outstanding mobility experience, Michelin Experiences is strategically focusing on its unrivaled expertise in curating a unique selection of restaurants, hotels and travel services.

In all, sales in the Automotive and related distribution reporting segment rose by 4.6% to €11,851 million, from €11,332 million in 2018. The decline in volumes was more than offset by steady enhancement of the product mix, led by the sustained success of the MICHELIN Primacy 4, Cross Climate+, X Ice North 4 and PilotSport 4 SUV lines on the one hand, and strong growth in the 18-inch and larger segment on the other, as well as a disciplined pricing policy pursued throughout the year. The acquisition of Multistrada in first-quarter 2019 also helped to increase segment sales, despite the slightly unfavorable impact of deconsolidating TCi in first-quarter 2018.

3.2.2 b) Road transportation and related distribution – Analysis of sales

Volumes in the Road transportation and related distribution reporting segment declined by 3% in 2019, in line with market trends for the year. Although the Group strengthened its positions in generally shrinking markets in the first half, the ensuing collapse in OE demand, particularly in Europe and North America, weighed heavily on sales in the second half of the year.

In **Europe,** the Group maintained its positions in an OE market down 10% for the year. On the Replacement side, the first half saw volume gains, led by the customs duties introduced in 2018 and the success of the MICHELIN AGILIS Cross Climate and BFGoodrich lines. However, the second half proved to be more challenging as the economic slowdown weighed on the transportation industry and the only growth in demand was for Asian tires (off of favorable prior-year comparatives), which hurt the Group's Low Intermediate tire sales. In this environment, Michelin focused on preserving margins with an assertive pricing policy.

In a **North American** market shaped by robust OE demand until the third quarter and a steep drop in Replacement demand that was primarily due to the collapse in import sales, Michelin volumes rose in every operating segment, thanks to the quality of the Group's products and services, which is widely recognized by manufacturers and users of urban mobility solutions such as buses and light trucks. The development of fleet services continued apace.

In **South America,** Michelin successfully maintained its positions in a fast-growing, OE-driven market, in particular thanks to strong OEM demand for its products and services. The high volatility of imports into markets that have generally been weakened by a series of recessions is disrupting the competitive environment in the Replacement segment, at a time when the Group has decided to maintain its firm pricing policy. Sascar's fleet management solutions remain on a growth trajectory.

In **Asia (excluding India),** and particularly in China, the focus on customers who value Michelin products with their high technological content did not adversely impact Group volumes, which held firm in a slightly lower market. In the rest of the region, the Group's operations are confronting increased competition from local tiremakers, particularly the Chinese manufacturers who have been shut out of other world markets by the introduction of import duties.

In the **Africa/India/Middle East** region, where markets fell sharply during the year, Michelin maintained its positions while protecting its margins with a disciplined pricing policy.

In all, sales by the Road transportation and related distribution reporting segment increased by 1.1% year-on-year, to €6,448 million from €6,378 million in 2018. Despite a favorable mix and a firm pricing policy reflecting the Group's strategy of building positions only in value-creating markets, the decline in volumes caused sales to end the year down slightly at constant exchange rates.

3.2.2 c) Specialty businesses and related distribution – Analysis of sales

Mining tires: Sales maintained their momentum, in particular thanks to the business' solid positions in the surface mining segment, its unrelenting pricing discipline and the expansion of its service operations.

Market share gains by Fenner's Conveyor Solutions business more than offset a certain amount of dealer destocking and softer demand in the energy-related segments.

Agricultural and Construction tires: Sales declined during the year, dragged down by plummeting OE demand. The Group's firm price discipline partially offset the unfavorable impact of the market collapse.

The integration of Camso, a global leader in off-the-road mobility acquired in December 2018, proceeded as planned during the year, delivering a number of contract wins in 2019 capitalizing on the company's synergies with Michelin.

Two-wheel tires: Sales rose under the combined impact of the increase in tonnages sold, strict price management and a favorable currency effect.

Aircraft tires: Sales continued to increase, lifted as always by sustained growth in the Radial segment, where Michelin is demonstrating its technological leadership.

In all, sales by the Specialty businesses reporting segment increased by 35.2% year-on-year, to €5,836 million from €4,318 million in 2018. In addition to the highly favorable impact from the consolidation of Fenner and Camso, the gain was led by growth in mining tire sales, robust demand for aircraft and two-wheel tires and a disciplined pricing policy.

3.2.3 CHANGES IN EXCHANGE RATES FOR THE MAIN OPERATING CURRENCIES

At current exchange rates, consolidated sales rose by 9.6% in 2019.

This increase included a €395 million positive currency effect, stemming primarily from the euro's favorable movements against the US dollar, Chinese renminbi and pound sterling.

Average exchange rate	2019	2018	Change
Euro/USD	1.120	1.182	-5.2%
Euro/CNY	7.733	7.803	-0.9%
Euro/GBP	0.877	0.884	-0.8%
Euro/BRL	4.410	4.283	+3.0%
Euro/AUD	1.611	1.579	+2.0%
Euro/CAD	1.486	1.530	-2.8%
Euro/RUB	72.469	73.749	-1.7%
Euro/JPY	122.042	130.477	-6.5%
Euro/MXN	21.566	22.703	-5.0%
Euro/THB	34.773	38.172	-8.9%
Euro/CLP	785.316	755.499	+3.9%
Euro/TRY	6.350	5.525	+14.9%
Euro/SEK	10.580	10.247	+3.2%
Euro/INR	78.841	80.611	-2.2%
Euro/ZAR	16.169	15.521	+4.2%
Euro/ARS	52.281	30.732	+70.1%

Sales break down as follows by currency:

Currency	%		
USD	38%	MXN	1%
EUR	31%	THB	1%
CNY	5%	CLP	1%
GBP	3%	TRY	1%
BRL	3%	SEK	1%
AUD	3%	INR	1%
CAD	3%	ZAR	0.5%
RUB	1%	ARS	0.4%
JPY	1%	Other	4.4%
TOTAL			**100%**

3.2.4 SALES BY REGION

(in € millions)	2019	2019/2018	Second half 2019	First half 2019
GROUP	**24,135**	**+9.6%**	**12,354**	**11,781**
Europe	8,847	+3.2%	4,495	4,352
of which France	*2,113*	*+2.8%*	*1,077*	*1,036*
North America (incl. Mexico)	8,902	+13.8%	4,606	4,296
Other regions	6,386	+13.3%	3,253	3,133

(in € millions)	2019	% of total	2018	% of total
GROUP	**24,135**		**22,028**	
Europe	8,847	36.7%	8,570	38.9%
of which France	*2,113*	*8.8%*	*2,056*	*9.3%*
North America (incl. Mexico)	8,902	36.9%	7,824	35.5%
Other regions	6,386	26.4%	5,634	25.6%

The Group's sales rose in every region during the year.
More than 60% of consolidated sales were generated outside Europe and more than 90% outside France.

3.3 CONSOLIDATED INCOME STATEMENT REVIEW

The definition of cost of sales was updated in 2019 to reflect the effects of the new organization set up in 2018 and the development of customer service businesses. Previously limited to the description of cost of sales for the Group's manufacturing activities, which is unchanged, the definition now includes the costs incurred to produce, administer and execute customer services. The main impact of this change is that "cost of sales" now includes the operating costs of the service centers run by the Euromaster dealership network in Europe, which were previously recognized in the consolidated income statement under "sales and marketing expenses".

The change has not had any impact on segment operating income, which is the Group's key operating performance metric, or on segment reporting data.

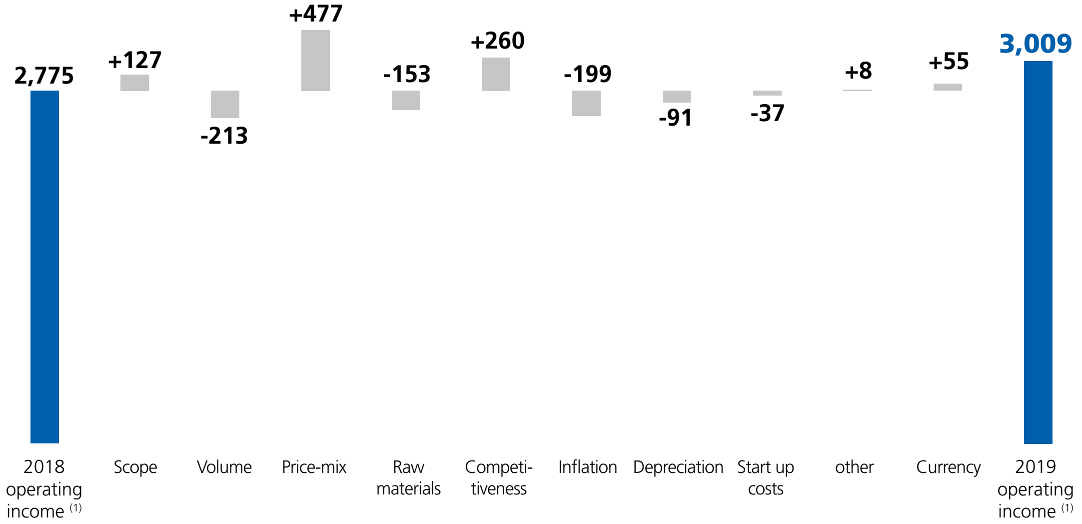
The impact of these changes on the consolidated income statement is presented in note 2.5 "Restatement of comparative financial information at December 31, 2018" to the consolidated financial statements.

(in € millions, except per share data)	**2019**	**2018[(1)]**	**2019/2018**	**2019** *(as a % of sales)*	**2018** *(as a % of sales)*
Sales	24,135	22,028	9.6%		
Cost of sales	(17,053)	(15,517)	9.9%	70.7%	70.4%
Gross income	**7,082**	**6,511**	**8.8%**	**29.3%**	**29.6%**
Sales and marketing expenses	(1,380)	(1,267)	8.9%	5.7%	5.8%
Research and development expenses	(687)	(648)	6.0%	2.8%	2.9%
General and administrative expenses	(1,987)	(1,816)	9.4%	8.2%	8.2%
Segment other income and expenses	(19)	(5)	280.0%	0.1%	0.0%
Segment operating income	**3,009**	**2,775**	**8.4%**	**12.5%**	**12.6%**
Other operating income and expenses	(318)	(225)	41.3%	1.3%	1.0%
Operating income	**2,691**	**2,550**	**5.5%**	**11.1%**	**11.6%**
Cost of net debt	(330)	(200)	65.0%	1.4%	0.9%
Other financial income and expenses	(5)	16	n/a	0.0%	-0.1%
Net interest on employee benefit obligations	(98)	(90)	8.9%	0.4%	0.4%
Share of profit/(loss) from equity-accounted companies	(22)	(46)	-52.2%	0.1%	0.2%
Income before taxes	**2,236**	**2,230**	**0.3%**	**9.3%**	**10.1%**
Income tax	(506)	(570)	-11.2%	2.1%	2.6%
Net income	**1,730**	**1,660**	**4.2%**	**7.2%**	**7.5%**
▶ Attributable to the shareholders of the Company	1,751	1,677	4.4%	7.3%	7.6%
▶ Attributable to the non-controlling interests	(21)	(17)	23.5%		
Earnings per share (in €)					
▶ Basic	9.69	9.30	4.2%		
▶ Diluted	9.66	9.25	4.4%		

(1) The 2018 figures have been restated for comparison purposes (see note 2.5 to the consolidated financial statements).

3.3.1 ANALYSIS OF SEGMENT OPERATING INCOME

(in € millions)



(1) Segment operating income.

Segment operating income amounted to €3,009 million or 12.5% of sales in the year ended December 31, 2019, versus €2,775 million and 12.6% in 2018.

The year's performance reflected:

- a €127 million increase from changes in the scope of consolidation following the inclusion of Fenner, Camso, Multistrada and Masternaut and the removal of TCi;
- a €213 million decrease from the 1.2% decline in volumes and the €108 million fixed cost shortfall, following the sudden drop in demand and the ensuing production adjustments required to reduce inventory during the end of the year;
- a robust €477 million increase from the price-mix effect thanks in particular to disciplined price management, which cushioned the €153 million adverse impact from raw materials costs (including customs duties);
- the €199 million increase in costs was more than offset by €260 million in competitiveness gains. Depreciation and amortization expense rose by €91 million and start-up costs by €37 million. Other factors totaled an increase of €8 million for the year;
- lastly, favorable currency movements added €55 million to the reported figure.

At constant exchange rates and scope of consolidation, segment operating income totaled €2,827 million in 2019, a €52 million improvement on the €2,775 million reported in 2018. In this way, Michelin has met its target of generating segment operating income at constant exchange rates and scope of consolidation in an amount exceeding the 2018 figure.

Other operating income and expenses represented an expense of €318 million. This primarily corresponded to restructuring costs, particularly the €249 million in costs related to the planned closure of the production plants in La Roche-sur-Yon, France and Bamberg, Germany. Other expenses also include the €91 million in amortization of acquired trademarks and customer relationships, recognized in particular on the consolidation of Fenner and Camso.

3.3.2 SEGMENT OPERATING INCOME

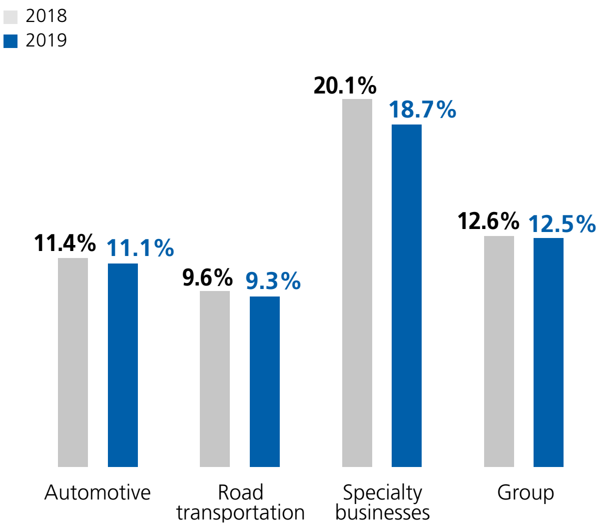
Certain businesses were reallocated to new segments with effect from January 1, 2019. The main change, which was prompted by the December 2018 acquisition of Camso and the subsequent redefinition of the exclusively Off-the-road business unit, concerned the transfer of multi-purpose (on and off-the-road) construction Truck tires from the Off-the-road unit in the "Specialty businesses" segment to the "Road transportation" segment.

Camso's income is included in the exclusively Off-the-road business unit in the "Specialty businesses" segment.

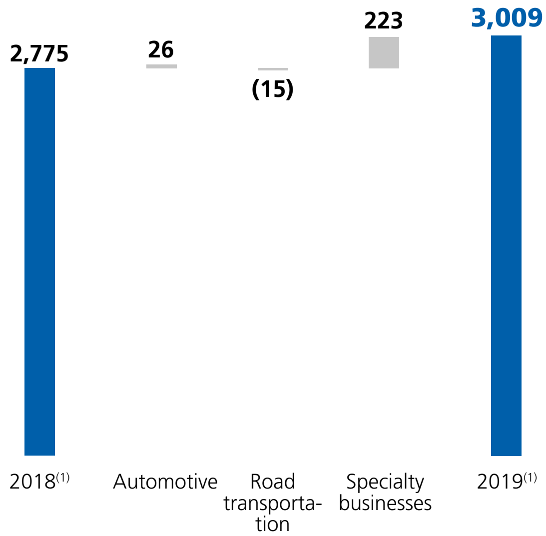
The impact of these changes on the consolidated income statement is presented in note 2.5 "Restatement of comparative financial information at December 31, 2018" to the consolidated financial statements.

(in € millions)	2019	2018 restated	Second half 2019	First half 2019
Automotive and related distribution				
Sales	11,851	11,332	6,193	5,658
Segment operating income	1,321	1,295	736	585
Segment operating margin	**11.1%**	**11.4%**	**11.9%**	**10.3%**
Road transportation and related distribution				
Sales	6,448	6,378	3,304	3,144
Segment operating income	597	612	318	279
Segment operating margin	**9.3%**	**9.6%**	**9.6%**	**8.9%**
Specialty businesses and related distribution				
Sales	5,836	4,318	2,857	2,979
Segment operating income	1,091	868	517	574
Segment operating margin	**18.7%**	**20.1%**	**18.1%**	**19.3%**
Group				
Sales	24,135	22,028	12,354	11,781
Segment operating income	3,009	2,775	1,571	1,438
Segment operating margin	**12.5%**	**12.6%**	**12.7%**	**12.2%**

3.3.2 a) Segment operating margin



(in € millions)



(1) Segment operating income.

3.3.2 b) Automotive and related distribution – Analysis of segment operating income

Automotive and related distribution *(in € millions)*	**2019**	**2018 restated**	**2019/2018**	**2019** *(% of consolidated total)*	**2018** *(% of consolidated total)*
Sales	11,851	11,332	+4.6%	49%	51%
Change in volumes	*-1%*				
Segment operating income	1,321	1,295	+2.0%	44%	47%
Segment operating margin	11.1%	11.4%	-0.3 pt		

Automotive segment operating income came to €1,321 million or 11.1% of sales versus €1,295 million and 11.4% in 2018.

The improvement primarily reflected (i) the 1% decline in volumes in markets down 2% for the year, the fixed cost shortfall and the rise in raw materials costs following the late 2018 increase in butadiene prices, all of which were offset by (ii) the highly positive price-mix effect stemming from the Group's disciplined price management and the growing proportion of 18-inch and larger tires in the sales mix. In addition, the consolidation of Multistrada reduced the segment operating margin.

3.3.2 c) Road transportation and related distribution – Analysis of segment operating income

Road transportation and related distribution *(in € millions)*	**2019**	**2018 restated**	**2019/2018**	**2019** *(% of consolidated total)*	**2018** *(% of consolidated total)*
Sales	6,448	6,378	+1.1%	27%	29%
Change in volumes	*-3%*				
Segment operating income	597	612	-2.4%	20%	22%
Segment operating margin	9.3%	9.6%	-0.3 pt		

Road transportation segment operating income amounted to €597 million or 9.3% of sales, compared with €612 million and 9.6% the year before.

The slight decline was attributable to (i) the 3% contraction in volumes in line with market trends, the fixed cost shortfall and the €30 million increase in customs duties, all of which were offset by (ii) the robust price-mix reflecting the Group's selective focus on value-creating market segments. The Group continued to expand its Services and Solutions business with the acquisition of Masternaut in Europe, and now manages more than one million vehicles under contract.

3.3.2 d) Specialty businesses and related distribution – Analysis of segment operating income

Specialty businesses and related distribution *(in € millions)*	**2019**	**2018 restated**	**2019/2018**	**2019** *(% of consolidated total)*	**2018** *(% of consolidated total)*
Sales	5,836	4,318	+35.2%	24%	20%
Change in volumes	*-1%*				
Segment operating income	1,091	868	+25.7%	36%	31%
Segment operating margin	18.7%	20.1%	-1.4 pt		

Segment operating income from the Specialty businesses amounted to €1,091 million or 18.7% of sales, versus €868 million and 20.1% the year before.

The increase was primarily attributable to the consolidation of Fenner and Camso, whose results were in line with expectations. However, their consolidation reduced segment operating margin by 2.5 points.

At constant scope of consolidation, segment operating margin improved to 21.2% in 2019 from 20.1% a year earlier. Volumes eased back 0.6% during the year, as the strong performance in mining tires offset nearly all of the contraction in Off-the-road tire volumes. The fixed cost shortfall was absorbed by the robust price effect, with in particular a favorable business mix and a priority focus on margin integrity in the OE Agricultural tire segment.

3.3.3 OTHER INCOME STATEMENT ITEMS

3.3.3 a) Raw materials

The cost of **raw materials** reported in cost of sales has been estimated at €5.1 billion in 2019 versus €4.9 billion in 2018.

It is calculated on the basis of:

- the price and mix of the Group's raw materials purchases;
- production and sales volumes;
- the valuation of raw materials, semi-finished and finished product inventories using the weighted average cost method. This method tends to spread fluctuations in purchase costs over time and delay their recognition in cost of sales, due to timing differences between the purchase of the raw materials and the sale of the finished product;
- exchange rate movements, which correspond to (i) the impact of converting the cost of purchases made in local currencies into the consolidation currency; and (ii) an untracked residual currency effect resulting from the difference between the purchasing companies' local currency and the currency used to purchase their raw materials.

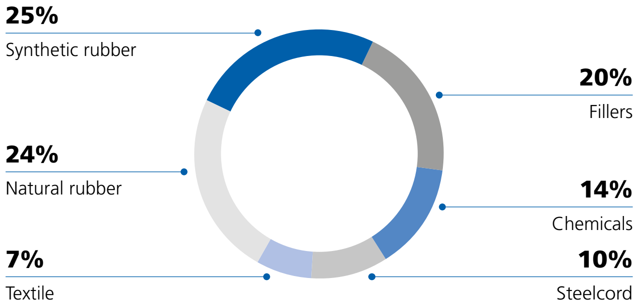
In 2019, the raw materials costs recognized in cost of sales included a €123 million unfavorable price impact, including the residual currency effect, as well as €30 million in additional customs duties compared with 2018.

Changes in prices feed through to the income statement five to six months later for natural rubber and around three months later for butadiene.

On the basis of estimated 2019 production volumes, the sensitivity of cash purchasing outlays to fluctuations in natural rubber and oil prices is as follows:

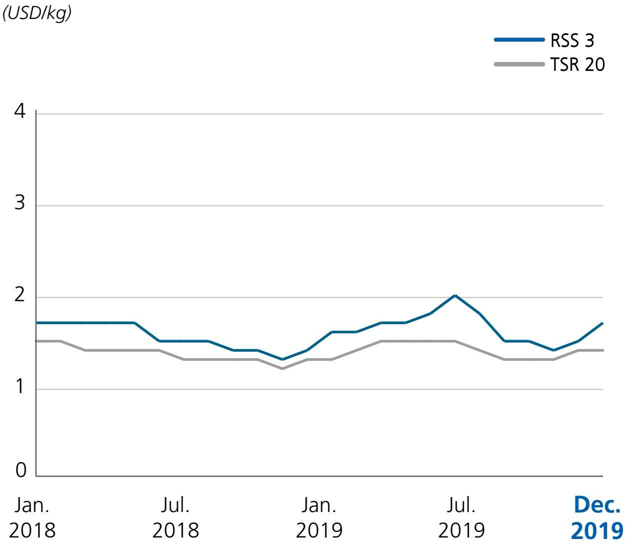
- a USD 0.10 per kg decrease in natural rubber prices would feed through to around an USD 90 million reduction in full-year purchasing costs;
- a USD 1.00 per barrel decline in oil prices would feed through to a USD 9 million decrease in full-year purchasing costs.

RAW MATERIALS RECOGNIZED IN 2019 COST OF SALES (€5.1 BILLION)

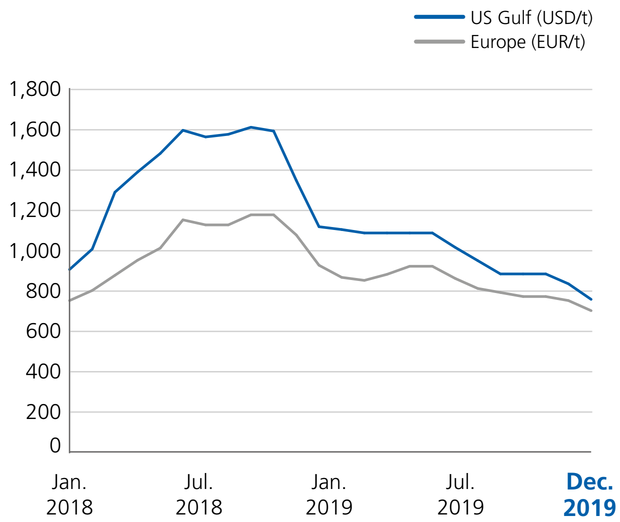


NATURAL RUBBER PRICES (SICOM)

(USD/kg)



BUTADIENE PRICES



3.3.3 b) Employee benefit costs and number of employees

At €6,365 million, **employee benefit costs** represented 26.4% of sales in 2019, down 1 point from the year before. The 5.4% or €327 million increase in euro terms was primarily attributable to the consolidation of Fenner, Camso, Multistrada and Masternaut employees.

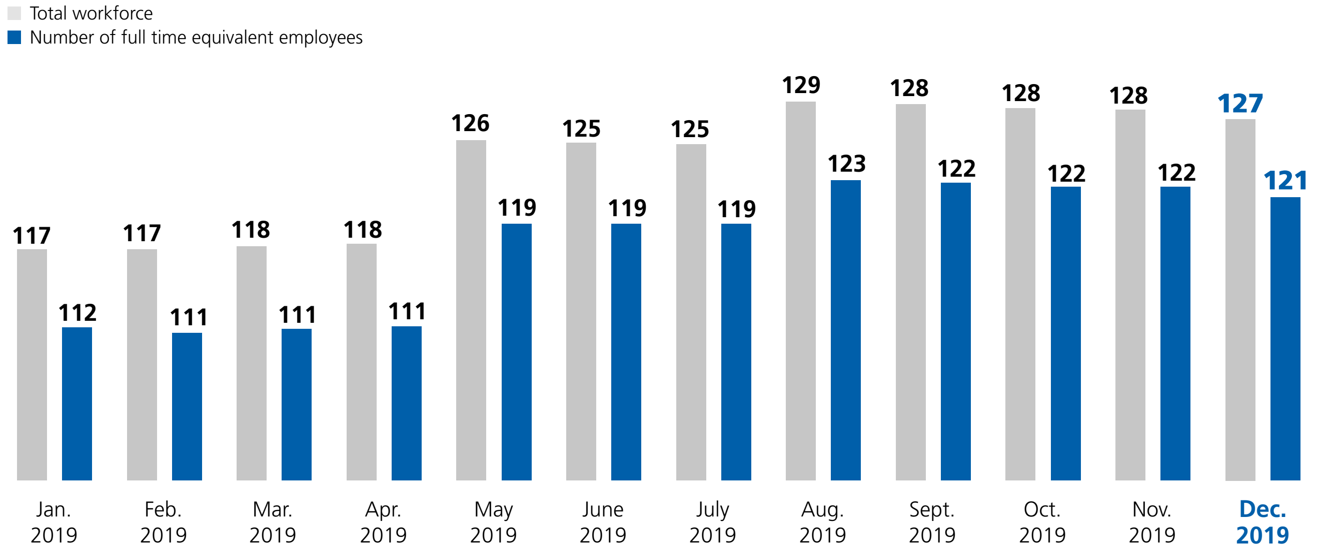
In addition, the adverse impact of currency movements (mainly the US dollar's gains against the euro) was more than offset by the ongoing reduction in headcount in high-cost regions and corporate offices.

In 2019, an expense of €6,423 million was recognized in segment operating income, and a gain of €58 million was recognized in other operating income and expenses. In 2018, €5,972 million in expenses were recognized in segment operating income and €66 million in other operating income and expenses. Employee benefit obligations recognized in other operating income and expenses are described in more detail in note 9.4 to the consolidated financial statements.

(in € millions and number of people)	2019	2018	Change
Total employee benefit costs	6,365	6,038	+5.4%
As a % of sales	*26.4%*	*27.4%*	*-1.0 pt*
Employees on payroll at December 31	127,200	117,400	+8.3%
Number of full-time equivalent employees at December 31	121,300	111,100	+9.2%
Average number of full-time equivalent employees	117,800	108,900	+8.2%

NUMBER OF EMPLOYEES

(in thousands)



Camso employees have been consolidated since May 2019, Multistrada employees since August and Masternaut employees since November.

3.3.3 c) Depreciation and amortization

(in € millions)	2019	2018	Change
Total depreciation and amortization	1,846	1,383	+33.4%
As a % of sales	*8%*	6%	

Depreciation and amortization charges rose by 33% to €1,846 million in 2019, of which €1,754 million was recognized in segment operating income and €91 million in other operating income and expenses (see notes 6 and 9 to the consolidated financial statements).

Excluding the €35 million positive currency effect, depreciation and amortization recognized in segment operating income rose by €375 million over the year. Nearly half of the increase (€180 million) stemmed from the application of IFRS 16 as from January 1, 2019 (see note 2.3.1 to the consolidated financial statements). The consolidation of Fenner, Camso, Multistrada and Masternaut added €97 million to depreciation and amortization charges for the year. The increase also reflected the recognition of depreciation charges following the commissioning of capital assets, particularly the new Passenger car tire plant in Mexico and the synthetic rubber facility in Indonesia.

3.3.3 d) Transportation costs

(in € millions)	2019	2018	Change
Transportation costs	1,232	1,186	+3.8%
As a % of sales	*5.1%*	*5.4%*	

Transportation costs came to €1,232 million or 5.1% of sales, up €45 million year-on-year, as the positive impact of productivity gains achieved during the year was offset by the increase in costs in North America at a time of truck driver shortages and rising wages. The currency effect also increased transportation costs for the period.

3.3.3 e) Sales and marketing expenses

Sales and marketing expenses represented 5.7% of sales in 2019, versus 5.8% in 2018, and rose by €113 million in euro terms at €1,380 million, impacted in particular by the consolidation of Fenner, Camso, Multistrada and Masternaut and by unfavorable movements in the US dollar.

3.3.3 f) Research and development expenses

Research and development expenses stood at €687 million, up €39 million from 2018, primarily due to the consolidation of Fenner, Camso, Multistrada and Masternaut, as well as to unfavorable movements in exchange rates.

They represented 2.8% of sales for the year, down 0.1 point compared with 2018, reflecting the Group's ability to keep research and development costs under control while maintaining its technological leadership.

3.3.3 g) General and administrative expenses

General and administrative expenses amounted to €1,987 million, a €171 million year-on-year increase that was led by the consolidation of Fenner, Camso, Multistrada and Masternaut and the unfavorable currency effect.

As a percentage of sales, general and administrative expenses were unchanged, at 8.2%.

3.3.3 h) Segment other income and expenses

Segment other operating income and expenses represented a net expense of €19 million in 2019 versus a net expense of €5 million in 2018. Most of the 2019 expense corresponded to the change in fair value of the shares held in SAPH, a rubber plantation company based in Côte d'Ivoire, as well as costs related to performance share grants and various taxes, partially offset by gains on the Group's insurance programs.

3.3.3 i) Other operating income and expenses

Other operating income and expenses represented a net expense of €318 million in 2019 versus a net expense of €225 million in 2018. The 2019 figure primarily corresponded to restructuring costs, particularly the €249 million in costs related to the planned closure of the production plants in La Roche-sur-Yon, France and Bamberg, Germany. Other expenses also include the €91 million in amortization of acquired trademarks and customer relationships, recognized in particular on the consolidation of Fenner and Camso.

3.3.3 j) Cost of net debt

(in € millions)	2019	2018	Change
Cost of net debt	330	200	+130

At €330 million, the **cost of net debt** was up €130 million compared with 2018, primarily as a result of the following factors:

- a €91 million increase in net interest expense to €299 million, reflecting the net impact of:
  - a €121 million increase due to the rise in average net debt to €5,809 million in 2019 from €2,364 million in 2018,
  - a €28 million decrease from the decline in the average gross interest rate on borrowings to 4.0% in 2019 from 4.4% in 2018,
  - a €2 million net decrease from a variety of other factors;
- a €29 million increase in losses on exchange rate derivatives, due mainly to the around 1-point decline in US dollar interest rates;
- an aggregate €10 million net increase from movements in other factors.

3.3.3 k) Other financial income and expenses

(in € millions)	2019	2018	Change
Other financial income and expenses	(5)	16	-21

Other financial income and expenses represented a net expense of €5 million in 2019 versus net income of €16 million the previous year (see note 10 to the consolidated financial statements).

3.3.3 l) Income tax

(in € millions)	2019	2018 restated	Change
Income before taxes	2,236	2,230	+6
Income tax	**(506)**	**(570)**	**-64**
Current tax	(492)	(535)	-43
Withholding tax	(56)	(35)	+21
Deferred tax	42	(0)	-42

Income tax amounted to €506 million in 2019, a €64 million year-on-year decrease that mainly stemmed from a favorable country mix and changes in the scope of consolidation, mainly related to the acquisition of Multistrada and Fenner.

The effective tax rate was 22.6%, versus 25.6% the year before.

3.3.3 m) Consolidated net income and earnings per share

(in € millions)	2019	2018	Change
Net income	1,730	1,660	+70
As a % of sales	*7.2%*	*7.5%*	*-0.3pt*
▶ Attributable to the shareholders of the Company	1,751	1,677	+74
▶ Attributable to the non-controlling interests	(21)	(17)	-4
Earnings per share *(in €)*			
▶ Basic	9.69	9.30	+0.39
▶ Diluted	9.66	9.25	+0.41

Net income came to €1,730 million, or 7.2% of sales, compared with €1,660 million in 2018.

The €70 million increase reflected the following factors:

- favorable factors:
  - the €234 million increase in segment operating income,
  - the €64 million reduction in income tax;
- unfavorable factors:
  - a €93 million increase in other operating expenses,
  - the increase in net financial expense, led by the €130 million increase in the cost of net debt.

3.4 CONSOLIDATED BALANCE SHEET REVIEW

The acquisition of a controlling interest in Camso was completed on December 18, 2018. Given the closing date, the entire purchase price as of the acquisition date (€1,174 million) was accounted for on a provisional basis as preliminary goodwill in the consolidated statement of financial position for the year ended December 31, 2018. For comparison purposes, that reported statement has been restated to reflect the final allocation of the purchase price (see note 2.5 to consolidated financial statements).

Methodological note: translation adjustments primarily stem from the translation into euros of prior-year assets and liabilities at the closing exchange rate.

ASSETS

(in € millions)	December 31, 2019	December 31, 2018(1)	Total changes	Translation adjustments	Movement
Goodwill	2,388	2,160	+228	+65	+163
Intangible assets	2,280	2,217	+63	+72	-9
Property, plant and equipment	13,169	11,644	+1,525	+236	+1,289
Non-current financial assets and other non-current assets	796	699	+97	+5	+92
Investments in equity-accounted companies	1,087	953	+134	+19	+115
Deferred tax assets	814	752	+62	+9	+53
Non-current assets	**20,534**	**18,425**	**+2,109**	**+406**	**+1,703**
Inventories	4,694	4,702	-8	+77	-85
Trade receivables	3,532	3,453	+79	+51	+28
Current financial assets	396	315	+81	+0	+81
Other current assets	1,055	1,103	-48	-2	-46
Cash and cash equivalents	1,466	2,128	-662	+4	-666
Current assets	**11,143**	**11,701**	**-558**	**+130**	**-688**
TOTAL ASSETS	**31,677**	**30,126**	**+1,551**	**+536**	**+1,015**

(1) The 2018 figures have been restated for comparison purposes (see note 2.5 to the consolidated financial statements).

EQUITY AND LIABILITIES

(in € millions)	December 31, 2019	December 31, 2018(1)	Total changes	Translation adjustments	Movement
Share capital	357	360	-3		-3
Share premiums	2,789	2,923	-134		-134
Reserves	10,080	8,875	+1,205	+201	+1,004
Non-controlling interests	3	23	-20	+0	-20
Total equity	**13,229**	**12,181**	**+1,048**	**+201**	**+847**
Non-current financial liabilities	5,923	5,302	+621	+36	+585
Employee benefit obligations	3,873	3,858	+15	+45	-30
Provisions and other non-current liabilities	1,104	1,319	-215	+14	-229
Deferred tax liabilities	455	435	+20	+18	+2
Non-current liabilities	**11,355**	**10,914**	**+441**	**+113**	**+328**
Current financial liabilities	1,158	1,222	-64	+132	-196
Trade payables	2,627	2,600	+27	+41	-14
Trade payables under reverse factoring agreements	470	440	+30	+10	+20
Provisions and other current liabilities	2,838	2,769	+69	+39	+30
Current liabilities	**7,093**	**7,031**	**+62**	**+222**	**-160**
TOTAL EQUITY AND LIABILITIES	**31,677**	**30,126**	**+1,551**	**+536**	**+1,015**

(1) The 2018 figures have been restated for comparison purposes (see note 2.5 to the consolidated financial statements).

3.4.1 GOODWILL

Excluding the €65 million positive impact of translation adjustments, **goodwill** rose by €163 million to €2,388 million at December 31, 2019, primarily due to the recognition of preliminary goodwill on the acquisition of an 87.59% stake in Indonesian tire manufacturer Multistrada in March 2019 (see note 4.1.1 to the consolidated financial statements) and of all outstanding shares of Masternaut, one of Europe's largest telematics providers, in May 2019 (see note 4.1.2 to the consolidated financial statements).

3.4.2 INTANGIBLE ASSETS

Intangible assets amounted to €2,280 million, unchanged from December 31, 2018 (before the positive €72 million translation adjustment), reflecting slightly higher amortization charges for the year than additions, adjusted for changes in the scope of consolidation, mainly related to the acquisitions of Multistrada and Masternaut.

3.4.3 PROPERTY, PLANT AND EQUIPMENT

Property, plant and equipment stood at €13,169 million at December 31, 2019, a €1,289 million increase before the positive €236 million translation adjustment. The increase was primarily attributable to (i) the first-time application of IFRS 16 concerning leases, which added €796 million; and (ii) the €428 million impact of consolidating newly acquired companies, including mainly Multistrada and Masternaut. In 2019, additions to property, plant and equipment amounted €1,594 million.

3.4.4 NON-CURRENT FINANCIAL ASSETS AND OTHER NON-CURRENT ASSETS

Non-current financial assets and other non-current assets ended the year at €796 million, a €92 million increase (before the positive €5 million translation adjustment) that primarily reflected the non-recurring matching contribution paid in first-half 2019 to the employee benefits fund in the United Kingdom, as well as fair value adjustments to derivative instruments.

3.4.5 INVESTMENTS IN EQUITY-ACCOUNTED COMPANIES

Excluding the positive €19 million translation adjustment, **investments in equity-accounted companies** rose by €115 million over the year to €1,087 million. The growth essentially stemmed from the €140 million increase in the portfolio of equity-accounted companies, primarily following the Group's investment in Symbio, A Faurecia Michelin Company, a 50/50-owned joint venture with Faurecia, its acquisition of shares in SIPH and its purchase of a 20% stake in Indonesian retailer PT Penta Artha Impressi ("Penta"), in partnership with Indomobil and private investors (see 3.9 "Highlights").

This favorable impact was partially attenuated by the Group's €22 million share in the loss from equity-accounted companies.

3.4.6 DEFERRED TAX ASSETS AND LIABILITIES

At December 31, 2019, the Group held a net **deferred tax asset** of €359 million, representing an increase of €51 million compared with a year earlier (before the €9 million negative translation adjustment). The increase was led mainly by the recognition of €47 million in deferred tax assets recognized on tax loss carryforwards in Mexico and Germany during the year (see note 18 to the consolidated financial statements).

3.4.7 TRADE WORKING CAPITAL

(in € millions)	December 31, 2019	December 31, 2018 restated	Change	2019 *(as a % of sales)*	2018 *(as a % of sales)*
Inventories	4,694	4,702	-9	19.4%	21.3%
Trade receivables	3,532	3,453	+79	14.6%	15.7%
Trade payables	(2,627)	(2,600)	-27	10.9%	11.8%
Trade payables under reverse factoring agreements	(470)	(440)	-30	1.9%	2.0%
TRADE WORKING CAPITAL	**5,129**	**5,115**	**+14**	**21.3%**	**23.2%**

Trade working capital declined by almost 2 points over the year as a percentage of sales, to 21.3% at end-2019 from 23.2% at end-2018. Excluding a positive €78 million in translation adjustments, this change amounted to a €63 million decrease in working capital in euro terms, mainly attributable to a sharp €85 million reduction in inventories (excluding translation adjustments).

Inventories represented 19.4% of sales at end-2019, declining 1.9 points year-on-year to €4,694 million. In euro terms, the €85 million reduction in inventories, excluding a positive €77 million in translation adjustments, was led by significant drawdowns across the inventory base (raw materials, semi-finished products, finished products) in a challenging market environment, particularly in the fourth quarter when demand for Truck tires and OE Agricultural and Construction tires fell sharply. This disciplined management of output more than offset the €62 million increase in inventories resulting from the consolidation of Multistrada and other acquisitions.

Excluding the positive €51 million in translation adjustments, **trade receivables** rose by €28 million year-on-year to €3,532 million at December 31, 2019. As a percentage of sales, they declined by 1.1 point year-on-year, to 14.6% at December 31, 2019. This favorable change was chiefly attributable to the around €31 million reduction in outstanding receivables at constant scope of consolidation, with changes in scope adding around €58 million, mainly due to the consolidation of Multistrada.

Trade payables, including under **reverse factoring agreements,** rose by €6 million year-on-year to €3,097 million (excluding translation adjustments for a positive €51 million). The impact of consolidating Multistrada and Masternaut offset the decline in outstandings at constant scope of consolidation.

3.4.8 CASH AND CASH EQUIVALENTS

Cash and cash equivalents stood at €1,466 million, down €666 million year-on-year excluding translation adjustments, primarily reflecting the net impact of the following factors:

- increases from:
  - the €1,142 million in free cash flow, after the investment of €423 million in acquisitions during the year,
  - the €101 million in new debt raised through the issue of commercial paper;
- decreases from:
  - the €765 million in debt repayments, of which €383 million in bonds maturing in June 2019 and €382 million in debt held by acquired companies that had been arranged on less favorable terms than on Michelin-grade debt securities,
  - the €676 million in dividends paid during the year,
  - the outlay of €141 million for share buybacks during the year,
  - the €238 million in repayments of lease liabilities,
  - the €89 million in other unfavorable factors, including the €58 million paid to buy out the non-controlling interests in Multistrada in May 2019.

3.4.9 EQUITY

Including translation adjustments for a positive €201 million, **total equity** increased by €1,048 million to €13,229 million, from €12,281 million at December 31, 2018, primarily as a result of the following factors:

- increases:
  - €1,893 million in comprehensive income for the year, including:
    - €1,730 million in net income,
    - the €115 million unfavorable impact of actuarial gains and losses, after deferred taxes,
    - the €201 million gain from translating foreign currencies,
    - the €46 million favorable impact from currency hedges, including hedges of US dollar-denominated convertible bond issues,
    - an aggregate €31 million net increase from other factors,
  - €7 million in service costs on performance share-based payment plans,
  - €6 million in other favorable items;
- decreases:
  - €676 million in dividends and other distributions,
  - €141 million in share buybacks under the shareholder-approved program,
  - €24 million in payments to buy out the non-controlling interests in Multistrada,
  - the €17 million impact of applying IFRS 16.

At December 31, 2019, the **share capital** of Compagnie Générale des Établissements Michelin stood at €357,255,110, comprising 178,627,555 shares outstanding corresponding to 240,861,826 voting rights.

3.4.10 NET DEBT

Net debt stood at €5,184 million at December 31, 2019, up €1,128 million from a year earlier, mainly as a result of the following factors:

- €273 million in net cash flow, which breaks down into four items:
  - €1,142 million in free cash flow for the period, of which €195 million due to IFRS 16,
  - €676 million distributions and other, of which €666 million in dividends,
  - €141 million in share buybacks,
  - €62 million in other outlays.
- €165 million in positive translation adjustments;
- €1,237 million in other factors together increasing net debt, of which:
  - the €815 million impact of applying IFRS 16 as of January 1,
  - a €217 million increase from setting up new leases,
  - a €249 million increase from the consolidation of Multistrada, Masternaut and other acquisitions,
  - €43 million in other factors decreasing net debt.

CHANGES IN NET DEBT

(in € millions)	2019	2018 restated
At January 1	**4,056**	**716**
Free cash flow(1)	-1,142(2)	+1,985
Distributions and other	+676	+648
IFRS 16	+815	-
New leases	+217	+65
Changes in scope of consolidation	+249	+203
Camso PPA(3)	-	+363
Share buybacks	+141	+75
Other	+172	+1
AT DECEMBER 31	**+5,184**	**+4,056**
CHANGE	**+1,128**	**+3,340**

(1) Free cash flow corresponds to net cash from operating activities less net cash used in investing activities, adjusted for net cash flows relating to cash pool assets and financial assets lodged as collateral for debt.
(2) of which €-195 million due to IFRS 16.
(3) Related to the fact that Camso's opening balance sheet was consolidated retroactively. Because the company's €1.2 billion purchase price was temporarily accounted for as preliminary goodwill, its opening balance sheet was not included in the consolidated statement of financial position at December 31, 2018. It was restated during the first half of 2019.

3.4.10 a) Gearing

Gearing rose to 39% at December 31, 2019 from 33% at year-end 2018, primarily due to the application of IFRS 16 and the recognition of new leases, which added €837 million in new debt during the year.

3.4.10 b) Credit ratings

The solicited corporate credit ratings of Compagnie Générale des Établissements Michelin (CGEM) and Compagnie Financière Michelin SCmA (CFM) are as follows:

		CGEM	CFM
Short term	Standard & Poor's	A-2	A-2
	Moody's	P-2	P-2
	Fitch Ratings	F2	F2
Long term	Standard & Poor's	A-	A-
	Moody's	A3	A3
	Fitch Ratings	A-	A-
Outlook	Standard & Poor's	Stable	Stable
	Moody's	Stable	Stable
	Fitch Ratings	Stable	Stable

On January 29, 2016, Standard & Poor's upgraded Michelin's long-term credit rating to A- from BBB+, with a stable outlook, while affirming its A-2 short-term rating.

On March 20, 2015, Moody's upgraded Michelin's long-term credit rating to A3 from Baa1, with a stable outlook, while affirming its P-2 short-term rating.

Fitch Ratings is one of the solicited rating agencies since July 1, 2019, and has confirmed its ratings for CGEM and CFM, namely A- for long-term rating, with a stable outlook, and F2 for short-term rating.

3.4.11 PROVISIONS

Provisions and other non-current liabilities amounted to €1,104 million, versus €1,319 million at December 31, 2018. Excluding the €14 million positive currency effect, they declined by €229 million year-on-year, primarily due to the fulfillment of Group commitments undertaken as part of the reorganization and adaptation of its activities in Europe.

3.4.12 EMPLOYEE BENEFITS

CHANGE IN THE FAIR VALUE OF THE NET DEFINED BENEFIT OBLIGATION

(in € millions)	Pension plans	Other defined benefit plans	2019	2018[1]
At January 1	**2,098**	**1,760**	**3,858**	**3,969**
Translation adjustments	14	30	44	23
Contributions paid to the funds	(192)	-	(192)	(189)
Benefits paid directly to the beneficiaries	(34)	(105)	(139)	(140)
Changes in scope of consolidation	10	(2)	8	29
Net cost recognized in operating expenses				
Current service cost	44	67	111	107
Actuarial (gains) or losses recognized on other long-term benefit obligations	-	5	5	(5)
Past service cost resulting from the introduction of new plans or plan amendments	(68)	-	(68)	54
Past service cost resulting from plan curtailments	(12)	(18)	(30)	(21)
Effect of any plan settlements	(10)	-	(10)	-
Other items	13	-	13	13
Net cost recognized in operating expenses				
Net interest on net defined benefit obligation (asset)	48	49	97	89
Costs recognized in other comprehensive income				
Actuarial (gains) or losses	63	111	174	(87)
Unrecognized assets due to the effect of the asset ceiling	(43)	-	(43)	16
NET OBLIGATION AT DECEMBER 31	**1,931**	**1,897**	**3,828**	**3,858**

(1) The 2018 figures have been restated for comparison purposes.

The net defined benefit obligation recognized at December 31, 2019 stood at €3,828 million, a year-on-year decrease of €30 million as reported and of €74 million excluding the €44 million positive currency effect (stemming primarily from the rise of the US dollar against the euro).

The decline in the net defined benefit obligation reflected the following main factors:

- the total €331 million in contributions and benefits paid in 2019 (2018: €329 million), of which:
  - €192 million in contributions paid to fund management institutions (2018: €189 million), primarily corresponding to a supplemental €125 million contribution in addition to the normal contributions to the UK pension plan,
  - €139 million in benefits paid directly to employees (2018: €140 million);
- the €8 million increase in obligations recognized by the Group due to the acquisition of Multistrada and other changes in the scope of consolidation (2018: €29 million);
- a €21 million expense recognized in operating income in 2019 (2018: €148 million) that resulted from:
  - a €118 million expense related to the cost of defined benefit plans (2018: €237 million),
  - a €98 million gain from plan amendments, curtailments and settlements, primarily reflecting the amendment of the supplemental pension plan in France (€68 million);
- the €97 million in net interest expense on the net defined benefit obligation, recognized outside of operating income (2018: €89 million);
- the €174 million in actuarial losses recorded in 2019 (2018: actuarial gains of €87 million), which corresponded to:
  - €944 million in actuarial losses on defined benefit obligations, resulting mainly from reductions in discount rates,
  - €727 million in actuarial gains on plan assets, due to the fact that the actual rate of return on plan assets was higher than the discount rate,
  - €43 million in experience gains on defined benefit obligations;
- €43 million in unrecognized assets due to the effect of the asset ceiling.

In addition, contributions paid by the Group to defined contribution plans amounted to €226 million in 2019 (2018: €223 million). The expense recognized in respect of defined contribution plans amounted to €226 million in 2019, up €3 million year-on-year.

3.5 CONSOLIDATED CASH FLOW STATEMENT REVIEW

3.5.1 NET CASH FROM OPERATING ACTIVITIES

(in € millions)	2019	2018	Change
Segment EBITDA	**4,763**	**4,119**	**644**
Change in inventories	147	4	143
Change in trade receivables and advances	(81)	(52)	(29)
Change in trade payables and advances	(135)	(124)	(11)
Restructuring cash costs	(172)	(172)	0
Other changes in provisions	-240	(241)	+1
Tax and interest paid	(944)	(679)	(265)
Other	-17	(24)	+7
NET CASH FROM OPERATING ACTIVITIES	**3,321**	**2,831**	**490**

At €4,763 million, segment **EBITDA** was up €644 million year-on-year, led by growth of €234 million in segment operating income, with depreciation and amortization charges rising by €410 million over the year, including the impact of applying IFRS 16.

Net cash from operating activities rose by €490 million to €3,321 million in 2019 from €2,831 million in 2018. The €644 million increase in EBITDA and the significant €103 million improvement in working capital amply offset the €265 million increase in tax and interest paid, which primarily reflected the one-time tax refund received in the United States in 2018 and the year-on-year increase in debt in 2019 (see section 3.3.3 j).

The general improvement in working capital reflected the following factors:

- a €147 million reduction in inventories at constant scope of consolidation during the year. This was led by drawdowns across the inventory base (raw materials, semi-finished products, finished products) in a challenging market environment, particularly in the fourth quarter when demand for Truck tires and OE Agricultural and Construction tires fell sharply;
- an €81 million increase in trade receivables and advances;
- a €135 million reduction in trade payables and advances.

Other factors only had a negligible impact on movements in cash flows from operating activities, with restructuring-related outlays in 2019 more or less on a par with 2018.

3.5.2 CAPITAL EXPENDITURE

(in € millions)	2019	2018	2019/2018	2019 *(as a % of sales)*	2018 *(as a % of sales)*
Additions to intangible assets and PP&E	**1,801**	**1,669**	**+132**	**7.5%**	**7.6%**
Investment grants received and change in capital expenditure payables	(19)	48	-67	0.1%	0.2%
Proceeds from sales of intangible assets and PP&E	(67)	(100)	+33	0.3%	0.5%
NET ADDITIONS TO INTANGIBLE ASSETS AND PROPERTY, PLANT AND EQUIPMENT	**1,715**	**1,617**	**+98**	**7.1%**	**7.3%**

Additions to **intangible assets and property, plant and equipment** amounted to €1,801 million in 2019, compared with €1,669 million in 2018. As a percentage of sales, they declined by 0.1 point, to 7.5% from 7.6% a year earlier. Competitiveness and growth investments accounted for €523 million of the total for the year.

By Business Line, the main capital projects completed during the year or still underway as part of competitiveness, product line renewal and growth investment programs are as follows:

Automotive tires:

- Mexico;
- China;
- Thailand,

Road transportation tires:

- Romania;
- Thailand,

Specialty products:

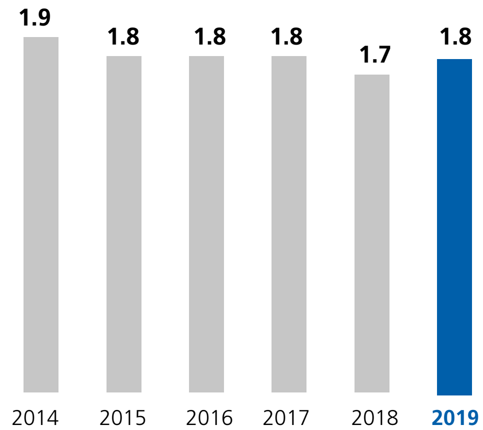
- Mining tires;
- Two-wheel tires;
- Aircraft tires.

In addition, the Group has a pipeline of technological innovation projects concerning new components or new products and services, to support its strategic expansion in the High-Tech Materials and Services & Solutions territories.

All of these projects have been supported by the capital expenditure commitments illustrated below.

CAPITAL EXPENDITURE

(in € billions)



Note that the Group's financing depends on its ability to generate cash flow as well as on market opportunities. As a result, there is generally no direct link between financing sources and capital expenditure projects.

3.5.3 AVAILABLE CASH FLOW AND FREE CASH FLOW

Available cash flow corresponds to cash flow from recurring operating activities, i.e., after routine capital expenditure but before competitiveness, growth and new-venture investments.

Free cash flow, which is stated before dividend payments and financing transactions, corresponds to net cash from operating activities less net cash used in investing activities, adjusted for net cash flows relating to cash pool assets and financial assets lodged as collateral for debt.

(in € millions)	2019	2018[(1)]
Net cash from operating activities	**3,321**	**2,831**
Routine capital expenditure (maintenance, IT, dealerships, etc.)	(1,096)	(1,031)
AVAILABLE CASH FLOW	**2,225**	**1,800**
Competitiveness and growth investments	(523)	(580)
Investments in new ventures	(181)	(59)
Acquisitions	(464)	(3,199)
Other	85	53
FREE CASH FLOW	**1,142**	**(1,985)**

(1) The 2018 figures have been restated for comparison purposes (see note 2.5 to the consolidated financial statements).

After deducting €1,096 million in routine capital expenditure, available cash flow was strongly positive in 2019, at €2,225 million.

Free cash flow was also positive, at €1,142 million, after outlays of €523 million in competitiveness and growth investments and €181 million in investments in new ventures. The €464 million in acquisitions primarily reflects the purchases of controlling interests in Multistrada and Masternaut.

3.5.4 STRUCTURAL FREE CASH FLOW

To track its intrinsic performance, Michelin has set targets based on its structural free cash flow, which is defined as free cash flow before acquisitions and adjusted for the impact of movements in raw materials prices on trade receivables, trade payables and inventories.

(in € millions)	2019	2018[1]
FREE CASH FLOW	**1,142**	**(1,985)**
Acquisitions	464	3,199
FREE CASH FLOW EXCLUDING ACQUISITIONS & DISPOSALS	**1,606**	**1,214**
Impact of raw materials costs on working capital	9	60
STRUCTURAL FREE CASH FLOW	**1,615**	**1,274**

(1) The 2018 figures have been restated for comparison purposes (see note 2.5 to the consolidated financial statements).

3.6 RETURN ON CAPITAL EMPLOYED (ROCE)

ROCE is measured as:

- segment operating income after tax (net operating profit after tax – NOPAT), calculated at a standard tax rate of 26%, corresponding to the Group's average effective tax rate;
- divided by the average economic assets employed during the year (excluding equity-accounted companies), i.e., all of the Group's intangible assets (excluding acquired intangible assets), property, plant and equipment, loans and deposits, and net working capital.

Non-euro currencies are translated at year-end rates for balance sheet items and average rates for income statement items.

If ROCE is greater than weighted average cost of capital (WACC) for the year, then the Group has created value during the period.

The Group's weighted average cost of capital (WACC) is estimated at 7.5%, it is based on a theoretical balance between equity and debt. The WACC is benchmarked externally. The rates used are determined (i) for equity capital, based on the yield on Michelin shares expected by the stock markets; and (ii) for debt capital, on the market risk-free rate plus the risk premium applied to Michelin by the markets, as adjusted for the tax effect.

(in € millions)	2019	2018
Segment operating income	3,009	2,775
Average standard income tax rate used for ROCE calculation	26%	26%
Segment operating income after tax (NOPAT)	**2,227**	**2,053**
Economic assets at December 31	17,430	14,867
Average economic assets	**16,233**	**14,661**
Consolidated ROCE	**13.7%**	**14.0%**
Passenger car/Light truck tires & related distribution ROCE	12.2%	14.4%
Truck tires & related distribution ROCE	10.8%	11.4%
Specialty businesses & related distribution ROCE	19.5%	18.4%

3.7 TREND INFORMATION

3.7.1 OUTLOOK

In 2020, the Passenger car and Light truck tire markets are expected to decline slightly over the year, with flat growth in Replacement demand and a sustained contraction in Original Equipment demand. Truck and Off-the-road tire markets should continue to soften, impacted by the sharp decline in Original Equipment business. Mining markets should also shrink due to a slight inventory adjustment, while tire consumption should be sustained.

In this generally declining market environment, Michelin's objectives for 2020 are as follows: Segment operating income at constante parity slightly down on the prior year and free cash flow of more than €1.5 billion excluding the systemic effect of the coronavirus crisis in China.

3.7.2 PROFIT FORECASTS OR ESTIMATES

No precise earnings or operating margin forecasts or estimates have been issued for 2020.

In light of the trend information provided in section 3.7.1, any previously issued targets for 2020 do not take into account the current economic environment and are not achievable this year.

3.7.3 RECENT EVENTS

On January 7, 2020, the Group called on the assistance of an investment services provider for the implementation of its share buyback program as authorized by the Annual Shareholders Meeting of May 17, 2019. The investment services provider has agreed to sell to CGEM, and CGEM has agreed to purchase, between January 8, 2020 and November 19, 2020, a certain quantity of CGEM shares for a maximum consideration of €100 million. All of the acquired shares will be canceled.

No other significant event occurred between the reporting date and the date when the Managing Chairman approved the consolidated financial statements for publication.

3.8 SHARE INFORMATION

3.8.1 THE MICHELIN SHARE

Traded on the Euronext Paris stock exchange

- Compartment A;
- Eligible for the SRD deferred settlement system;
- ISIN: FR 0000121261;
- Par value: €2;
- Traded in units of: 1.

Market capitalization

- €19,488 million at December 31, 2019.

Average daily trading volume

- 577,545 shares since January 1, 2019.

3.8.1 a) Indices

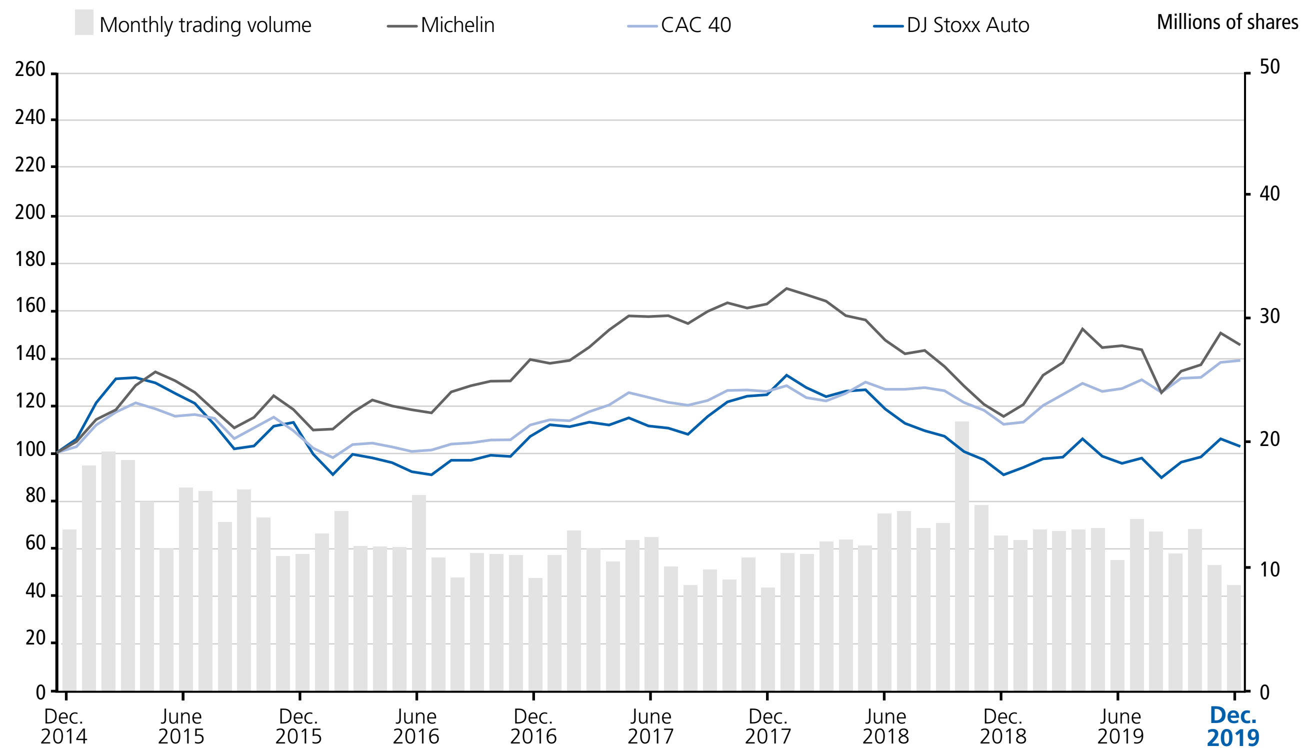
The Michelin share is included in two leading stock market indices:

- CAC 40: 1.47% of the index at December 31, 2019;
- Euronext 100: 0.64% of the index at December 31, 2019;

Michelin is also included in the main Socially Responsible Investing (SRI) indices:

- FTSE4Good;
- Ethibel Sustainability Index (ESI) Europe;

SHARE PERFORMANCE



3.8.2 DETAILED SHARE DATA

Share price *(in €)*	2019	2018	2017	2016	2015	2014
Session high	119.50	130.85	128.40	106.80	103.90	94.33
Session low	83.74	82.68	98.93	77.40	71.60	65.10
High/Low ratio	1.43	1.58	1.30	1.38	1.45	1.45
Closing price, end of period	109.10	86.70	119.55	105.70	87.90	75.27
Average closing price over the period	104.36	109.40	115.65	91.97	90.26	82.10
Change in the Michelin share price over the period	25.84%	-27.48%	13.10%	20.25%	16.78%	-2.56%
Change in the CAC 40 index over the period	*26.37%*	*-10.95%*	*9.26%*	*4.86%*	*8.53%*	*-0.54%*
Market value *(at end of period, in € billions)*	**19.49**	**15.59**	**21.45**	**19.03**	**15.98**	**13.98**
Average daily trading volume over the period	577,545	649,347	503,534	554,262	719,709	662,063
Average shares outstanding	179,669,608	179,384,513	182,212,806	182,122,667	185,960,394	185,954,390
Volume of shares traded over the period	147,273,882	165,583,378	128,401,095	142,445,218	184,245,619	168,826,055
Share turnover rate	**82%**	**92%**	**71%**	**78%**	**99%**	**91%**

3.8.3 PER SHARE DATA

(in € per share, except ratios)	2019	2018	2017	2016	2015
Net assets per share	74.1	67.8	62.7	59.1	52.5
Basic earnings per share	9.69	9.30	9.39	9.21	6.28
Diluted earnings per share(1)	9.66	9.25	9.34	9.03	6.19
Price-earnings ratio	**11.3**	**9.3**	**12.7**	**11.5**	**14.0**
Dividend for the year(2)	3.85	3.70	3.55	3.25	2.85
Payout ratio	37.6%	36.4%	36.0%	36.5%	37.0%
Yield(3)	3.5%	4.3%	3.0%	3.1%	3.2%

(1) Earnings per share adjusted for the impact on net income and the average number of shares of the exercise of outstanding dilutive instruments.
(2) Subject to approval at the Annual Shareholders Meeting on May 15, 2020.
(3) Dividend/share price at December 31.

3.8.4 CAPITAL AND OWNERSHIP STRUCTURE

At December 31, 2019, Michelin's share capital amounted to €357,255,110.

	At December 31, 2019		
	Number of shareholders	Shares outstanding	Voting rights outstanding
French institutional investors	3,735	27.4	29.1
Non-resident institutional investors		61.3	57.1
Individual shareholders(1)	141,628	9.5	11.8
Employee share ownership plan (2)	58,079	1.8	2.0
TOTAL	**203,442**	**178,627,555 SHARES(3)**	**240,861,826 VOTING RIGHTS**

(1) The change compared to the previous year is due to the reclassification of non-resident individual shareholders.
(2) Group ex-employees and retirees are now registered in the Individual shareholders category.
(3) All fully paid up.

Shares held in the same name for at least four years carry double voting rights.

3.9 HIGHLIGHTS

3.9.1 STRATEGY

Michelin acquires 99.64% of leading Indonesian tire manufacturer Multistrada

(March 8, 2019, April 16, 2019) – After taking an 87.59% stake in PT Multistrada Arah Sarana TBK (March 8, 2019), Michelin has acquired an additional 12.05% following a public offer for the remaining outstanding shares (April 16, 2019). Through the transaction, Michelin will strengthen its presence in the highly promising but local-production dominated Indonesian market by acquiring a very competitive plant with good quality facilities and immediately available capacity to manufacture up to 180,000 tonnes of Passenger car, Two-wheel and Truck tires.

Faurecia and Michelin join forces to create a future world leader in hydrogen mobility

(March 11, 2019) – Faurecia and Michelin, the current parent company of Symbio (a hydrogen company), have signed a memorandum of understanding. Symbio will be owned equally by Faurecia and Michelin. This French joint venture, built around a unique ecosystem, will develop, produce and market hydrogen fuel cell systems for light vehicles, utility vehicles, trucks.

Investor Day held in Almeria (Spain) and €500 million share buyback program announced, to be implemented between 2019 and 2023

(April 4, 2019) – At an Investor Day held at its Spanish test center in Almeria, Michelin confirmed its growth strategy and announced a €500 million share buyback program to be implemented between 2019 and 2023, including €70 million in 2019. During this day, the Group also reaffirmed the commitment of all Michelin employees to meeting its ambitious growth objectives in support of sustainable mobility.

Gulf Air chooses Michelin as exclusive tire supplier

(May 3, 2019) – Gulf Air, the national carrier of the Kingdom of Bahrain, has chosen Michelin to equip every aircraft type in its fleet including its brand new Boeing 787-9 Dreamliners, Airbus 320neos and Airbus 321neos. With Gulf Air's fleet already fitted with Michelin tires over the past decade, the new contract is just the latest chapter in the successful, long-lasting relationship between the two companies. The complete revamp of Gulf Air's new fleet is the perfect opportunity to introduce the MICHELIN Air X tire featuring the patented Michelin Near Zero Growth technology.

Michelin acquires Masternaut, stepping up deployment of its telematics solutions across Europe

(May 16, 2019) – Michelin has acquired the entire share capital of Masternaut, one of the largest European telematics providers. Masternaut operates primarily in France and the United Kingdom. It provides a technical platform equipped with the latest technology and offers on-board fleet telematics solutions to optimize vehicle fleet management and monitoring. Masternaut manages over 220,000 mostly light utility vehicles under contract. The acquisition bolsters the Group's presence in the booming fleet services market.

Florent Menegaux, Managing General Partner, elected Managing Chairman of the Group

(May 17, 2019) – The Annual Meeting of Michelin shareholders was held on May 17, 2019 in Clermont-Ferrand. Following the Meeting, Florent Menegaux, Managing General Partner, became Managing Chairman, succeeding Jean-Dominique Senard.

Michelin acquires a 22.8% stake in a unique public-private partnership to create Hympulsion, whose mission is to encourage renewable hydrogen powered mobility in the Auvergne-Rhône-Alpes region

(May 20, 2019) – Hympulsion is a unique public-private partnership owned 49% by the Auvergne-Rhône-Alpes Region and the Banque des Territoires and 51% by Michelin, ENGIE and Crédit Agricole. It is tasked with stepping up the deployment of Zero Emission Valley, France's first renewable hydrogen-powered mobility project for corporate fleets, involving 1,000 vehicles and 20 refueling stations. Co-financed by European funds, the project is committed to providing vehicles and renewable hydrogen at an overall cost that is on a par with diesel. It represents a real-world response to the environmental, industrial and economic challenges of hydrogen mobility.

Michelin presents the safety, purchasing power and environmental benefits of its LONG LASTING PERFORMANCE approach in Vienna. The approach has been recognized by the European Parliament, which has added worn tire testing to EU safety regulations from 2022

(June 3, 2019) – Presented in Vienna from July 1 to 5, 2019, Michelin's LONG LASTING PERFORMANCE approach highlighted the Group's firm conviction that everyone is entitled to tires that deliver safe performance from the first to the last kilometer. Michelin supports the passage of legislation that would encourage this performance and welcomes the recent decisions of the European Parliament to raise safety standards by introducing tests on worn tires from 2022. In addition to safety, this approach has a direct impact on consumer purchasing power and the environment, in particular by enabling motorists to use their tires longer before replacing them, thereby saving raw materials.

Inaugural edition of the MICHELIN Guide California, featuring 90 starred restaurants

(June 4, 2019) – Michelin is pleased to unveil the highly anticipated selection of star awards in the 2019 MICHELIN Guide California, the first ever statewide MICHELIN Guide in the United States. Expanding the selection announced in the 2019 MICHELIN Guide San Francisco, the Guide now showcases 657 restaurants across the state.

Fenner expands its industrial presence in Australia

(July 24, 2019) – Fenner, the world leader in industrial and mining conveyor belt solutions, acquired by the Michelin group in 2018, has announced the opening of a new production site in Brisbane, Australia. Manufacturing process has been optimized through robotic automation to reduce production costs while maintaining the highest quality.

WWF France and the Michelin group renew their partnership

(July 26, 2019) – WWF France and the Michelin group have renewed their joint commitment to a sustainable natural rubber market and the development of a pilot project in Indonesia to preserve and restore forests while developing responsible rubber plantations that are good for local communities and ecosystems. In this new phase, the partnership will expand to include two additional areas: sustainable mobility and biodiversity conservation.

The Michelin group announces the closure of its Bamberg (Germany) site

(September 25, 2019) – In response to a steep drop in global demand for 16-inch tires and fierce competition from Asian manufacturers on this segment, Michelin made the decision to close its production site in Bamberg (Germany). Negotiations with the social partners are currently under way.

Michelin announces its intention to close the La Roche-sur-Yon (France) site

(October 10, 2019) – The La Roche-sur-Yon site, which specializes in high-end truck tires, will end production. The Michelin group's decision was driven by the lack of growth potential on the European market of this tire segment, heightened competition, and the steady growth of the entry level brand segment. On January 23, a majority agreement for aiding employees was signed by unions representing its personnel.

Michelin files public offer to acquire all outstanding shares of Société Internationale de Plantation d'Hévéas (SIPH)

(November 20, 2019) – On October 15, 2019, Michelin filed a draft buyout offer with squeeze-out (BOSO) for the outstanding shares of Société Internationale de Plantation d'Hévéas (SIPH). The offer was launched on November 20, 2019, with the squeeze-out taking place on December 6, 2019, The transaction followed on from the public offer carried out by Michelin in 2017.

Faurecia and Michelin including its subsidiary "Symbio", formalize their joint venture and aim to create a world leader in mobility

(November 21, 2019) – In March 2019, Faurecia and Michelin announced the signature of a Memorandum of Understanding to create a joint venture bringing together all of Michelin's fuel cell related activities – including its subsidiary Symbio – with those of Faurecia. An alliance that just a few months later led to the creation of SYMBIO, A FAURECIA MICHELIN HYDROGEN COMPANY, which aims to achieve 25% market share and sales of around €1.5 billion by 2030.

The MICHELIN Guide, TripAdvisor®, and TheFork launch an international strategic partnership

(December 3, 2019) – The Michelin Guide has teamed up with TripAdvisor® and TheFork to bring users an array of exclusive and unique dining experiences, with access to a broader selection of gourmet restaurants worldwide. For TheFork, the acquisition of BookaTable opens up five new markets: the UK, Germany, Austria, Finland, and Norway.

Capital Reduction

(December 9, 2019) – The Compagnie Générale des Établissements Michelin has decided to cancel 1,345,821 treasury shares, representing 0.75% of the total shares outstanding. On December 9, 2019, its issued share capital therefore decreased to 178,601,169 shares.

3.9.2 INNOVATION

At the Geneva International Motor Show, Michelin presents the two latest additions to the MICHELIN Pilot Sport family: the MICHELIN Pilot Sport 4 SUV and the MICHELIN Pilot Sport Cup2 R

(March 5, 2019) – Its two latest additions, the MICHELIN Pilot Sport 4 SUV and the MICHELIN Pilot Sport Cup2 R, were unveiled at the Geneva International Motor Show. Designed for drivers who want to use the full potential of their car and increase their driving pleasure, the new models leverage technologies developed in motorsport and in cooperation with the most demanding car manufacturers.

Michelin elected "Tire Manufacturer of the Year"

(March 8, 2019) - At the Tire Technology Expo 2019 in Germany, a global panel of 31 tire industry experts voted Michelin "Tire Manufacturer of the Year". The jury rewarded Michelin in particular for its environmental initiatives, its product innovations, and its work on the performance of used tires.

Launch of the new MICHELIN Anakee Adventure motorcycle tire in one of the most dynamic, competitive and innovative markets

(March 21, 2019) – With this new tire, which ticks all the performance-related boxes, and will appeal to exacting on Michelin is effectively addressing the expectations of customers who use their bike in all weather for commuting, or predominantly at the weekend, not only on sealed surfaces but also off-road.

Michelin extends its X Multi regional truck tire range

(May 3, 2019) – The new X Multi HD D tire is designed for tractor units and trucks for road use mainly, and for loading phases, use in rural areas. The X Multi T2 tire is intended for low platform height trailers, such as tank carriers or exceptional convoys. The common characteristic of these two Michelin X Multi tires is their robustness, which offers users greater safety and lower operating costs.

At the Movin'On summit, Michelin and General Motors presented the MICHELIN Unique Puncture-Proof Tire System (Uptis) prototype, a new generation of airless wheels for passenger vehicles

(June 4, 2019) – At the Movin'On Summit third edition held from June 4 to 6, 2019 in Montreal, Michelin and General Motors (GM) presented the Uptis prototype, the first airless tire developed by the two companies' research partnership, which is now being tested on vehicles like the Chevrolet Bolt EV. MICHELIN Uptis features ground-breaking improvements in architecture and composite materials, which enable it to bear the car's weight at road-going speeds. This stage represents a major advancement toward achieving Michelin's VISION concept, presented at the Movin'On Summit in 2017, and demonstrates Michelin's and GM's shared commitment to delivering safer, more sustainable mobility solutions.

BMW chooses the MICHELIN Pilot Sport 4S as a tire fitment for its new X3 M and X4 M models*

(June 18, 2019) – BMW has chosen the MICHELIN Pilot Sport 4S* as the sole fitment for the global press launch of its new high performance X3 M and X4 M models. The result of almost three years of co-development between BMW M and Michelin, the tires feature such novel Michelin technologies as multi-compound treads and aramid-fiber reinforced casings. The contract has confirmed Michelin's long and successful relationship with BMW M.

Michelin and Safran announce successful flight tests of the world's first connected aircraft tire

(June 19, 2019) – At the Paris Air Show, Michelin and Safran Landing Systems announced the successful flight tests of PresSense, the world's first connected aircraft tire, on June 13 at the Istres air base in southern France, using a Dassault Aviation Falcon 2000S. The flight tests mark the latest phase in the development of the PresSense solution and pave the way for an entry into service towards 2020. The wireless solution is designed to facilitate ground maintenance operations for airlines by sharply reducing tire cooling time, thereby speeding aircraft turnaround.

CAMSO launches its brand new X4S track system

(August 6, 2019) – The X4S track system is designed to meet the full spectrum of ATV owners' needs, even on the toughest terrain. It is an ideal solution for users looking for better performance, excellent versatility and easy handling on any terrain, year-round. Michelin finalized its acquisition of CAMSO in 2018 and has created the leader of the off-road mobility.

Launch of the MICHELIN Road 5 GT, a tire designed for riders

(September 3, 2019) – The MICHELIN Road 5 GT tire is built for high performance, especially on wet ground, to guarantee stability and efficient braking. Designed using additive metal manufacturing technology, it features sipes that change over time to maintain its water-clearance capacity as it is used.

Michelin, Continental and Smag create a joint-venture to develop Rubberway®, the mobile app designed to map sustainability practices across the natural rubber industry

(September 12, 2019) – Rubberway® uses the data collected to assess practices and environmental, social, and governance risks from rubber processing plants to plantations. Tire manufacturers can use it to identify and boost sustainability in the natural rubber supply chain.

Michelin, IFPEN, and Axens announce the construction of the first industrial-scale prototype of a plant producing butadiene from bioethanol

(September 26, 2019) – This decision lends a new dimension to the BioButterfly project and highlights the partners' commitment to reducing the environmental impact of manufacturing by encouraging the development of a biosourced synthetic rubber industry. Remember that biosourced and high-tech materials support the Group's growth strategy of changing mobility to make it more sustainable. This production process will also help Michelin secure its access to butadiene.

The BioImpulse project is giving new impetus to biotechnologies in materials

(October 1, 2019) – The BioImpulse project, which Michelin coordinates through its ResiCare entity, aims to create a new adhesive resin that is free of Substances of Very High Concern (SVHC). The global market targeted by this replacement resin has very strong potential, particularly in the automotive and construction industries. Remember that biosourced and high-tech materials support the Group's growth strategy of changing mobility to make it more sustainable.

Michelin overhauls its road bike tire offer

(October 16, 2019) – With "MICHELIN POWER," Michelin has developed its Premium Road tire offer to better fit the needs of amateur and professional cyclists dedicated to the pursuit of excellence. Road cycling tires account for over half of the Group's cycling sales.

Michelin pushes the limits of electric bus tires with the MICHELIN X-Incity Energy Z"

(October 17, 2019) – This innovation opens up new possibilities for electric bus designers thanks to increased battery life while offering the same capacities as those of current buses. The MICHELIN X-Incity Energy Z also fits into the Michelin group's strategy of offering consumers tires that remain safe and high-performing throughout their lifespan.

Michelin and Essilor join forces for safer mobility, with the announcement of a two-year Memorandum of Understanding

(November 7, 2019) – Michelin and Essilor have decided to formalize their shared commitment to road safety with a cooperation agreement that combines both companies' expertise. Its goal: raising public awareness of the importance of having good vision and tires in good condition that are reliable up to the legal wear limit to keep them safe on the road.

Michelin presents AgroPressure by Michelin, a free decision support module, at the 2019 AGRITCHNICA show.

(November 12, 2019) – With its new AgroPressure by Michelin service, the Michelin group is offering a personalized, connected solution that its agricultural customers can use to make the most of their equipment, protect their soil, and increase their yields. It also offers benefits in terms of fuel costs and tire wear.

3.9.3 RACING

2019 World Endurance Championship – 24 Hours of Le Mans 2019: Toyota Gazoo Racing's double win clinches Michelin's 22nd straight victory

(June 17, 2019) – The 2019 race saw Toyota Gazoo Racing claim first and second places to clinch the 2019 FIA World Endurance Championship title with Sébastien Buemi, Kazuki Nakajima (Japan's first ever FIA World Champion) and Fernando Alonso, who steered the No. 8 Toyota TS050-Hybrid to Michelin's 22nd straight Le Mans victory. On both track and street, Michelin is committed to meeting the same exacting standard of long-lasting performance.

Michelin looks back at the MICHELIN Pilot Sport tire's maiden Formula E season: a tire worthy of its ambitions

(July 15, 2019) – These new tires, designed by Michelin Motorsport's engineers, stood out in all the 2018/2019 Formula E FIA Championship races. Race after race, they proved their energy efficiency, versatility, longevity and high performance.

Michelin to make Playstation's Gran Turismo Sport even more gripping for gamers

(August 23, 2019) – Michelin is the "official tire technology partner" for Gran Turismo, the most realistic racing video game on the market. Players choose between hard, medium, and soft MICHELIN tires as they develop their racing strategy, experience the thrill of racing, and get to know the brand.

Michelin launches the first connected racing tire for Formula-E Season 6

(November 22, 2019) – With Michelin Track Connect, its connected solution for motorsport which was used in international car racing and an FIA championship for the first time in 2019-2020, Michelin is investing to stay on the cutting edge of technology. For the Group, this solution also represents a way to accelerate connected mobility for all.

3.10 CONSOLIDATED KEY FIGURES AND RATIOS

(in € millions)	2019	2018*	2017	2016	2015
Sales	24,135	22,028	21,960	20,907	21,199
% change	+9.6%	+0.3%	+5.0%	-1.4%	+8.4%
Total employee benefit costs	6,365	6,038	5,871	5,542	5,785
as a % of sales	26.4%	27.4%	26.7%	26.5%	27.3%
Number of full-time equivalent employees at period-end	121,300	111,100	107,800	105,700	105,800
Research and development expenses	687	648	641	718	689
as a % of sales	2.8%	2.9%	2.9%	3.4%	3.3%
Segment EBITDA(1)	**4,763**	**4,119**	**4,087**	**4,084**	**3,934**
Segment operating income	3,009	2,775	2,742	2,692	2,577
Segment operating margin	12.5%	12.6%	12.5%	12.9%	12.2%
Operating income	2,691	2,550	2,631	2,791	2,207
Operating margin	11.1%	11.6%	12.0%	13.3%	10.4%
Cost of net debt	330	200	176	203	184
Other financial income and expenses	(5)	16	(0)	20	(30)
Income before taxes	2,236	2,230	2,354	2,464	1,869
Income tax	506	570	661	797	706
Effective tax rate	22.6%	25.6%	28.1%	32.3%	37.8%
Net income	1,730	1,660	1,693	1,667	1,163
as a % of sales	7.2%	7.5%	7.7%	8.0%	5.5%
Dividends(2)	666	637	585	522	463
Net cash from operating activities	**3,321**	**2,831**	**2,741**	**2,764**	**2,695**
as a % of sales	13.8%	12.9%	12.5%	13.2%	12.7%
Gross purchases of intangible assets and PP&E	1,801	1,669	1,771	1,811	1,804
as a % of sales	7.5%	7.6%	8.1%	8.7%	8.5%
Net debt(3)	5,184	4,056	716	944	1,008
Total equity	13,229	12,181	11,261	10,646	9,542
Gearing	39%	33%	6%	9%	11%
Net debt(3)/EBITDA(1)	1.09	0.98	0.18	0.23	0.26
Segment operating income/net interest expense(4)	10.1	13.3	15.9	13.3	12.8
Free cash flow(5)	1,142	(1,985)	662	1,024	653
ROE(6)	13.1%	13.6%	15.0%	15.7%	12.2%
ROCE(7)	-	-	11.9%	12.1%	12.2%
Operating ROCE(8)	13.7%	14.0%	13.0%	-	-
Per share data *(in €)*					
Net assets per share(9)	74.1	67.8	62.7	59.1	52.5
Basic earnings per share	9.69	9.30	9.39	9.21	6.28
Diluted earnings per share	9.66	9.25	9.34	9.03	6.19
Price-earnings ratio(10)	11.3	9.3	12.7	11.5	14.0
Dividend for the year(11)	3.85	3.70	3.55	3.25	2.85
Payout ratio(12)	37.6%	36.4%	36.0%	36.5%	37.0%
Yield(13)	3.5%	4.3%	3.0%	3.1%	3.2%
Share turnover rate(14)	82%	92%	71%	78%	99%

* *The 2018 figures have been restated for comparison purposes (see note 2.5 to the consolidated financial statements).*
(1) *As defined in note 3.7.2 to the consolidated financial statements.*
(2) *Including the dividends paid in shares.*
(3) *Net debt: financial liabilities - cash and cash equivalents adjusted for net cash flows relating to cash pool assets and financial assets lodged as collateral for debt +/- derivative assets, as defined in note 26 to the consolidated financial statements.*
(4) *Net interest expense: interest expense - interest income from cash and equivalents.*
(5) *Free cash flow: as calculated in section 3.5.3.*
(6) *ROE: net income attributable to the shareholders/shareholders' equity excluding non-controlling interests.*
(7) *ROCE: net segment operating profit after tax (NOPAT)/capital employed (intangible assets and PP&E + non-current financial assets + working capital), as calculated in section 3.6.*
(8) *Operating ROCE: net segment operating profit after tax (NOPAT)/capital employed (intangible assets and PP&E + non-current financial assets + working capital and goodwill - acquired intangible assets and investments in equity-accounted companies), as calculated in section 3.6.*
(9) *Net assets per share: net assets/number of shares outstanding at the end of the period.*
(10) *Price-earnings ratio: share price at the end of the period/basic earnings per share.*
(11) *Subject to approval at the Annual Shareholders Meeting on May 15, 2020.*
(12) *Payout ratio: Dividend/net income excluding non-recurring items (adjusted with respect to the nominal tax rate).*
(13) *Yield: dividend per share/share price at December 31.*
(14) *Share turnover rate: number of shares traded during the year/average number of shares outstanding during the year.*

04

CONSOLIDATED FINANCIAL STATEMENTS YEAR ENDED DECEMBER 31, 2019

CONSOLIDATED FINANCIAL STATEMENTS – YEAR ENDED DECEMBER 31, 2019

DETAILED SUMMARY OF THE NOTES TO THE CONSOLIDATED STATEMENTS

CONSOLIDATED INCOME STATEMENT

(in € millions, except per share data)	Note	2019	2018(1)
Sales	5	24,135	22,028
Cost of sales		(17,053)	(15,517)
Gross income		**7,082**	**6,511**
Sales and marketing expenses		(1,380)	(1,267)
Research and development expenses		(687)	(648)
General and administrative expenses		(1,987)	(1,816)
Segment other income and expenses	8	(19)	(5)
Segment operating income	**5**	**3,009**	**2,775**
Other operating income and expenses	9	(318)	(225)
Operating income		**2,691**	**2,550**
Cost of net debt	10	(330)	(200)
Other financial income and expenses	10	(5)	16
Net interest on employee benefit obligations	27.1	(98)	(90)
Share of profit/(loss) from equity-accounted companies	17	(22)	(46)
Income before taxes		**2,236**	**2,230**
Income tax	11	(506)	(570)
NET INCOME		**1,730**	**1,660**
▶ Attributable to the shareholders of the Company		1,751	1,677
▶ Attributable to the non-controlling interests		(21)	(17)
Earnings per share *(in €)*	**12**		
▶ Basic		9.69	9.30
▶ Diluted		9.66	9.25

(1) The 2018 figures have been restated for comparison purposes (see note 2.5 to the consolidated financial statements).

Notes 1 to 37 are an integral part of the consolidated financial statements.

CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

(in € millions)	Note	2019	2018[(1)]
Net income		**1,730**	**1,660**
Post-employment benefits	27.1	(131)	71
Tax effect – Post-employment benefits	18	16	(101)
Equity instruments at fair value through OCI – changes in fair value	15.1	20	-
Tax effect – equity instruments at fair value through OCI		6	-
Other comprehensive income that will not be reclassified to the income statement		***(89)***	***(30)***
Cash flow hedges – changes in fair value		46	(37)
Currency translation differences		201	(57)
Other		5	40
Other comprehensive income that may be reclassified to the income statement		***252***	***(54)***
Other comprehensive income		**163**	**(84)**
TOTAL COMPREHENSIVE INCOME		**1,893**	**1,576**
▶ Attributable to the shareholders of the Company		1,914	1,590
▶ Attributable to the non-controlling interests		(21)	(14)

(1) The 2018 figures have been restated for comparison purposes (see note 2.5 to the consolidated financial statements).

Notes 1 to 37 are an integral part of the consolidated financial statements.

CONSOLIDATED STATEMENT OF FINANCIAL POSITION

(in € millions)	Note	December 31, 2019	December 31, 2018[1]
Goodwill	13	2,388	2,160
Intangible assets	13	2,280	2,217
Property, plant and equipment (PP&E)	14	13,169	11,644
Non-current financial assets and other non-current assets	15	796	699
Investments in equity-accounted companies	17	1,087	953
Deferred tax assets	18	814	752
Non-current assets		**20,534**	**18,425**
Inventories	19	4,694	4,702
Trade receivables	20	3,532	3,453
Current financial assets	21	396	315
Other current assets	22	1,055	1,103
Cash and cash equivalents	23	1,466	2,128
Current assets		**11,143**	**11,701**
TOTAL ASSETS		**31,677**	**30,126**
Share capital	24	357	360
Share premiums	24	2,789	2,923
Reserves	25	10,080	8,875
Non-controlling interests		3	23
Equity		**13,229**	**12,181**
Non-current financial liabilities	26	5,923	5,302
Provisions for employee benefit obligations	27.1	3,873	3,858
Provisions and other non-current liabilities	29	1,104	1,319
Deferred tax liabilities	18	455	435
Non-current liabilities		**11,355**	**10,914**
Current financial liabilities	26	1,158	1,222
Trade payables		2,627	2,600
Trade payables under reverse factoring agreements	3.26	470	440
Provisions and other current liabilities	30	2,838	2,769
Current liabilities		**7,093**	**7,031**
TOTAL EQUITY AND LIABILITIES		**31,677**	**30,126**

(1) The 2018 figures have been restated for comparison purposes (see note 2.5 to the consolidated financial statements).

Notes 1 to 37 are an integral part of the consolidated financial statements.

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

(in € millions)	Share capital (note 24)	Share premiums (note 24)	Reserves (note 25)	Non-controlling interests	Total
At January 1, 2018	**359**	**2,942**	**7,925**	**35**	**11,261**
Net income/(loss)	-	-	1,677	(17)	1,660
Other comprehensive income	-	-	(87)	3	(84)
Comprehensive income	**-**	**-**	**1,590**	**(14)**	**1,576**
Issuance of shares	2	56	-	-	58
Share buybacks	-	-	(75)	-	(75)
Cancellation of shares	(1)	(74)	75	-	-
Dividends and other appropriations	-	-	(647)	(1)	(648)
Share-based payments – current service cost	-	-	7	-	7
Other	-	(1)	-	3	2
At December 31, 2018(1)	**360**	**2,923**	**8,875**	**23**	**12,181**
Net income/(loss)	-	-	1,751	(21)	1,730
Other comprehensive income	-	-	163	-	163
Comprehensive income	**-**	**-**	**1,914**	**(21)**	**1,893**
Issuance of shares	-	4	-	-	4
Share buybacks	-	-	(141)	-	(141)
Cancellation of shares	(3)	(138)	141	-	-
Dividends and other appropriations	-	-	(675)	(1)	(676)
Share-based payments – current service cost	-	-	7	-	7
Other	-	-	(41)	2	(39)
AT DECEMBER 31, 2019	**357**	**2,789**	**10,080**	**3**	**13,229**

(1) The 2018 figures have been restated for comparison purposes (see note 2.5 to the consolidated financial statements).

Notes 1 to 37 are an integral part of the consolidated financial statements.

CONSOLIDATED STATEMENT OF CASH FLOWS

(in € millions)	Note	2019	2018(1)
Net income		1,730	1,660
Adjustments			
▶ Cost of net debt	10	330	200
▶ Other financial income and expenses	10	5	(16)
▶ Net interest on employee benefit obligations	27.1	98	90
▶ Income tax	11	506	570
▶ Amortization, depreciation and impairment of intangible assets and PP&E	6	1,754	1,344
▶ Other operating income and expenses	9	318	225
▶ Share of profit from equity-accounted companies	17	22	46
Segment EBITDA	**3.7.2.**	**4,763**	**4,119**
Other operating income and expenses (cash) and change in provisions	31	(399)	(413)
Interest and other financial income and expenses received and paid, net	31	(325)	(182)
Income tax paid	18.2	(619)	(497)
Change in working capital, net of impairment	31	(99)	(196)
Net cash from operating activities		**3,321**	**2,831**
Purchases of intangible assets and PP&E	31	(1,782)	(1,716)
Proceeds from sales of intangible assets and PP&E		67	100
Equity investments in consolidated companies, net of cash acquired		(553)	(3,138)
Disposals of equity investments in consolidated companies, net of cash sold		128	161
Purchases of equity instruments at fair value		(15)	(18)
Disposals of equity instruments at fair value		17	29
Cash flows from other financial assets	31	(109)	(224)
Net cash from/(used in) investing activities		**(2,247)**	**(4,806)**
Proceeds from issuance of shares	24	4	58
Dividends paid to the shareholders of the Company	24	(665)	(637)
Cash flows relating to financial liabilities, net	31	(870)	3,020
Share buybacks	24	(141)	(75)
Other		(68)	(38)
Net cash from/(used in) financing activities		**(1,740)**	**2,328**
Effect of changes in exchange rates		**4**	**2**
INCREASE/(DECREASE) IN CASH AND CASH EQUIVALENTS		**(662)**	**355**
Cash and cash equivalents at January 1		**2,128**	**1,773**
Cash and cash equivalents at December 31	**23**	**1,466**	**2,128**

(1) The 2018 figures have been restated for comparison purposes (see note 2.5 to the consolidated financial statements).

Notes 1 to 37 are an integral part of the consolidated financial statements.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

NOTE 1 GENERAL INFORMATION

Compagnie Générale des Établissements Michelin (CGEM or the "Company") and its subsidiaries (together "the Group") design, manufacture and market tires throughout the world. The Group also provides its customers with tire-related services and solutions, mobility experiences and expertise in high-tech materials.

The Company is a partnership limited by shares *(société en commandite par actions)* incorporated in Clermont-Ferrand (France).

The Company is listed on Euronext Paris (Eurolist Compartment A).

After a review by the Supervisory Board, these consolidated financial statements were authorized for issue by the Managing Chairman on February 7, 2020.

Except as otherwise stated, all amounts are presented in millions of euros (€ millions).

NOTE 2 BASIS OF PREPARATION

2.1 Statement of compliance

The consolidated financial statements:

- have been prepared in accordance with the International Financial Reporting Standards (IFRS) adopted by the European Union as of the reporting date and applicable to the period then ended;
- also comply with the International Financial Reporting Standards (IFRS) published by the International Accounting Standards Board (IASB); and
- have been prepared using the historical cost convention, with the exception of unconsolidated equity investments and financial assets and liabilities (including derivatives), which are measured at fair value through profit and loss or other comprehensive income.

2.2 Accounting policies

The accounting policies applied in the preparation of the Group's consolidated financial statements are set out in note 3 "Accounting policies". Aside from the exceptions described in sections 2.3 and 2.5 below, these policies have been consistently applied to all the years presented.

2.3 New standards, amendments to existing standards and interpretations effective from January 1, 2019 in the European Union

2.3.1 IFRS 16 "Leases"

IFRS 16 "Leases", published in January 2016 and adopted by the European Union in November 2017, has been applied by the Group as from January 1, 2019. This new standard provides a comprehensive model for the identification of lease arrangements and their treatment in the financial statements of both lessees and lessors. IFRS 16 supersedes IAS 17 and its associated interpretative guidance. The accounting policies applied and assumptions used to account for leases are set out in note 3.16.1.

The new standard applies a control model for the identification of leases, distinguishing between leases and service contracts on the basis of whether there is an identified asset controlled by the customer. In accordance with transitional provisions of IFRS 16, the Group has applied this standard to contracts previously identified as leases in application of IAS 17 and IFRIC 4. The implementation project showed that the new definition of leases in IFRS 16 does not materially affect the scope of contracts identified as leases by the Group.

This new definition has been applied to contracts signed or amended since the date of first-time application of the standard.

Significant changes to the lessee's accounting model have been introduced, as the previous distinction between operating and finance leases has been removed. The lessee must recognize an asset, corresponding to the right of use, and a liability corresponding to the lease commitment.

This standard has been applied as from January 1, 2019 without restatement of 2018 comparatives, as permitted by the simplified retrospective method. In addition, the Group has applied the practical simplifications provided for short-term leases, including leases with a remaining term of less than 12 months after the application date and those relating to low-value assets (mainly computers, printers and tools).

Most of the leases are operating leases where the Group is the lessee. Leased assets are mainly real estate assets (points of sale for the Group's integrated distribution network, sales and administrative offices), passenger cars and forklifts.

For contracts previously classified as finance leases, the Group has maintained the carrying amount of the right-of-use assets and lease liability at the date of initial application.

For the purposes of the transition, the incremental borrowing rate used is the rate applicable to the residual term of the lease, taking into account each subsidiary's specific credit risk, the currency of the contract and the weighted average maturity of the reimbursement of the lease liability.

The reconciliation between operating lease commitments disclosed at December 31, 2018 and the lease liability recognized at the IFRS 16 first-time application date is presented below:

(in € millions)	
Operating lease commitments disclosed at December 31, 2018	**917**
(Less): lease commitments on short-term leases	(69)
(Less): lease commitments on low-value assets	(69)
Add: adjustments resulting from a different treatment of extension and termination options	175
Discounted using the average incremental borrowing rate of 3.7% at the date of initial application	**815**
Add: finance lease liabilities recognized at December 31, 2018	316
LEASE LIABILITY AT JANUARY 1, 2019	**1,131**
Of which:	
Current lease liabilities	*211*
Non-current lease liabilities	*920*

Right-of-use assets include the following types of assets:

(in € millions)	December 31, 2019	January 1, 2019
Land and buildings	889	880
Plant and industrial equipment	74	70
Other equipment	164	178
TOTAL RIGHT-OF-USE ASSETS	**1,127**	**1,128**

Movements for the year are presented in note 14.1.

The first-time application of IFRS 16 affected mainly the following items in the consolidated statement of financial position at January 1, 2019:

(in € millions)	December 31, 2018[(1)]	IFRS 16	January 1, 2019 restated
Property, plant and equipment (PP&E)	11,644	796	12,440
Non-current financial liabilities	5,302	637	5,939
Current financial liabilities	1,222	178	1,400

(1) The 2018 figures have been restated for comparison purposes (see note 2.5 to the consolidated financial statements).

The indicators of the consolidated income statement and consolidated cash flow statement presented below were impacted at December 31, 2019 by the implementation of IFRS 16 as follows:

(in € millions)	Increase of
Segment operating income	17
Segment EBITDA	223

2.3.2 IFRIC 23 "Uncertainty Over Income Tax Treatments"

IFRIC 23 "Uncertainty Over Income Tax Treatments" clarifies the recognition and valuation principles applicable to income tax risks. These risks arise when there is uncertainty related to a tax position adopted by the Group that could be challenged by the tax administration.

This interpretation was adopted by the European Union in October 2018 and is applicable for financial years beginning on or after January 1, 2019. It did not have a material impact on the consolidated financial statements.

2.3.3 Amendments to IFRS 9 "Prepayment Features with Negative Compensation"

Negative compensation arises when a symmetric prepayment option is exercised by the borrower and the contractual terms require the lender to pay compensation to the borrower. The amendment describes the situations in which a financial asset with a symmetric prepayment option may be measured at amortized cost.

Prior to this amendment, to qualify for amortized cost measurement, the prepaid amount had to correspond to the unpaid principal and interest plus reasonable compensation for early termination of the contract. Symmetrical prepayment options did not fulfill this criterion because the compensation did not depend on which party exercised the option.

Following adoption of the amendment, it is no longer necessary for the party that accepts the exercise of the prepayment option to receive positive cash compensation from the party that exercises the option. In other words, the compensation may now be negative. The only restriction is that the amount of the compensation must be reasonable. Application of the amendment did not have a material impact on the Group's consolidated financial statements.

2.3.4 Amendments to IAS 19 "Plan Amendment, Curtailment or Settlement"

The Group applied the amendments to IAS 19 for the first time in 2019. The amendments clarify that the past service cost (or the gain or loss on settlement) is calculated by remeasuring the net defined benefit liability (asset) using current assumptions and the current fair value of plan assets at the time of the amendment, curtailment or settlement, but ignoring the effect of the asset ceiling that may arise when the defined benefit plan is in a surplus position. Current service cost, net interest on the net liability (asset) and interest on the effect of the asset ceiling for the remainder of the reporting period after the plan amendment are measured using current assumptions and the current fair value of plan assets at the time of the amendment, curtailment or settlement. Application of these amendments did not have a material impact on the Group's consolidated financial statements.

2.3.5 Amendments to IAS 28 "Long-term Interests in Associates and Joint Ventures"

The Group applied the amendments to IAS 28 for the first time in 2019. The amendments clarify that IFRS 9 including its impairment requirements, is applicable to financial instruments in an associate or joint venture to which the equity method is not applied. This mainly concerns long-term interests in an associate or joint venture that, in substance, form part of the net investment in the associate or joint venture. The Group applies IFRS 9 to these long-term interests before applying IAS 28. Application of the amendments did not have a material impact on the Group's consolidated financial statements.

2.3.6 Amendments to IAS 39, IFRS 7 and IFRS 9 "Interest Rate Benchmark Reform"

The Phase 1 amendments, which are effective for annual periods beginning on or after January 1, 2020, provide temporary relief from applying specific hedge accounting requirements to hedging relationships directly affected by IBOR reform. They have been early-adopted by the Group as from January 1, 2019.

The amendments, which modify certain hedge accounting requirements, are designed to support the provision of useful financial information by companies during the period of uncertainty arising from IBOR reform. They also require companies to provide additional information to investors about their hedging relationships, which are directly affected by these uncertainties.

Application of these amendments did not have material impact on the consolidated financial statements.

2.3.7 Annual Improvements to IFRSs – 2015-2017 Cycle

The Group has applied the amendments included in the Annual Improvements to IFRSs – 2015-2017 Cycle.

These improvements include amendments to the following standards, none of which have a material impact on the Group's consolidated financial statements:

IAS 12 "Income Taxes"

The amendments state that an entity recognizes income tax on dividends in either profit or loss, or other comprehensive income or equity according to where the transactions or events that generated the distributable profits were originally recognized.

IAS 23 "Borrowing Costs"

The amendments clarify that if any specific borrowing remains outstanding after the related asset is ready for its intended use or sale, that borrowing becomes part of the funds that an entity borrows generally when calculating the capitalization rate on general borrowings.

IFRS 3 "Business Combinations"

The amendments clarify that when an entity obtains control of a business that is a joint operation, it applies the requirements of IFRS 3 for a business combination achieved in stages and remeasures previously held interest in that business. The amounts to be remeasured include all unrecognized assets, liabilities and goodwill related to the joint operation.

IFRS 11 "Joint Arrangements"

The amendments clarify that when an entity obtains joint control of a business that is a joint operation, the entity does not remeasure previously held interests in that business.

There are no other new standard, update and interpretation published and effective whose impact could be material for the Group.

2.4 Newly published standards, amendments to existing standards and interpretations that are not yet effective

As of the date when the Group's consolidated financial statements were approved for publication, the Group had not adopted the following new standards or amendments to existing standards that had been published but were not effective as of January 1, 2019:

- IFRS 17 *"Insurance Contracts"*;
- Amendments to IFRS 10 and IAS 28 – *"Sale or Contribution of Assets Between an Investor and its Associate or Joint Venture"*;
- Amendments to IFRS 3 – *"Definition of a Business"*;
- Amendments to IAS 1 and IAS 8 – *"Definition of Material"*.

The impact of these new standards and amendments is currently being assessed by the Group.

2.5 Restatement of comparative financial information at December 31, 2018

The consolidated financial statements at December 31, 2018, published in February 2019, have been restated with the following impacts:

2.5.1 Consolidated income statement

The definition of cost of sales was updated in 2019 to reflect the effects of the new organization set up in 2018 and the development of customer service businesses. Previously limited to the cost of sales for the Group's manufacturing activities, which is unchanged, the definition now includes the costs incurred to produce, administer and execute customer services. The main impact of this change is that "cost of sales" now includes the operating costs of the service centers run by the Euromaster dealership network in Europe, which were previously recognized in the consolidated income statement under "sales and marketing expenses".

The change has not had any impact on segment operating income, which is the Group's key operating performance metric, or on segment reporting data.

The impact of this change on the comparative income statement for 2018 is presented below:

(in € millions)	2018 as reported	Change in cost of sales definition	2018 restated
Cost of sales	(14,912)	(605)	(15,517)
Gross income	**7,116**	**(605)**	**6,511**
Sales and marketing expenses	(1,862)	595	(1,267)
Research and development expenses	(648)	-	(648)
General and administrative expenses	(1,826)	10	(1,816)
Segment other income and expenses	(5)	-	(5)
SEGMENT OPERATING INCOME	**2,775**	**-**	**2,775**
Other operating income and expenses	(225)	-	(225)
OPERATING INCOME	**2,550**	**-**	**2,550**

2.5.2 Consolidated statement of financial position

At December 31, 2018, given the date when the Camso business combination was concluded, the entire purchase price, *i.e.,* €1,174 million at the acquisition date, accounted for as preliminary goodwill on the "Goodwill" line within the consolidated statement of financial position. The consolidated statement of financial position has been restated for comparison purposes by taking into account the purchase price allocation.

The restatement of the opening balance sheet is presented below:

(in € millions)	December 31, 2018 as reported	Consolidation of Camso's provisional opening balance sheet	December 31, 2018 restated
Goodwill	2,667	(507)	2,160
Intangible assets	1,828	389	2,217
Property, plant and equipment (PP&E)	11,379	265	11,644
Non-current financial assets and other non-current assets	691	8	699
Investments in equity-accounted companies	938	15	953
Deferred tax assets	740	12	752
Non-current assets	**18,243**	**182**	**18,425**
Inventories	4,447	255	4,702
Trade receivables	3,307	146	3,453
Current financial assets	314	1	315
Other current assets	1,037	66	1,103
Cash and cash equivalents	2,100	28	2,128
Current assets	**11,205**	**496**	**11,701**
TOTAL ASSETS	**29,448**	**678**	**30,126**
Share capital	360	-	360
Share premiums	2,923	-	2,923
Reserves	8,862	13	8,875
Non-controlling interests	22	1	23
Total equity	**12,167**	**14**	**12,181**
Non-current financial liabilities	5,020	282	5,302
Provisions for employee benefit obligations	3,850	8	3,858
Provisions and other non-current liabilities	1,315	4	1,319
Deferred tax liabilities	326	109	435
Non-current liabilities	**10,511**	**403**	**10,914**
Current financial liabilities	1,134	88	1,222
Trade payables	2,506	94	2,600
Trade payables under reverse factoring agreements	440	-	440
Provisions and other current liabilities	2,690	79	2,769
Current liabilities	**6,770**	**261**	**7,031**
TOTAL EQUITY AND LIABILITIES	**29,448**	**678**	**30,126**

2.5.3 Consolidated statement of cash flows

The amount of cash and cash equivalents at January 1, 2019 came to €2,128 million following the first-time consolidation of Camso's provisional opening balance sheet (note 4.2.1). This amount was €2,100 million in the consolidated statement of financial position published at December 31, 2018.

2.5.4 Segment reporting

Certain businesses were reallocated to different segments with effect from January 1, 2019. The main change, which was prompted by the 2018 acquisition of Camso and the subsequent redefinition of the exclusively Off-the-road business unit, concerned the transfer of multi-purpose (on- and off-the-road) construction truck tires from the Off-the-road unit in the "Specialty businesses" segment to the "Road transportation" segment.

Camso's income and assets are included in the Off-the-road business unit in the Specialty businesses segment. In the restated statement of financial position at December 31, 2018, Camso's segment assets amounted to €1,630 million. Published segment assets at December 31, 2018 did not include provisional goodwill.

2018 information by reporting segment has been restated as follows to apply the reallocations and include Camso's assets:

	December 31, 2018 as reported				December 31, 2018 restated			
(in € millions)	Automotive and related distribution	Road transportation and related distribution	Specialty businesses and related distribution	Total	Automotive and related distribution	Road transportation and related distribution	Specialty businesses and related distribution	Total
Profit and loss information								
Sales	11,340	5,852	4,836	**22,028**	11,332	6,378	4,318	**22,028**
Segment operating income	1,314	513	948	**2,775**	1,295	612	868	**2,775**
As a percentage of sales	*11.6%*	*8.8%*	*19.6%*	***12.6%***	*11.4%*	*9.6%*	*20.1%*	***12.6%***
Segment assets								
Goodwill, intangible assets and PP&E	6,765	3,753	4,197	**14,715**	6,776	4,049	5,196	**16,021**
Finished product inventories	1,208	822	691	**2,721**	1,198	901	800	**2,899**
Trade receivables	1,550	1,035	722	**3,307**	1,544	1,117	792	**3,453**
Segment assets	**9,523**	**5,610**	**5,610**	**20,743**	**9,518**	**6,067**	**6,788**	**22,373**

2.6 Critical accounting estimates and judgments

The preparation of the consolidated financial statements in accordance with IFRS requires that management use assumptions and estimates to calculate the value of assets and liabilities at the date of the consolidated statement of financial position and the amount of income and expenses for the reporting period. Actual results could differ from those estimates.

The main sources of uncertainty relating to key assumptions and judgments concern impairment of non-financial assets, employee benefit obligations, income taxes, goodwill, intangible assets acquired in a business combination and the estimated useful life of such assets, and the definition of the enforceable period of a lease contract.

2.6.1 Impairment of non-financial assets

The cash generating units' (CGU) future cash flows used to calculate value in use (note 3.17 "Impairment of non-financial assets") are derived mainly from forecasts set out in the Group's five-year business plan. Strategic objectives are developed with the involvement of key people in the Business Lines and Business Departments, and are validated by management. The process requires using critical estimates and judgments, especially to determine market trends, raw material costs and pricing policies. Consequently, actual cash flows may differ from the estimates used to calculate the CGUs' value in use.

Quantitative information is provided in note 13.1 "Goodwill".

2.6.2 Employee benefit obligations

The Group uses defined contribution plans which generally require, on top of the portion financed by the Group, a contribution from each salaried employee, defined as a percentage of their compensation.

Some subsidiaries also recognize liabilities for pension plans, jubilees and other post-employment benefits linked to rights acquired by the employees through plans specific to these subsidiaries or resulting from certain legal obligations.

The valuation of these benefits is carried out annually with the assistance of independent actuaries. The actuarial method used is the projected unit credit method.

In accordance with this method, statistical information and various assumptions are used in calculating the expenses, liabilities and assets related to the benefit plans. Assumptions mainly include the discount rate, the inflation rate, the long-term salary increase rate and the expected rate of growth in future medical costs. Statistical information is mainly related to demographic assumptions such as mortality, employee turnover, disability and retirement age.

Assumptions and statistical information are determined based on internal guidelines, in consultation with the actuaries.

The discount rates are determined based on actuarial models using the same maturity as the liabilities.

The rate of salary increases is determined by each country based on a long-term salary policy and takes into consideration all of the relevant factors including market practices, as well as career development, promotion and seniority, among other inputs.

The inflation rates, calculated over standard durations, are determined using several methods:

- by using actuarial models based on target rates published by central banks, forecasts from Consensus Economics and inflation swap curves;
- by taking the spread between inflation-linked bonds and conventional securities. The rates are then adjusted with a spread which represents the liquidity and risk premium embedded in the inflation-linked bonds;
- based on historical averages.

The other assumptions (retirement age, employee turnover, health care cost trend, mortality and disability) reflect the demographic and economic situation of the countries and subsidiaries in which the plans are in force.

The actual data (such as inflation, mortality and real return on assets) may differ from the long-term actuarial assumptions used. The resulting difference is recognized as a gain or loss in other comprehensive income.

Quantitative information is provided in note 27 "Employee benefit obligations".

2.6.3 Income tax

Significant judgments and estimates are required to determine the amount of the deferred tax assets resulting from tax loss carryforwards or deductible temporary differences.

The expected reversal of tax losses is based on forecasted future results approved by local management and reviewed by the Group Tax and Accounting Departments. Analyses are also performed in order to ensure the consistency of the forecasts with the Group's strategic plans validated by management. Analyses to support the deferred tax positions are performed periodically, at a date as close as possible to the reporting date.

The period over which tax loss carryforwards are reversed is based on a reasonable time horizon, taking into account the specific circumstances of each Group company, such as:

- the origin of the historical tax losses (generally exceptional and non-recurring: restructuring, significant increases in production capacity, etc.);
- forecasted future results;
- tax planning strategies;
- opportunities for internal reorganizations that will eliminate sources of losses; and
- the time limit for recovering historical losses.

Quantitative information is provided in notes 11 "Income tax" and 18 "Taxes".

The companies that make up the Group operate in different, and sometimes uncertain, legal and regulatory environments, including tax environments. They may be involved, in the normal course of business, in various types of litigation, disputes or other proceedings.

Each of the known disputes or ongoing proceedings in which the Group or one of the Group companies is involved was examined at the reporting date, where appropriate with the assistance of external consultants, and provisions have, if necessary, been booked to cover the estimated risks. The main ongoing tax disputes are described in note 32.2 "Contingencies".

2.6.4 Goodwill, intangible assets acquired and their residual useful life

As part of its acquisitions, the Group identifies, measures and recognizes intangible assets (trademarks and customer relationships, for example) and determines their residual useful lives. The difference between the fair value of assets acquired and liabilities assumed, on the one hand, and the consideration transferred, on the other, represents goodwill, which is allocated to the CGUs or to the groups of CGUs benefiting from the synergies expected from the business combination. In order to perform the purchase price allocation, the Group takes into account the various strategic and operational objectives underlying the acquisition and relies on the expertise of valuation firms.

The value of assets and liabilities recognized on business combinations may be impacted in the future if judgments, estimates and key assumptions made at the time of the acquisition, such as revenue growth rate, operating margin or discount rates, should differ from reality.

2.6.5 Enforceable period of a lease

When the Group enters into a lease, it determines the enforceable period by taking into account all the economic facts and circumstances, as well as the options to extend and terminate the lease. This information is used to determine the most economically relevant end date for the lease.

For certain categories of leased assets (mainly vehicles), the Group considers that there is no reasonably certain extension option. Consequently, the duration is selected to coincide with the initial term of the lease.

For real estate leases, the Group defines the reasonable end date of the lease, based on the enforceable period, in line with the asset's expected period of use. Accordingly, for leases with a residual term of more than ten years, the first enforceable exit option is chosen unless specific information and economic circumstances lead the Group to define a longer period.

NOTE 3 ACCOUNTING POLICIES

3.1 Consolidation

The Group's consolidated financial statements include all subsidiaries, joint ventures and associates of Compagnie Générale des Établissements Michelin.

The Group treats transactions with non-controlling interests, as long as they do not result in a change of control over the entities in question (no loss nor gain of control), as equity transactions having no impact on comprehensive income. Expenses relating to these transactions are directly accounted for in equity. At the date the Group gains control of an entity, the carrying amount of previously held non-controlling interests, if any, is adjusted to fair value and the difference is recognized in the income statement. All other related items previously recognized in other comprehensive income are reclassified to the income statement. When the Group loses control over an entity but keeps some non-controlling interests in the entity, the transaction is analyzed as an exchange, *i.e.,* the disposal of a controlling interest and the acquisition of a non-controlling interest.

Shareholdings in companies which are not subsidiaries, joint ventures or associates are not consolidated. They are accounted for as non-derivative financial assets (note 3.18 "Non-derivative financial assets").

3.1.1 Subsidiaries

The Group controls an entity when it has:

- power over the investee;
- exposure, or rights, to variable returns from its involvement with the investee;
- the ability to use its power over the investee to affect the amount of the investor's returns.

The financial statements of subsidiaries are included in the consolidated financial statements from the date that control commences until the date that control ceases.

Intercompany transactions and balances, as well as unrealized gains on transactions between Group companies are eliminated. Unrealized losses are also eliminated unless an impairment loss on the transferred asset arises on the transaction.

Accounting policies of subsidiaries have been changed where necessary to ensure consistency with the policies adopted by the Group.

3.1.2 Joint ventures and associates

Joint ventures are joint arrangements (arrangements over which the Group has joint control with one or more other parties) in which the Group has rights to the net assets. Joint control is defined as the contractually agreed sharing of control over an arrangement, which exists only when decisions about the relevant activities require the unanimous consent of the parties sharing control.

Associates are all entities over which the Group has significant influence. Significant influence is the power to participate in the financial and operating policy decisions of the investee but is not control or joint control of those policies. Generally, associates are entities in which the Group has a shareholding representing between 20% and 50% of the voting rights.

Investments in joint ventures and associates are accounted for using the equity method and are initially recognized at cost. The Group's investments in joint ventures and associates include goodwill identified at the acquisition date and are presented net of any accumulated impairment losses.

From the acquisition date to the date that significant influence ceases, the Group's share of its joint ventures' and associates' profits and losses, is recognized in the income statement and its share of movements in other comprehensive income is recognized in other comprehensive income. The cumulative post-acquisition movements are adjusted against the carrying amount of the investment.

When the Group's share of losses in an associate or a joint venture equals or exceeds its interest in the investee, the Group does not recognize future losses, unless it has incurred obligations or made payments on behalf of the entity.

Unrealized gains on transactions between the Group and its joint ventures and associates are eliminated to the extent of the Group's interest in the investee. Unrealized losses are also eliminated unless an impairment loss on the transferred asset arises on the transaction.

The profit resulting from downstream transactions carried out with a joint venture or an associate is deducted from the Group's proportionate share in profit of the joint venture or associate.

3.2 Segment reporting

Operating segments are reported in a manner consistent with the internal reporting provided to the Group's Management.

The Managing Chairman regularly examines segment operating income to assess segment performance. He has therefore been identified as the chief operating decision maker of the Group.

3.3 Foreign currency

3.3.1 Presentation and functional currency

The financial statements of the Group entities are measured using their functional currency, which is the currency of the primary economic environment in which they operate and corresponds for most of them to their local currency.

The consolidated financial statements are presented in euros, which is the Company's functional currency.

3.3.2 Transactions

Foreign currency transactions are translated into the functional currency using the exchange rate prevailing at the transaction date. Foreign exchange gains and losses resulting from the settlement of such transactions and from the translation at closing exchange rates of monetary assets and liabilities denominated in foreign currencies are recognized in the income statement.

Exchange differences on unconsolidated equity investments are included in other comprehensive income until the investment is sold.

3.3.3 Translation

The financial statements of the Group entities whose functional currency is different from the Group's presentation currency are translated into euros as follows: assets and liabilities are translated at the closing rate at the date of the consolidated statement of financial position, income and expenses are translated at the average rate for the period (as it is considered a reasonable approximation to actual rates at the transaction date), and all resulting exchange differences are recognized in other comprehensive income.

Cash flows are also translated at the average rate for the period. When an entity is disposed of, the translation differences accumulated in other comprehensive income are recycled to the income statement as part of the gain or loss on disposal.

On the acquisition of an entity, goodwill and fair value adjustments recognized are treated as assets and liabilities of the acquired entity and translated at the spot rate on the transaction date.

3.3.4 Exchange rates of major currencies

	Closing rates		Average rates	
Against the euro (EUR):	2019	2018	2019	2018
US dollar (USD)	1.119	1.146	1.120	1.182
Canadian dollar (CAD)	1.464	1.560	1.486	1.530
Mexican peso (MXN)	21.058	22.546	21.566	22.703
Brazilian real (BRL)	4.528	4.440	4.410	4.283
Pound sterling (GBP)	0.854	0.905	0.877	0.884
Chinese yuan (CNY)	7.820	7.860	7.733	7.803
Indian rupee (INR)	79.881	80.218	78.841	80.611
Thai baht (THB)	33.735	37.136	34.773	38.172

3.4 Derivative instruments

Derivative instruments are used to manage financial exposures.

All derivatives are initially recognized at fair value on the date a derivative contract is entered into and are subsequently measured at their fair value. The method of recognizing the resulting gain or loss depends on whether the derivative is designated as a hedging instrument, and if so, the nature of the item being hedged (see hedging policy below).

All changes in fair value of derivatives not qualifying as hedges are recorded as financial income or expense in the period in which they arise.

The fair values of listed instruments are based on their market values.

For unlisted instruments, fair values are determined using mathematical models, such as option pricing models, or methods based on discounted future cash flows. These models take into account market data.

Embedded derivatives are recognized separately if they are not closely related to the host contract.

3.5 Hedging

Some derivative instruments are eligible for hedge accounting and are therefore designated as either:

- hedges of the fair value of recognized assets or liabilities or a firm commitment (fair value hedges);
- hedges of highly probable forecast transactions (cash flow hedges).

At the inception of the transaction, the Group documents the relationship between the hedging instrument and the hedged item, as well as its risk management objectives and strategies. The Group also documents its assessment, both at inception and on an ongoing basis, of whether the derivatives that are used in hedging transactions are highly effective in offsetting changes in fair values of hedged items.

Changes in the fair value of derivatives are accounted for differently depending on the type of hedge.

3.5.1 Fair value hedges

Changes in fair value of derivatives are recorded in financial income and expenses, together with any changes in the fair value of the hedged assets or liabilities that are attributable to the hedged risk.

3.5.2 Cash flow hedges

The effective portion of changes in the fair value of derivatives is recognized in other reserves. The ineffective portion of the gain or loss is recognized immediately in the income statement, in operating income (commodity price hedges) or financial income and expenses (interest rate hedges).

When options are used to hedge future transactions, only the changes in the options' intrinsic value are designated as hedging instruments. Changes in the intrinsic value and the time value in relation to the hedged item ("aligned time value") are recorded in other reserves.

For forward contracts used to hedge future transactions, the Group designates all the changes in fair value (including the forward points) as hedging instruments. These changes in fair value are recorded in other reserves.

Amounts accumulated in other reserves are recognized in the income statement over the period during which the hedged item affects the profit and loss, as follows:

- when the hedged item is a non-financial asset (for example, a consolidated investment or an inventory), deferred gains or losses, as well as deferred gains or losses on the time value of the option or contract forward points are included in the initial cost of the asset;
- the gains or losses resulting from the interest rate hedge are recognized in financial income at the same time as the interest on the loans that are hedged.

When a hedging instrument is sold or expires, or when a hedging instrument no longer meets the criteria required to qualify for hedge accounting, the amount accumulated in other reserves at that date is immediately recognized in profit or loss.

3.5.3 Derivatives not qualifying for hedge accounting

Certain other derivative instruments, while offering effective economic hedging in terms of the Group's financial policy, do not meet the criteria for hedge accounting or have not been treated as hedging instruments (refer to the policy relating to derivative instruments, above). Changes in the market value of these derivatives must therefore be recognized in financial income and expenses. For example, foreign exchange derivatives used to hedge the currency exposure of financial assets and liabilities recognized in the consolidated statement of financial position are not designated as hedging instruments.

3.6 Fair value of financial instruments

Fair value measurements are disclosed by level of input, in line with the following fair value hierarchy:

- Level 1: Quoted prices in active markets. The fair value of financial instruments traded in active markets is based on quoted market prices at the date of the consolidated statement of financial position. A market is regarded as active if quoted prices are readily and regularly available from an exchange, dealer, broker, industry group, pricing service, or regulatory agency, and those prices represent actual and regularly occurring market transactions on an arm's length basis. The quoted market price used for financial assets held by the Group is the current bid price. These instruments, essentially cash and cash equivalents, as well as quoted unconsolidated equity investments, are included in level 1.
- Level 2: Inputs other than quoted prices included within level 1 that are observable for the asset or liability, either directly (*i.e.,* as prices) or indirectly (*i.e.,* derived from prices). The fair value of financial instruments that are not traded in an active market (for example, over-the-counter derivatives) is determined by using valuation techniques. These valuation techniques maximize the use of observable market data where it is available and rely as little as possible on entity-specific estimates. If all significant inputs required to fair value these instruments are observable, these instruments, essentially cash management financial assets and derivative instruments, are included in level 2.
- Level 3: Inputs for assets or liabilities that are not based on observable market data (*i.e.,* unobservable inputs). If one or more of the significant inputs is not based on observable market data, the instrument, essentially non-quoted unconsolidated equity investments, is included in level 3.

Specific valuation techniques used to value, generally internally, financial instruments include:

- quoted market prices or dealer quotes for similar instruments (level 1);
- the fair value of interest rate swaps calculated internally as the present value of the estimated future cash flows based on observable yield curves (level 2);
- the fair value of forward foreign exchange contracts determined internally using forward exchange rates at the date of the consolidated statement of financial position, with the resulting value discounted back to present value (level 2).

Other techniques, such as discounted cash flow analysis, are used internally to determine fair value for the remaining financial instruments (level 3).

When observable yield curves include negative interest rates, those are used without adjustment to determine the fair value of derivatives.

The Group assesses the counterparty risk included in the fair value of its over-the-counter derivatives for which there is no exchange of collateral. The Group includes the effect of its exposure to the credit risk of the counterparty or the counterparty's exposure to the credit risk of the Group. The valuation for long-term derivatives with no exchange of collateral is based on discounted cash flows using a rate including the counterparty credit risk.

3.7 Definition of certain indicators presented in the consolidated financial statements

3.7.1 Net debt

Net debt is made up of current and non-current financial liabilities as they appear on the consolidated statement of financial position less:

- cash and cash equivalents as they appear on the consolidated statement of financial position;
- derivative instruments included in "Current financial assets" and "Non-current financial assets" on the consolidated statement of financial position;
- cash pool assets included in "Current financial assets" on the consolidated statement of financial position (these assets are highly liquid, little affected by interest rate risk and foreign currency risk); and
- borrowing collateral included in "Current financial assets" and "Non-current financial assets" on the consolidated statement of financial position.

3.7.2 Segment EBITDA

The Group defines Segment EBITDA as segment operating income less depreciation of property, plant and equipment and amortization of intangible assets.

3.8 Revenue recognition

The sale of tires, in the original equipment or replacement market, constitutes the major part of Group income. In the replacement market, tires are sold to distributors (wholesalers, specialist dealers, etc.) who are customers of the Group. These distributors have the full and complete possibility to use the tires for their own benefit, or to market them, and in this case, to fix the resale price. Furthermore, they carry the inventory risk.

The terms of sale offered by Group companies, in line with normal market practice, vary according to the customer category and the country in which the sales are made. They provide however, that the payment for the goods sold will be made in a period appreciably less than one year and there is therefore no reason to adjust the amount of consideration received from customers to take into account the effects of a financing component.

Each delivery of tires, either in the original equipment market with car manufacturers or in the replacement market, represents a distinct and separate performance obligation to be fulfilled at a point in time and which corresponds to the loading of goods or their delivery, in accordance with the underlying contract.

The warranties offered to the buyers cover design or manufacturing defects, which may appear as irregular or excessive tires wear under normal conditions of use. These warranties, which do not provide the customer with any supplementary guarantee, apart from the fact that the tire is exempt from defects, continue to be accounted for in accordance with IAS 37 "Provisions, Contingent Liabilities, and Contingent Assets".

The Group agrees, under certain conditions, to give trade concessions or to reimburse unsatisfied customers. Occasionally and under special circumstances, it also grants the right to return products already sold. This right gives rise to the recognition of a liability and a reduction in income, as well as an asset representing the Group's right to recover the goods that customers will return. In addition, the amount that the Group effectively receives for the tires delivered, as well as the revenue from sales recognized in the income statement, can vary as a result of deferred rebates stipulated in contractual agreements and/or at the start of marketing campaigns, which will be paid to the customers at the end of the reference period and depending on the achievement of qualitative or quantitative objectives set for that period. Their value is determined using the expected value method. The Group relies on the analysis of historical data and its accumulated experience to estimate the probable amount of rebates and discounts to be given to customers. Income from ordinary activities is therefore recognized taking into account the uncertainty surrounding the different components of variable consideration and to the extent that it is highly probable that the outcome of this uncertainty will not give rise to a significant reduction in the amount of sales already recognized, once the uncertainty is resolved. The difference between the amounts invoiced to the customers and the level of income recorded from ordinary activities results in the recognition of a liability in respect of the future reimbursement under "Other current liabilities" in the consolidated statement of financial position.

The other sales categories essentially comprise the management of tires for commercial fleets and the supply of telematics services, where the main objective is greater fuel economy and fleet efficiency. The services supplied under these contracts consist of a single performance obligation satisfied over time for which the sales revenue is recognized according to the stage of completion, measured on the basis of the work performed and the costs incurred.

The Group may enter into multi-year agreements with customers, which include a commitment regarding its capacity to supply the products, in exchange for a specific amount of consideration. This is to be paid in advance of fulfillment of the obligations to supply the products, which will be spread over the duration of the contract. As such, this commitment is considered to be linked to the supply of the products and will be recognized as revenue as and when the supply obligations are fulfilled. When the payment is received, a contract liability is recognized and split between the line items "Provisions and other non-current liabilities" and "Other current liabilities" in the consolidated statement of financial position, depending on the date the performance obligations are fulfilled.

3.9 Cost of sales

Cost of sales for the Group's manufacturing activities comprises the costs of manufacturing products and the cost of goods purchased for resale.

It includes the purchase cost of raw materials, production costs directly related to the manufactured products and all production overheads, based on the normal capacity of manufacturing facilities.

Production overheads include depreciation of property, plant and equipment, amortization of intangible assets relating to production and write-downs of inventories.

Cost of sales also includes a relevant portion of general overheads to the extent that they are directly attributable to bringing the manufactured products to their present location and condition.

For non-manufacturing activities, especially customer services, cost of sales includes all the costs incurred to produce, administer or execute a service delivered in the distribution network. Cost of sales for these activities mainly comprises employee benefits expense, depreciation of plant and equipment, energy costs and the cost of acquiring and processing the data needed to produce the service.

3.10 Research and development expenses

Research costs cannot be capitalized. Development costs are capitalized as intangible assets when the conditions relating to the commercial and technical feasibility of the project, the ability to allocate the costs reliably and the probability of generating future economic benefits are fulfilled.

Development costs are reviewed annually in order to determine whether the criteria for recognition as intangible assets are met.

3.11 Segment operating income

"Segment operating income" measures the performance of the operating segments and is one of the Group's management indicators.

3.12 Other operating income and expenses

"Other operating income and expenses" is used to record items that are not taken into account by management when measuring the performance of the operating segments due to their nature or their significant, unusual or abnormal characteristics. They include, in particular, the costs related to the reorganization and adaptation of activities and those related to major litigation (and the adjustments in the corresponding provisions), as well as impairment of goodwill and acquisition-related costs. Given the recent major acquisitions made by the Group, the amortization of trademarks and customer relationships recognized as part of a business combination is also recognized in other operating income and expenses. They also include gains and losses on disposals and changes in impairment of property, plant and equipment and intangible assets, acquisition price adjustments, as well as gains and losses related to changes in post-employment benefits.

They are detailed in note 9 "Other operating income and expenses".

3.13 Income tax

Current and deferred taxes, plus any withholding tax on royalties and on distributions of retained earnings within the Group, are included in the income statement except if they relate to items recognized either in other comprehensive income or directly in equity, in which case they are also recognized, respectively, in other comprehensive income or directly in equity.

Current tax is based on the results of Group companies and is calculated according to local rules, including any adjustments to tax payable in respect of previous years.

Deferred tax is recognized, using the liability method, on temporary differences arising between the tax bases of assets and liabilities and their carrying amount in the consolidated financial statements, using enacted or substantially enacted tax rates that are expected to prevail when the temporary differences reverse.

A deferred tax asset or liability is recognized on initial recognition of transactions arising from business combinations and impacting the accounting or taxable profit or loss.

Deferred tax assets are recognized to the extent that it is probable that future taxable profit will be available against which the tax loss carryforwards and the temporary differences can be offset.

Deferred tax is calculated on temporary differences arising from investments in subsidiaries, joint ventures, and associates: deferred tax assets are recognized if the reversal is under the entity's control and is also probable. Deferred tax liabilities are recognized unless their reversal is controlled and not probable.

Tax positions are analyzed periodically and if any positions are considered unlikely to be accepted by the tax authorities a provision is booked for the most probable amount in order to cover the risk. Assets/liabilities resulting from uncertain tax treatments are included in current or deferred tax assets or liabilities in the consolidated statement of financial position.

3.14 Business combinations and goodwill

When the Group obtains control of an entity, the business combination is valued and accounted for by applying the acquisition method. Goodwill is calculated at the acquisition date as the difference between:

- the fair value of consideration transferred including, if any, the fair value of contingent consideration and;
- the fair value at acquisition date of the identifiable acquired assets, the liabilities and contingent liabilities assumed.

The valuation period for a business combination does not exceed 12 months from the acquisition date.

Goodwill is allocated to CGUs or groups of CGUs that are expected to benefit from the synergies of the combination and that reflect the level at which the Group manages goodwill. Goodwill is tested for impairment annually.

3.15 Intangible assets

Intangible assets are recognized at cost. The cost of an intangible asset acquired as part of a business combination is its fair value at the acquisition date.

Intangible assets with indefinite useful lives are not amortized but are tested for impairment at least once a year. Those with finite useful lives are amortized on a straight-line basis over their estimated useful life:

- Software 3-7 years
- Brands and trademarks 5-20 years
- Customer relationships 5-20 years

3.16 Property, plant and equipment (PP&E)

Property, plant and equipment are measured at cost less accumulated depreciation and, when necessary, impairment.

The gross carrying amount includes the cost of acquisition or production cost and other costs directly attributable to the acquisition or the construction of the asset (including borrowing costs). Investment grants are initially accounted for as deferred income and are subsequently recognized as income over the useful life of the related asset.

Repair and maintenance costs are expensed as incurred. Other subsequent expenditures are included in the asset's carrying amount or recognized as a separate asset if the recognition criteria are met.

Property, plant and equipment are depreciated on a straight-line basis, except land, which is not depreciated. Depreciation of property, plant and equipment reflects the pattern in which the asset's future economic benefits are expected to be consumed. Depreciation is allocated to cost of sales, sales and marketing expenses, research and development expenses or general and administrative expenses.

The following depreciation periods, based on the expected useful lives of the respective assets, are applied throughout the Group:

- Buildings and general land and building installations: 25 years
- Petrochemical equipment: 25 years
- Industrial and commercial equipment: 2-12 years
- Computer and telecommunication equipment: 5 years
- Vehicles: 5 years
- Other: 5-12 years

The useful lives of the assets and their respective residual values are reviewed annually.

When assets are sold or otherwise disposed of, the difference between the net proceeds and the net carrying amounts of the assets is recognized in other operating income and expenses.

3.16.1 Leases

A contract is or contains a lease if it conveys to the lessee in return for a payment or series of payments the right to use an asset for an agreed period of time. The Group assesses whether a contract is or contains a lease on the inception of the lease, which is the earlier of the date of the lease agreement and the date of commitment by the parties to the principal provisions of the lease.

Substantially all of the Group's leases are leases where the Group is the lessee. Leased assets are mainly real estate assets (points of sale for the Group's integrated distribution network, sales and administrative offices), passenger cars and forklifts.

Lease liabilities

Lease liabilities correspond to the present value of future lease payments, excluding variable lease payments that do not depend on an index or a rate.

For contracts that include a lease component and non-lease components (such as services), only the lease component is taken into account in calculating the present value.

The interest rate implicit in the lease is used as the discount rate if it can be readily determined. If the implicit rate cannot be readily determined, each Group entity uses its incremental borrowing rate reflecting its specific credit risk, the currency of the lease and the weighted average maturity of the outstanding lease liability.

After initial recognition, the carrying amount of the lease liability is increased to reflect interest on the lease and reduced to reflect the lease payments made.

The carrying amount of the lease liability and the corresponding right-of-use asset is adjusted to reflect any change in the lease term, any change in the assessment of an option to purchase the underlying asset, any change in the amount that the lessee expects to have to pay to the lessor under the residual value guarantee or any change in future lease payments resulting from a change in an index or a rate used to determine those payments.

Right-of-use assets

Right-of-use assets corresponding to leased property, plant and equipment are initially measured at cost, corresponding to the sum of the present value of the outstanding lease payments at the commencement date. Any lease payments made at or before the commencement date any initial direct costs and an estimate of costs to be incurred by the Group in dismantling or restoring the underlying asset, are included in the value of the night-of-use asset, less any lease incentives.

The right-of-use asset is depreciated over the shorter of the lease term and the useful life of the leased asset if the transfer of ownership of the leased asset is uncertain or is not provided for in the contract.

Enforceable period

The enforceable period of a lease is determined by taking into account all the economic facts and circumstances (such as contractual terms and conditions for the optional periods compared with market rates, significant leasehold improvements, costs relating to the termination of the lease, such as negotiation costs, relocation costs, costs associated with returning the underlying asset in a contractually specified condition or to a contractually specified location), and contractual options to extend or terminate the lease. Consequently, for leases that are automatically renewable and the 3/6/9-year commercial leases that are common in France, the enforceable period can be longer than the period to the contractual end date. This information is used to determine the most economically relevant end date for the lease. For certain categories of leased assets (mainly vehicles), the Group considers that there is no reasonably certain extension option. Consequently, the duration is selected to coincide with the initial term of the lease. For real estate leases, the Group defines the reasonable end date of the lease, based on the enforceable period, in line with the asset's expected period of use. Accordingly, for leases with a residual term of more than ten years, the first enforceable exit option is chosen unless specific information and economic circumstances lead the Group to define a longer period.

Exceptions

Leases with a term not exceeding 12 months or concerning low-value assets (mainly computers, printers and tools) are not recognized in the consolidated statement of financial position.

The payments related to these leases are expensed on a straight-line basis over the duration of the contracts. Variable lease payments are expensed in the period in which the triggering event or situation occurs.

3.17 Impairment of non-financial assets

When there is any indication that the recoverable amount of an asset (goodwill, intangible assets or property, plant and equipment) may be lower than its carrying amount, the recoverable amount of the asset is measured and if needed, an impairment is recognized. Whether there is an indication of impairment or not, an annual impairment test is performed for goodwill, intangible assets with an indefinite useful life and intangible assets not ready for use, by comparing their carrying amount with their recoverable amount.

At individual asset level, indications of impairment generally relate to a fall in market value, technical obsolescence or an anticipated change of use. The recoverable amount is usually based on the market value.

At Group level, non-financial assets (including rights-of-use assets, note 3.16.1) are combined for impairment testing purposes in the smallest identifiable group of assets that generates cash flows that are largely independent of cash flows from other assets or groups of assets (cash generating units – CGUs).

For the tire business, CGUs are based on industrial asset groups, generally production plants, working together to manufacture and provide product offerings that meet the needs of customers with similar expectations in homogeneous markets or market segments.

CGUs related to non-tire businesses (Services and Solutions, Experiences, High-Technology Materials and Distribution) generally cover the scope of each of these activities.

CGUs to which goodwill has been allocated are tested annually for impairment or more frequently if events or changes in circumstances indicate a potential impairment loss. For the purpose of impairment testing, goodwill is allocated to a CGU or group of CGUs on the same basis as that used by the Group's management to monitor the performance of the businesses and assess synergies deriving from business combinations.

CGUs to which no goodwill is allocated are tested for impairment only if there is an indication that they may be impaired. In assessing whether there is any indication that a CGU may be impaired, the Group has defined three indicators for the tire business CGUs. They measure respectively the trends (i) in the market served by the CGU, (ii) in financial performance through the cost of sales' margin and (iii) in the use of the installed production capacity. For the non-tire business CGUs, as well as for the distribution CGUs, the indicator used to measure trends in financial performance serves as the triggering indicator for an impairment test.

Recoverable amount is the higher of value in use and fair value less costs of disposal.

For most CGUs, recoverable amount is based on value in use, which is equal to estimated future cash flows calculated using the weighted average cost of capital (WACC) as a discount rate. Future cash flows are mainly based on the CGUs' five-year cash flow forecasts plus a terminal value, measured by discounting projected cash flows using the WACC. The discount rate is based on the cost of equity capital derived from the market-expected return on the Company's shares, the cost of debt and a risk premium reflecting the risks associated with the countries where the assets are located. The gearing and the beta are based on data from comparable segments and take into account the specificities of certain activities.

The recoverable amount of the distribution CGUs is measured at fair value less costs of disposal. Since most of these assets are land and buildings, external appraisals or other real estate valuation techniques are applied to measure their fair value.

Any impairment loss is recognized first against goodwill, and any remaining amount is allocated among the other non-current assets, proportionally to their net carrying amounts at the closing date.

When the circumstances which previously caused non-financial assets to be impaired no longer apply, the impairment losses are reversed accordingly. However, goodwill impairment can never be reversed.

Changes in impairment losses, including any reversals, are recognized in "Other operating income and expenses".

3.18 Non-derivative financial assets

3.18.1 Asset categories

The Group classifies and measures its debt instruments in the following categories depending on their alignment with "solely payment of principal and interest" (SPPI) criteria and with its business model:

- Amortized cost: held to maturity financial assets in order to collect repayments from principal and interest;
- Fair value through profit or loss: financial assets that do not meet the criteria to be classified as amortized costs (SPPI and HTC).

The Group measures all its unconsolidated equity investments at their fair value. When the Group chooses to use the irrevocable option to record fair value adjustments in other comprehensive income, the realized gains or losses on disposal are not recycled in the income statement. The impairment losses recognized on equity investments are not shown separately from the other changes in fair value.

3.18.2 Initial recognition and derecognition

Purchases and sales of non-derivative financial assets are recognized on the trade-date, *i.e.,* the date on which the Group commits to purchase or sell the asset. Non-derivative financial assets are initially recognized at fair value plus transaction costs for all financial assets not carried at fair value through profit or loss.

Non-derivative financial assets are derecognized when the rights to receive cash flows from the assets have expired or have been transferred and the Group has transferred substantially all the risks and rewards of ownership.

3.18.3 Measurement

Loans and receivables are measured at amortized cost using the effective interest rate method.

Financial assets at fair value are valued by direct reference to a price quoted in an active market or on the basis of market assumptions (note 3.6 "Fair value of financial instruments"). Gains and losses, realized or unrealized, arising from changes in the fair value of financial assets at fair value through profit or loss are recognized immediately in other operating income and expenses.

Gains and losses, realized or unrealized, arising from changes in the fair value of financial assets at fair value through comprehensive income are recorded in other comprehensive income and never impact the income statement.

3.18.4 Impairment

At each reporting date, the Group looks for any objective indication of impairment of financial assets recorded at amortized cost.

The model for calculating the expected credit loss is determined on the basis of the counterparty rating and the associated default probability. The impairment loss is calculated over a period of 12 months given the non-deterioration of the credit risk of the counterparties. It is recognized in the income statement.

When the credit risk of a financial asset at amortized cost increases significantly, the expected credit loss is calculated over the life of the asset.

If there is no longer a reasonable way to recover the value of a financial asset at amortized cost, the asset is derecognized from the consolidated statement of financial position and impacts the income statement.

3.19 Inventories

Inventories are carried at the lower of cost and net realizable value.

The cost of raw materials, supplies and purchased finished goods includes the purchase price and other costs directly attributable to the acquisition. The cost of work in progress and manufactured finished goods comprises direct labor costs, other direct costs and production overheads based on the normal capacity of production facilities. Borrowing costs are expensed as incurred. The measurement of inventories and cost of sales using the standard cost method put in place by the Group, taking variances into account, is close to what would be obtained using the actual cost method.

Net realizable value is the estimated selling price less the estimated costs of completion and sale.

An impairment loss is recognized when net realizable value is lower than cost and is reversed when it becomes apparent that the circumstances which previously caused inventories to be written down below cost no longer exist.

3.20 Trade receivables

Trade receivables are initially recognized at the amount unconditionally due by the customer. The Group manages its trade receivables in order to collect the contractual cash flows and measures its receivables at amortized cost, according to the effective interest rate method, after deduction of any impairment losses.

When payment terms are less than one year, the initial fair value and the subsequent amortized cost are equal to the nominal amount to the extent that the receivable does not include a significant financial component.

The Group applies the simplified approach provided under IFRS 9, which consists in calculating the expected credit loss over the life of the trade receivable. This model makes it possible to determine a credit loss expected at maturity for all trade receivables, as soon as they are recognized.

Expected credit losses are based on customer payment patterns that have been observed over 36 months, and trade credit losses historically recorded during this period.

An impairment loss is also recognized whenever there are objective indications that the Group will not be able to recover all amounts due under the terms of the original transaction. Bankruptcies, the use of legal procedures to protect against creditors, cases of known insolvency or disappearance of the debtor, late payments of more than six months, economic or political risks in the country of residence of the debtor, as well as the deterioration of the latter's solvency are all indicators that suggest that a trade receivable must be impaired. The amount of the impairment loss is the difference between the carrying amount of the asset and the present value of the estimated future cash inflows at the initial effective interest rate. Before recognizing an impairment loss, the quality of the guarantees potentially obtained must be assessed, as well as the capacity to implement them. The impairment loss is recognized in Sales and marketing expenses.

When the receivable is irrecoverable, it is canceled by offsetting it against the previously recognized impairment loss. Any subsequent cash inflows corresponding to previously derecognized receivables are recorded by reducing Sales and marketing expenses in the income statement.

3.21 Cash and cash equivalents

Cash and cash equivalents include cash in hand, demand deposits and other short-term highly liquid investments with initial maturities not exceeding three months. Term deposits maturing in more than three months, but with early withdrawal terms of less than three months with guaranteed capital and negligible withdrawal costs are also classified as cash and cash equivalents.

3.22 Share capital

Ordinary shares are classified as equity.

Incremental costs directly attributable to the issue of new ordinary shares are shown in equity as a deduction, net of tax, from the proceeds.

Treasury shares are presented separately in reserves. The amount of the consideration paid, which includes directly attributable costs, net of any tax effects, is recognized as a deduction from equity. When treasury shares are sold, the amount received is recognized as an increase in equity and the resulting surplus or deficit on the transaction is presented within retained earnings.

3.23 Non-derivative financial liabilities

Borrowings are classified as current liabilities unless the Group has an unconditional right to defer settlement of the liability for at least 12 months after the consolidated statement of financial position date.

Non-derivative financial liabilities are recognized initially at fair value, net of transaction costs, and subsequently at amortized cost. Any difference between the issue proceeds (net of transaction costs) and the redemption value is recognized in the income statement over the period of the borrowing using the effective interest method.

The fair value of the liability portion of a convertible bond is determined using a market interest rate for an equivalent non-convertible bond. This amount is recorded as a liability at amortized cost. The remainder of the proceeds (after deducting the debt component), representing the value of the conversion option, is recognized in financial liabilities.

To the extent that borrowings are hedged by qualifying fair value hedges, the carrying amount of the hedged item is adjusted for the change in fair value attributable to the risk being hedged.

3.24 Employee benefit obligations

Wages, salaries, social security contributions, payments to defined contribution plans, annual leave and sick leave payments, bonuses and non-monetary benefits are recognized in the year in which the associated services are rendered by the employees.

Where employee benefits, such as certain pension plans, other post-employment benefits and other long-term benefits, are provided by the Group, a liability or an asset and the related costs are recognized.

3.24.1 Pension and other post-employment benefits

Post-employment benefits are benefits payable after employment ceases. The Group provides retirement benefits for most of its employees, either directly or by contributing to independently administered funds. The benefits provided by the Group vary according to the legal, tax and economic situation in each country and are usually based on one or more factors such as employees' compensation, age and years of service. The obligations relate both to current retirees and to the entitlements of future retirees.

The Group provides post-employment benefits under defined contribution plans and defined benefit plans.

In the case of defined contribution plans, the Group pays fixed contributions to fund managers or insurance companies. Once the contributions have been paid, the Group has no legal or constructive obligation to make further contributions if the fund does not hold sufficient assets to pay the benefits expected by the beneficiaries.

The regular contributions are recognized as an expense for the year in which they are due and, as such, are included in cost of sales, sales and marketing expenses, research and development expenses or general and administrative expenses.

Group management policies regarding post-employment benefits have led to the transformation of defined benefit plans into defined contribution benefit plans since the early 2000s. Nevertheless, a significant portion of the post-employment benefit plans provided by the Group are still defined benefit plans. They are either externally funded plans (mainly pension plans), for which the plan assets are held separately in independently administered funds, or unfunded plans such as healthcare plans and end-of-service benefit plans.

Post-employment benefit obligations, and the related current service cost, are measured using the projected unit credit method.

A defined benefit plan is a plan that defines an amount of benefits that the Group is committed to pay to current and former employees.

All defined benefit plans are subject to actuarial valuations carried out annually for the largest plans and on a regular basis for other plans. These actuarial valuations are carried out with the help of independent actuaries. Actuarial assumptions, primarily discount rates, projected salary increase rates, inflation rates and expected growth in healthcare costs are incorporated into the actuarial valuations and reviewed annually.

The liabilities or assets recognized in the consolidated statement of financial position in respect of defined benefit plans correspond to the present value of the defined benefit obligation at the reporting date, less the fair value of plan assets. They take into account any unrecognized assets not available in the form of refunds or a reduction in future contributions.

The present value of the defined benefit obligation corresponds to the estimated future cash outflows, calculated using a discount rate established by reference to a market rate based on interest rates of high-quality corporate bonds that have maturities approximating the duration of the related post-employment benefit obligation.

A net asset is recognized only to the extent that it represents a future economic benefit that is actually available to the Group in the form of refunds from the plan or reductions in future contributions.

When a defined benefit plan is subject to a minimum funding requirement (MFR), the Group determines whether paying these contributions may give rise to a surplus in that defined benefit plan. To the extent that the surplus in the plan exceeds the available economic benefits, the Group immediately recognizes a decrease in the defined benefit asset or an increase in the defined benefit liability.

Actuarial gains and losses arising from experience adjustments and changes in actuarial assumptions. are recognized in other comprehensive income in the period in which they arise.

Past service costs may arise when new defined benefit plans are set up, when changes to benefits payable under an existing defined benefit plan are introduced or when curtailments occur. They are recognized immediately in the income statement.

The Group's net benefit plan cost recognized in the income statement includes the current service cost for the period, curtailment and settlement gains and losses, past service cost, as well as actuarial gains and losses arising under other long-term benefit plans. Net interest on the net defined benefit liability (asset) is recognized outside operating income.

3.24.2 Share-based payments

Employee stock option plans

Benefits related to stock options, which may be granted to some Group employees, are measured at the grant date using the binomial option pricing model.

The grant date is the date when the Managing Chairman decides on the list of plan beneficiaries and the number of options granted to them.

The binomial model is based on the spot price for Company shares, the exercise price, the historical volatility of the shares (over a period equal to the expected lifetime of the option), a risk-free interest rate (zero coupon government bonds with a maturity equal to the expected lifetime of the option), and a dividend stream based on market expectations.

Benefits are spread over the period during which the services are rendered. They are recognized in "Segment other income and expenses".

Performance share plans

The Group may adopt plans to grant free shares of the Company to certain employees.

The grant date is the date when the Managing Chairman decides on the list of plan beneficiaries and the number of performance shares granted to them.

The fair value of the performance shares granted corresponds to the Company's share price on the grant date less:

- the present value of dividends that will not be received by the grantees during the vesting period;
- the value of the stock market performance condition on the grant date, which depends on the probability of the condition being fulfilled.

The number of shares that will ultimately be issued at the end of the vesting period depends on the extent to which the Group's performance and service conditions are met.

The total benefit cost is based on the fair value of the performance shares and the estimated number of shares that will ultimately be issued. This cost is recognized over the vesting period and is recognized in "Segment other income and expenses".

Employee share ownership plan

The Group may offer most of its employees the opportunity to participate in a share ownership plan allowing them to purchase Company shares.

These shares, which are subject to certain restrictions relating to their sale or transfer, may be purchased by the employees at a subscription price based on the Michelin share price, less a discount. The benefit granted to the employees equals the difference between the fair value of the shares acquired (after deducting the five-year lock-up cost) and the price paid by the employees, multiplied by the number of shares acquired.

The benefit granted to the employees is immediately expensed by the Group, as no vesting period applies, and is recognized under "employee benefit costs – share-based payments", within "Segment other income and expenses".

3.25 Provisions

Provisions are recognized when a legal or constructive obligation has been incurred that will probably lead to an outflow of resources that can be reasonably estimated.

Provisions for reorganizations and adaptation of activities are recognized when the Group has a detailed formal plan that has been announced.

Provisions are recorded at the net present value of the estimated cash outflows.

3.26 Trade payables

Trade payables are recognized initially at fair value and are subsequently measured at amortized cost using the effective interest method.

The Group has put in place paying agent agreements with several financial institutions. Under these agreements, the financial institution acts as a paying agent with respect to invoices due to suppliers who have entered into a bilateral agreement with the financial institution in order to be in position to factor their trade receivables from the Group.

Given the nature of some of these agreements, the total balance of trade payables to such suppliers is presented on a separate line of the consolidated statement of financial position, within "Trade payables under reverse factoring agreements". In the consolidated statement of cash flows, these transactions are included in operating or investing activities.

NOTE 4 CHANGES IN THE SCOPE OF CONSOLIDATION

The main acquisitions, joint-venture creations and disposals made by the Group in 2018 and 2019 are presented below:

Company	Transaction type	Transaction date	Purchase price allocation status at December 31, 2019	Note
Multistrada	Acquisition	March 6, 2019	provisional	4.1.1.
Masternaut	Acquisition	May 22, 2019	provisional	4.1.2.
Symbio	Creation of a joint venture	November 21, 2019	provisional	4.1.3.
BookaTable	Disposal	December 3, 2019	not applicable	4.1.4.
Camso	Acquisition	December 18, 2018	final	4.2.1.
Fenner	Acquisition	May 31, 2018	final	4.2.2.
TBC	Creation of a joint venture	April 5, 2018	final	4.2.3.

4.1 Operations in 2019

4.1.1 Multistrada

On January 22, 2019, the Group announced the signing of an agreement to acquire 80% of PT Multistrada Arah Sarana TBK ("Multistrada"), a tire manufacturer based in Indonesia. With this transaction, the Group has strengthened its presence in the highly promising, local production-dominated Indonesian market by acquiring a local plant with good quality equipment and immediately available production capacity.

After obtaining antitrust clearance, the transaction was completed on March 6, 2019 with the acquisition of 87.59% of the share capital.

The net cash outflow generated by the acquisition of 87.59% of the Multistrada shares in 2019 is as follows:

(in € millions)	At the acquisition date
Fair value of consideration transferred	(417)
Net cash acquired	66
Acquisition costs paid	(4)
NET CASH OUTFLOW FROM THE ACQUISITION	**(355)**

As Multistrada is a listed company, and in accordance with Indonesian regulations, the Group launched a mandatory tender offer (MTO) just after the takeover on March 6, 2019 to acquire the remaining 12.41% interest at the same price per share offered to acquire the initial 87.59% stake. The MTO ended on May 22, 2019, resulting in the acquisition of 12.05% of additional shares, bringing the total ownership interest to 99.64%.

The shares acquired through the MTO correspond to a purchase of shares from minority shareholders and are not regarded as part of the fair value of the consideration transferred.

The identification and measurement of the identifiable assets acquired and the liabilities assumed at their fair value at the acquisition date started in the second half of 2019 and will be completed within 12 months after the acquisition date, *i.e.,* no later than March 6, 2020.

The provisional fair value measurement of each main category of identifiable assets acquired and liabilities assumed is detailed as follows:

(in € millions)	**At the acquisition date**
Intangible assets	14
Property, plant and equipment (PP&E)	411
Non-current financial assets and other non-current assets	10
Deferred tax assets	-
Non-current assets	**435**
Inventories	59
Trade receivables and other current assets	56
Cash and cash equivalents	66
Current assets	**181**
Non-current financial liabilities	96
Provisions and other non-current liabilities	11
Deferred tax liabilities	33
Non-current liabilities	**140**
Current financial liabilities	76
Trade payables and other current liabilities	111
Current liabilities	**187**
TOTAL FAIR VALUE OF NET ASSETS ACQUIRED	**289**

The trademark portfolio has been valued at €13 million and will be amortized over its estimated useful life of 20 years; property, plant and equipment, valued at €411 million, constitute the main acquired assets and will be depreciated over their estimated useful lives, ranging from 10 to 25 years depending on the assets concerned.

As of December 31, 2019, the provisional allocation of the purchase price, after the measurement at fair value of the identifiable assets acquired and liabilities assumed, led to the recognition of goodwill for €164 million in application of the partial goodwill method, calculated as follows:

(in € millions)	**At the acquisition date**
Fair value of consideration transferred	417
Plus: non-controlling interests at fair value of identifiable net assets	36
Less: fair value of net assets acquired	289
GOODWILL	**164**

This goodwill, allocated to the passenger car tires - regional brands CGU, corresponds primarily to the value attributed to the expected synergies which include strengthening the Group's presence in the highly promising Indonesian market and gradually converting production from Tier 3 passenger car tires to Tier 2 Group brands with limited new investment, thereby allowing more Tier 1 production at other Asian plants and supporting growing demand for Tier 2 tires in Europe, North America and Asia.

4.1.2 Masternaut

On May 22, 2019, the Group completed the acquisition of the entire share capital of Masternaut, one of the largest European telematics providers. Masternaut operates primarily in France and the United Kingdom. It provides a technical platform equipped with the latest technology and offers on-board telematics solutions to optimize vehicle fleet management and monitoring.

The net cash outflow generated by the acquisition of 100% of the Masternaut shares in 2019 breaks down as follows:

(in € millions)	**At the acquisition date**
Fair value of consideration transferred	(10)
Net cash acquired	2
Acquisition costs paid	(2)
NET CASH OUTFLOW FROM THE ACQUISITION	**(10)**

The identification and measurement of the identifiable assets acquired and the liabilities assumed at their fair value at the acquisition date started in the second half of 2019 and will be completed with 12 months of the acquisition date, *i.e.*, no later than May 22, 2020. The fair value of the net assets acquired was a negative €61 million, corresponding mainly to the €75 million in assumed debt. The debt was repaid when the shares were acquired.

The brand has been valued at €8 million and will be amortized over its estimated useful life of 10 years; the acquired technology has been valued at €18 million and will be amortized over its estimated residual useful life of 10 years.

As of December 31, 2019, the provisional allocation of the purchase price, after the measurement at fair value of the identifiable assets acquired and liabilities assumed, led to the recognition of goodwill for €71 million, calculated as follows:

(in € millions)	At the acquisition date
Fair value of consideration transferred	10
Less: fair value of net assets acquired	(61)
GOODWILL	**71**

This goodwill, allocated to the Light truck and Truck tires CGU, corresponds primarily to the value attributed to the expected synergies, which include increasing the pace of growth of the light vehicle Services and Solutions businesses in the extremely buoyant fleet market, deploying the offering in all European countries and using data to provide the best solutions to customers, improve product performance and develop data science businesses such as predictive maintenance.

4.1.3 Symbio

On November 21, 2019, Michelin and Faurecia announced the creation of a joint venture combining all their hydrogen fuel cell dedicated activities, with the aim of becoming a world leader in hydrogen mobility. The joint venture, named Symbio – A Faurecia Michelin Hydrogen Company, will develop, produce and market hydrogen fuel cell systems for light vehicles, commercial vehicles, trucks and other applications.

The joint venture was set up in phases during 2019. In February 2019, the Group increased its interest in Symbio from 46.64% to 100%. Subsequently, and prior to the creation of the joint venture, certain Group companies and Faurecia sold their hydrogen fuel cell assets to Symbio for cash, and the Group employees working in this area were transferred to Symbio. The joint venture was set up on November 21, 2019. Since that date, the Group has exercised joint control over Symbio, which is therefore consolidated using the equity method in the Group's consolidated financial statements.

At December 31, 2019, the Group's interest in Symbio is presented in the consolidated statement of financial position under "Investments in equity-accounted companies" for €82 million.

4.1.4 BookaTable

In December 2019, Michelin, TripAdvisor and LaFourchette entered into an international strategic partnership to combine the gastronomic selection expertise of the Michelin Guide with the power of the global customer audience of TripAdvisor and its subsidiary LaFourchette by TheFork, Europe's leading online restaurant booking platform.

At the same time, Michelin sold its Bookatable online restaurant booking platform to LaFourchette.

The sale generated a loss of €17 million, corresponding mainly to currency translation adjustments, in addition to the €19 million impairment loss recorded in the first half of the year.

4.2 Purchase price allocation for transactions carried out in 2018

4.2.1 Camso

The acquisition of a controlling interest in Camso was completed on December 18, 2018. The fair value of the consideration transferred exclusively in cash amounts to €1,169 million.

The net cash outflow generated by the acquisition of 100% of Camso shares in 2018 was as follows:

(in € millions)	At the acquisition date
Fair value of consideration transferred	(1,169)
Net cash acquired	28
Acquisition costs paid	(14)
NET CASH OUTFLOW FROM THE ACQUISITION	**(1,155)**

The identification and measurement at their fair value of assets acquired and liabilities assumed started in the first half of 2019 with the assistance of an external expert.

The measurement at fair value of the assets acquired and liabilities assumed are detailed in the following table:

(in € millions)	At the acquisition date
Intangible assets	389
Property, plant and equipment (PP&E)	265
Non-current financial assets and other non-current assets	21
Deferred tax assets	13
Non-current assets	**688**
Inventories	256
Trade receivables and other current assets	215
Cash and cash equivalents	28
Current assets	**499**
Non-current financial liabilities	282
Provisions and other non-current liabilities	10
Deferred tax liabilities	109
Non-current liabilities	**401**
Current financial liabilities	88
Trade payables and other current liabilities	175
Current liabilities	**263**
TOTAL FAIR VALUE OF NET ASSETS ACQUIRED	**523**

The trademark portfolio was valued at €33 million and will be amortized over a 10-year estimated useful life period. The technology was valued at €52 million and the customer relationships at €267 million; they will be amortized over a 15-year estimated residual life period.

Purchase price allocation was finalized within the 12-month post-acquisition period. Final goodwill at aquisition date amounts to €646 million, as per the following table:

(in € millions)	Provisional restated December 31, 2018	Final
Fair value of consideration transferred	1,174	1,169
Less: fair value of net assets acquired	522	523
GOODWILL	**652**	**646**

This goodwill has been allocated to the Off-the-road tires (OTR) CGU. The rationale is mainly supported by expected synergies in providing customers with a comprehensive range of solutions: premium radial tires and tracks in the agricultural market or radial and bias tires and tracks in the construction market. Deployment of new offerings will be accelerated by the complementarity of both Michelin and Camso's distribution networks. On the technology front, the acquisition is expected to leverage the Group's innovation capacity in tracks and airless tires.

In 2019, Camso contributed €925 million to the Group's sales and €75 million to its segment operating income.

4.2.2 Fenner

Purchase price allocation was finalized within the 12-month post-acquisition period. Final goodwill at acquisition date amounts to €397 million, as per the following table:

(in € millions)	Provisional reported amount at December 31, 2018	Final
Fair value of consideration transferred	1,370	1,370
Less: fair value of net assets acquired	990	973
GOODWILL	**380**	**397**

The goodwill allocated to the Mining CGU amounts to €247 million whereas the portion allocated to the High-Technology Materials CGU group amounts to €150 million. The goodwill rationale is mainly supported by expected synergies:

- in conveyor belts, the acquisition enables the Group to provide its mining industry customers with a comprehensive offering, ranging from tires to conveyor belts with related services and solutions, and to enhance both companies' geographical reach;
- in high-technology materials, the transaction broadens the Group's high-technology materials expertise and innovation capacity.

Subsequent to analysis, the Group decided to amortize the various trademarks and technology related to the reinforced polymer products over an estimated residual useful life of 20 years.

4.2.3 Joint venture with Sumitomo Corporation of Americas

On April 5, 2018, Michelin North America, Inc. and Sumitomo Corporation of Americas completed a definitive agreement to combine their respective North American wholesale and retail distribution activities into a joint venture named TBC, owned on a 50-50 basis by the parties.

The Group has joint control over TBC, which is therefore consolidated using the equity method in the Group's consolidated financial statements.

The purchase price allocation was completed during the first half of 2019 and TBC's financial figures are presented in note 17.1 "Joint venture with Sumitomo Corporation of Americas (TBC)".

NOTE 5 SEGMENT REPORTING

Segment information is presented according the following three operating segments:

- Automotive and related distribution;
- Road transportation and related distribution;
- Specialty businesses and related distribution.

The Specialty businesses include the Mining, Off-the-road, Two-wheel and Aircraft tire activities, as well as the Conveyor Belt and High-Technology Materials activities.

The above three operating segments are essentially the same as the ones presented in the prior year, with the exception of a few reallocations, the largest of which followed on from the Camso acquisition in 2018. Segment information for 2018 has been restated to reflect these reallocations (note 2.5.4).

The operating segments' performance is measured mainly at the level of sales and segment operating income, according to the same measurement principles used in the consolidated income statement.

Segment assets consist of goodwill, intangible assets, property, plant and equipment, trade receivables and finished product inventories. Corporate intangible assets and property, plant and equipment are allocated to each segment in proportion to the amount of their directly attributed assets. The amounts provided to the Group's management in respect of operating segment assets are measured in a manner consistent with the consolidated financial statements. Capital expenditure consists of additions of property, plant and equipment and intangible assets.

No operating liabilities are allocated to the segments in the internal report provided to the Group's management.

The segment information is as follows:

	2019				2018[1]			
(in € millions)	Automotive and related distribution	Road transportation and related distribution	Specialty businesses and related distribution	Total	Automotive and related distribution	Road transportation and related distribution	Specialty businesses and related distribution	Total
Profit and loss information								
Sales	11,851	6,448	5,836	**24,135**	11,332	6,378	4,318	**22,028**
Segment operating income	1,321	597	1,091	**3,009**	1,295	612	868	**2,775**
As a percentage of sales	*11.1%*	*9.3%*	*18.7%*	**12.5%**	*11.4%*	*9.6%*	*20.1%*	**12.6%**
Segment assets								
Goodwill, intangible assets and PP&E	7,911	4,518	5,408	**17,837**	6,776	4,049	5,196	**16,021**
Finished product inventories	1,252	879	806	**2,937**	1,198	901	800	**2,899**
Trade receivables	1,589	1,094	849	**3,532**	1,544	1,117	792	**3,453**
Segment assets	**10,752**	**6,491**	**7,063**	**24,306**	**9,518**	**6,067**	**6,788**	**22,373**
Other information								
Capital expenditure	897	492	412	**1,801**	882	457	329	**1,668**

(1) The 2018 figures have been restated for comparison purposes (see note 2.5.4 to the consolidated financial statements).

Segment reporting assets are reconciled to total Group assets as follows:

(in € millions)	December 31, 2019	December 31, 2018[1]
Total segment assets	**24,306**	**22,373**
Non-current financial assets and other non-current assets	796	699
Investments in equity-accounted companies	1,087	953
Deferred tax assets	814	752
Other net inventories (raw materials and supplies, work in progress)	1,757	1,803
Current financial assets	396	315
Other current assets	1,055	1,103
Cash and cash equivalents	1,466	2,128
TOTAL GROUP ASSETS	**31,677**	**30,126**

(1) The 2018 figures have been restated for comparison purposes (see note 2.5.4 to the consolidated financial statements).

Information by region breaks down as follows:

	2019				2018[1]			
(in € millions)	Europe	North America	Other	Total	Europe	North America	Other	Total
Sales	8,847	8,902	6,386	**24,135**	8,570	7,824	5,634	**22,028**
Goodwill, intangible assets and PP&E	6,850	5,817	5,170	**17,837**	6,336	5,451	4,234	**16,021**
Capital expenditure	822	460	519	**1,801**	826	435	407	**1,668**

(1) The asset amounts reported in 2018 have been restated for comparison purposes. Camso's assets have been consolidated in a total amount of €1,305 million, of which €57 million for Europe, €1,072 million for North America and €176 million for the rest of the world.

Europe includes western and eastern European countries. North America includes Mexico. Asian, South-American, Middle-Eastern, Oceanic and African countries are included in "Other".

The Group sales information is based on the location of the customer.

Sales generated in France amounted to €2,113 million (2018: €2,056 million). The intangible assets and PP&E located in France amounted to €2,488 million (2018: €2,356 millions).

Approximately 80% of North American sales were generated in the United States in 2018 and 2019.

No single external customer accounted for 10% or more of the Group's sales in 2019 and 2018.

NOTE 6 EXPENSES BY NATURE

The following segment operating costs are allocated by function to the appropriate expense headings in the income statement:

(in € millions)	2019	2018
Raw materials and consumables used and changes in finished product inventories	(8,889)	(7,948)
Employee benefit costs	(6,423)	(5,972)
Transportation of goods	(1,232)	(1,186)
Depreciation and amortization[1]	(1,754)	(1,344)
Other expenses	(2,828)	(2,803)
EXPENSES BY NATURE	**(21,126)**	**(19,253)**

(1) Excluding amortization of trademarks and customer relationships acquired through business combinations.

NOTE 7 EMPLOYEE BENEFIT COSTS

Employee benefit costs are allocated by function to the appropriate expense headings in the income statement:

(in € millions)	2019	2018
Wages and salaries	(5,140)	(4,732)
Payroll taxes	(941)	(907)
Defined benefit plan costs (note 27.1)	(51)	(169)
Defined contribution plan costs (note 27.2)	(226)	(223)
Share-based payments – current service cost (note 25)	(7)	(7)
EMPLOYEE BENEFIT COSTS	**(6,365)**	**(6,038)**

The average number of employees in 2019 was 128,850 (2018: 118,308).

NOTE 8 SEGMENT OTHER INCOME AND EXPENSES

Segment other income and expenses are recognized within in the income statement:

(in € millions)	2019	2018
Employee share ownership plan cost	-	(13)
Share-based payments – current service cost	(7)	(9)
Other operating income/(expenses)	(12)	17
SEGMENT OTHER INCOME AND EXPENSES	**(19)**	**(5)**

NOTE 9 OTHER OPERATING INCOME AND EXPENSES

Other operating income and expenses are detailed in the table below:

(in € millions)	2019	2018
Amortization of trademarks and customer relationships acquired (note 9.1)	(91)	(39)
Reorganization and adaptation of activities (note 9.2)	(174)	(113)
Impairment of non-current assets (note 9.3)	(146)	(70)
Employee benefit obligations (note 9.4)	58	(66)
Other (note 9.5)	35	63
OTHER OPERATING INCOME AND EXPENSES	**(318)**	**(225)**

9.1 Amortization of trademarks and customer relationships acquired

Amortization of trademarks and customer relationships recognized in the course of a business combination (note 4) amounted to €91 million in 2019 (2018: €39 million): €28 million related to amortization of brands or trademarks (2018: €9 million) and €63 million to amortization of customer relationships (2018: €30 million).

9.2 Reorganizations and adaptation of activities

9.2.1 Year ended December 31, 2019

The Bamberg plant in Germany primarily manufactures 16-inch passenger car tires. In September 2019, the Group announced its decision to cease operations at the Bamberg plant by early 2021. The Group's priority is now to provide the plant's 858 employees with the support they need to face the consequences of this decision in the best possible conditions.

An expense amounting to €97 million has been recognized, mainly to cover the cost of the employee-related aspects of the project, as well as the costs required to deploy the revitalization plan to help the impacted area.

In October 2019, the Group announced its intention to close the La Roche-sur-Yon plant in France, which specializes in the manufacture of truck tires, by the end of 2020. The Group's priority is to support each of the 619 employees in a joint process to build their future career, and a dedicated program fostering voluntary mobility has been set up.

An expense amounting to €73 million has been recognized to cover the cost of the employee-related aspects of the project, as well as the costs necessary to convert the site.

9.2.2 Year ended December 31, 2018

The Group announced in 2018 its intention to close the Dundee plant in the United Kingdom by mid-2020. The plant manufactures 16-inch and smaller Michelin tires for passenger cars and employs 845 people. The Groups intends to implement a personalized support program for every plant employee. In addition to enhanced redundancy packages and early retirement measures for employees at the end of their career, a comprehensive plan will be proposed to assist the employees concerned to start a new career as quickly as possible. Michelin Development, the Group's entity dedicated to local economic development in its host communities, will also be working with local stakeholders with the aim of creating an equivalent number of new jobs.

A provision amounting to €104 million has been recognized, mainly to cover the cost of the employee-related aspects of the project, as well as the costs required to deploy the revitalization plan to help the impacted area.

9.3 Impairment of non-current assets

9.3.1 Year ended December 31, 2019

Impairment losses of €79 million were recorded in connection with the Bamberg and La Roche-sur-Yon restructurings.

In addition, a partial €19 million impairment loss was recognized on the goodwill relating to the BookaTable CGU in the first half of 2019 (see note 4.1.4).

9.3.2 Year ended December 31, 2018

Impairment losses of €70 million recorded in 2018 mainly concerned the closure of the Dundee site in the United Kingdom.

9.4 Employee benefit obligations

9.4.1 Year ended December 31, 2019

In France, the transformations needed to align the supplementary pension plan with the requirements of government order 2019-697 dated July 3, 2019 led to the recognition of negative past service costs (income) in an amount of €68 million.

Additional information is provided in note 27.1.

9.4.2 Year ended December 31, 2018

On October 26, 2018, the UK High Court ruled that inequalities between men and women in pension plans with a guaranteed minimum pension (GMP) must be eliminated. The Group analyzed the conclusions of the judgment relating to equalizing the GMPs and recognized an expense (a positive past service cost) for an amount of €37 million.

9.5 Other operating income and expenses

9.5.1 Year ended December 31, 2019

Other operating income and expenses for the year represent net income of €35 million, including the profit recognized in connection with the creation of the Symbio joint venture with Faurecia.

9.5.2 Year ended December 31, 2018

During 2018, the Group acquired both Fenner Plc and Camso Inc. As part of these transactions, expenses in the form of consulting, due diligence, valuation and audit fees were incurred for a total amount of €30 million.

Following a ruling handed down by Brazil's Federal Supreme Court, the Group's local subsidiary SML recorded income of €51 million for payroll tax overpayments made in the period 2005-2018. In addition, interest income of €26 million was recorded in the consolidated income statement under "Other financial income and expenses".

In the United States, the disposal of the TCi wholesale subsidiary, transferred to the joint venture with Sumitomo Corporation of Americas generated a gain of €35 million.

NOTE 10 COST OF NET DEBT AND OTHER FINANCIAL INCOME AND EXPENSES

Cost of net debt and other financial income and expenses are broken down in the table below:

(in € millions)	2019	2018
Interest expense	(303)	(210)
Interest income	4	2
Interest rate derivatives	(33)	(4)
Fees on credit lines	(3)	(3)
Capitalized borrowing costs	5	15
COST OF NET DEBT	**(330)**	**(200)**
Net income from financial assets (other than cash and cash equivalents and cash management financial assets)	16	3
Currency remeasurement (including currency derivatives)	(9)	(7)
Other	(12)	20
OTHER FINANCIAL INCOME AND EXPENSES	**(5)**	**16**

Interest expense on lease liabilities is recognized in cost of net debt and amounted to €40 million for the year ended December 31, 2019 (2018:€10 million).

10.1 Derivatives not accounted for using hedge accounting

As described in the financial risk management policy, the Group's financing activities are mostly centralized (note 33.1.2 "Liquidity risk") and the interest rate risk is managed through the use of "plain vanilla" derivative instruments (note 33.1.4 "Interest rate risk"). As a consequence:

- most borrowings are denominated in euros (note 26 "Financial liabilities");
- some of these borrowings are subsequently swapped into foreign currencies to finance the foreign subsidiaries; and
- derivatives are purchased to manage the interest rate risk in these currencies (note 16 "Derivative instruments").

This process is described in the summary table in note 33.2.3 "Interest rate risk".

Although these transactions provide effective economic hedges, they do not qualify for hedge accounting under IFRS and they cannot be recognized as cash flow hedges as described in note 3.5 "Hedging". Fluctuations in the derivatives' fair values are therefore accounted for in the income statement. The decrease in fair value during the year amounted to €33 million (2018: decrease of €5 million) and is included in "Cost of net debt" under "Interest rate derivatives".

10.2 Ineffective hedges

The effectiveness of the hedge is determined at the beginning of the hedging relationship and through periodic prospective effectiveness assessments to ensure that an economic relationship exists between the hedged item and the hedging instrument. A hedging relationship may become ineffective if the timing of the planned transaction changes from the original estimate.

The ineffective portion of cash flow hedges represented a €2 million gain in 2019 (2018: €3 million). This gain recorded under "Other financial income and expenses".

NOTE 11 INCOME TAX

Income tax expense can be analyzed as follows:

(in € millions)	2019	2018
Current tax expense (note 18.2)	(548)	(570)
Deferred tax benefit/(expense) (note 18.1)	42	-
INCOME TAX	**(506)**	**(570)**

Current tax includes €56 million of withholding tax on royalties and on retained earnings distributed between Group companies (2018: €35 million).

The Group tax proof is presented in the table below:

(in € millions)	2019	2018
Income before taxes	**2,236**	**2,230**
Tax calculated using domestic tax rates applicable to income in the respective countries	(410)	(483)
Tax effect of:		
▶ untaxed transactions	15	(22)
▶ deferred tax assets not recognized during the year	(87)	(84)
▶ net change in unrecognized deferred tax assets	15	35
▶ changes in tax rates	3	(32)
▶ taxes with no tax base (tax credits, withholding tax, etc.)	(51)	(1)
▶ other items	9	17
INCOME TAX	**(506)**	**(570)**

The Group has operations in various countries that have different tax laws and rates. The weighted average domestic tax rate of Group companies may therefore vary from year to year depending on the relative size of taxable incomes.

The difference between the Group's effective and theoretical tax rates can be explained mainly by deferred tax assets not recognized during the year and by withholding taxes, tax credits and other taxes not assessed on income before tax.

The recoverability of deferred tax assets is periodically reviewed at the tax entity level and may lead to the recognition of previously unrecognized deferred tax assets.

Previously unrecognized deferred tax assets recognized in 2019 were not material. The companies for which no deferred tax assets were recognized in 2019 were broadly the same as in 2018.

In 2018, deferred tax assets arising from tax loss carryforwards were recognized in China and Germany for €61 million.

In China, the Group considered that a deferred tax asset of €36 million was recognizable for tax loss carryforwards (tax base: €144 million) in the consolidated statement of financial position. In 2019, deferred tax assets of €13 million were utilized, reducing the balance to €23 million. The recognized amount takes into consideration that, in China, tax losses can be carried forward for five years.

In Germany, following a reorganization of the tax group, a deferred tax asset of €25 million was recognized for tax loss carryforwards. Tax losses can be carried forward indefinitely, but their utilization is limited to 60% of income for the year if taxable income exceeds €1 million.

In the United Kingdom, following the Group's announcement of its intention to close the Dundee plant by mid-2020, deferred taxes were remeasured in 2018. The remeasurement took into account the new taxable income projections and led to the recognition of deferred tax expense of €30 million. In addition, in this context, deferred tax assets of €39 million were not recognized on tax loss carryforwards of €229 million. As the situation was unchanged in 2019, no deferred tax assets were recognized during the year.

In France, in application of the 2019 finance act *(Loi de finances)* published on December 28, 2018 concerning the taxation of industrial property royalties, the Group reassessed its deferred tax assets, resulting in the recognition of deferred tax expense of €31 million in 2018.

NOTE 12 EARNINGS PER SHARE

Basic earnings per share are calculated by dividing income attributable to the shareholders of the Company by the weighted average number of shares outstanding during the year, excluding shares bought back by the Group and held as treasury shares.

Diluted earnings per share are calculated by adjusting the weighted average number of shares outstanding to assume conversion of all dilutive potential shares. At December 31, 2019 the Company had two types of dilutive potential shares: stock options (note 28.1 "Employee stock option plans") and performance shares (note 28.2 "Performance share plans"). For stock options, when they are dilutive at the reporting date, the number of shares that could have been acquired at fair value is calculated based on the monetary value of the subscription rights attached to outstanding stock options. Fair value is determined for this purpose as the average annual market price of the Company's shares. The number of shares calculated as above is compared with the number of shares that would have been issued assuming exercise of the stock options. Since performance shares are granted free of charge and are dilutive by definition, the number of shares that are expected to be issued is determined at the reporting date based on estimates.

Components of the basic and diluted earnings per share calculations are presented in the table below:

Taking into account the change in the average share price in 2019, all the stock option plans, as described in note 28.1 "Employee stock option plans", are dilutive.

No share transactions affecting the weighted average number of shares used to calculate basic earnings per share and diluted earnings per share occurred after the end of the 2019 reporting period.

	2019	2018
Net income *(in € millions)*, excluding non-controlling interests	1,751	1,677
▶ Less, estimated General Partners' profit shares	(11)	(12)
Net income attributable to the shareholders of the Company used to calculate basic earnings per share	**1,740**	**1,665**
Weighted average number of shares outstanding *(thousands of shares)* **used to calculate basic earnings per share**	**179,512**	**178,990**
▶ Plus, adjustment for stock option plans	34	129
▶ Plus, adjustment for performance shares	607	857
Weighted average number of shares used to calculate diluted earnings per share	**180,153**	**179,976**
Earnings per share *(in €)*		
▶ Basic	9.69	9.30
▶ Diluted	9.66	9.25

NOTE 13 GOODWILL AND INTANGIBLE ASSETS

Changes in goodwill and intangible assets are as follows:

(in € millions)	Goodwill	Intangible assets	Total
Gross carrying amounts at January 1, 2018	**1,154**	**2,174**	**3,328**
Translation adjustments	(48)	(37)	(85)
Additions (including new emission rights: €21 million)	-	222	222
Disposals	-	(31)	(31)
Change in scope of consolidation(1)	1,125	1,477	2,602
Transfers and other	-	4	4
Gross carrying amounts at December 31, 2018(1)	**2,231**	**3,809**	**6,040**
Translation adjustments	67	77	144
Additions (including new emission rights: €20 million)	-	227	227
Disposals	-	(71)	(71)
Change in scope of consolidation	150	59	209
Transfers and other	-	(4)	(4)
Gross carrying amounts at December 31, 2019	**2,448**	**4,097**	**6,545**
Amortization and impairment at January 1, 2018	**(62)**	**(1,389)**	**(1,451)**
Translation adjustments	-	1	1
Amortization	-	(175)	(175)
Net impairment	(9)	(25)	(34)
Disposals	-	19	19
Change in scope of consolidation	-	(18)	(18)
Transfers and other	-	(5)	(5)
Amortization and impairment at December 31, 2018	**(71)**	**(1,592)**	**(1,663)**
Translation adjustments	(3)	(5)	(8)
Amortization	-	(256)	(256)
Net impairment	(36)	(15)	(51)
Disposals	-	48	48
Change in scope of consolidation	49	4	53
Transfers and other	1	(1)	-
Amortization and impairment at December 31, 2019	**(60)**	**(1,817)**	**(1,877)**
NET CARRYING AMOUNTS AT DECEMBER 31, 2019	**2,388**	**2,280**	**4,668**
Net carrying amounts at December 31, 2018(1)	**2,160**	**2,217**	**4,377**

(1) The 2018 figures have been restated for comparison purposes (see note 2.5 to the consolidated financial statements).

13.1 Goodwill

At December 31, 2019, goodwill allocated to the CGUs or groups of CGUs is as follows:

(in € millions)	December 31, 2019	December 31, 2018[(1)]
Passenger car tires – global brands CGU group	382	364
Light truck and Truck tires CGU group	680	606
Passenger car tires – regional brands CGU	177	11
Mining CGU group [(2)]	254	235
Two-wheel tires CGU	25	26
Off-the-road tires CGU	698	687
High-Technology Materials CGU group[(2)]	154	136
Other CGUs	18	95
GOODWILL	**2,388**	**2,160**

(1) The 2018 figures have been restated for comparison purposes (see note 2.5 to the consolidated financial statements).
(2) As explained in note 4.2.2, Fenner's conveyor belt business represents a separate CGU that is combined with the Mining CGU for impairment testing purposes. Reinforced polymers' activities are shown in the "High-Technology Materials" CGU group.

Goodwill has been tested for impairment using the following two main assumptions:

- the terminal value takes into account an annual growth rate that depends on the type of business and the countries where the assets are located;
- the CGUs' future cash flows are discounted using the after-tax Weighted Average Cost of Capital (WACC) applied to after-tax cash flows. They are determined by geographical region taking into account the features of the business.

After-tax discount rates and perpetual growth rates used in 2019 for terminal value calculations are presented in the table below:

(as a percent)	WACC	Perpetual growth rate
Passenger car tires – global brands CGU group	7.6	1.5
Light truck and Truck tires CGU group	8.1	1.8
Passenger car tires – regional brands CGU	7.4	1.5
Mining CGU group	9.4	1.9
Two-wheel tires CGU	7.7	1.7
Off-the-road tires CGU	7.4	1.7

A 50-basis point increase in WACC combined with a 100-basis point decrease in the perpetual growth rate applied to the groups of CGUs would not lead to the recognition of any impairment.

Interactions between impairment tests and the application of IFRS 16 have been dealt as follows: right-of-use assets have been included in the assets to be tested, the corresponding lease liabilities have been deducted from the value of the CGU's concerned and values in use include the lease payments determined previously before IFRS 16 was applied. This pragmatic approach does not preclude other approaches to this subject that may be implemented in the future.

13.2 Intangible assets

In 2019, additions to intangible assets, amounting to €227 million (2018: €222 million), are detailed as follows:

- Software €188 million
- Emission rights – allowances granted €20 million
- Other €19 million

Changes in scope of consolidation amount to €59 million (2018: €1,477 million), are detailed as follows:

- Brands and trademarks €20 million
- Contractual customer relationships €2 million
- Technology €13 million
- Other €24 million

13.2.1 Software

The net carrying amount of software at December 31, 2019 was €653 million (2018: €563 million). Software is initially recognized at cost, including the cost of acquisition or production and other costs directly attributable to the acquisition or production of the software.

13.2.2 Brands and trademarks

At December 31, 2019, the net carrying amount of brands and trademarks in the consolidated statement of financial position was €432 million (2018: €419 million), of which €11 million related to brands and trademarks with indefinite useful lives. These amounts correspond mainly to the fair value of brands and trademarks recognized as part of business combinations.

13.2.3 Customer relationships

At December 31, 2019, the net carrying amount of customer relationships in the consolidated statement of financial position was €970 million (2018: €1,013 million). These amounts correspond primarily to the fair value of customer lists recognized in connection with business combinations (mainly Fenner and Camso).

13.2.4 Emission rights

The emission rights received or purchased are recognized as an intangible asset at their price on the transaction date. If emission right is not purchased, a government grant is recognized in liabilities for the same amount. The cost and liability corresponding to actual emissions and the income corresponding to the use of the government grant are accounted for using the price on the acquisition date. Net emission rights at December 31, 2019 amounted to 2.5 million tonnes (2018: 2.5 million tonnes), representing a value of €37 million (2018: €25 million). The liability corresponding to actual emissions in 2019 amounts to 0.8 million tonnes (2018: 0.8 million tonnes) representing a value of €13 million (2018: €9 million). It will be offset by the delivery of the acquired allowances.

13.2.5 Development costs

In 2018 and 2019, no development costs were capitalized since the criteria for recognition as intangible assets were not met. To be recognized as an asset, the development costs incurred for a new product or a significant product renewal project must fulfill six criteria. One of these criteria requires the entity to demonstrate the existence of a market for the output of the intangible asset. The existence of a market is demonstrated only when the Group has obtained OEM approval and when the margin generated by the purchase volumes proposed by the manufacturers is in line with Group objectives. In practice, the corresponding development costs are incurred at a stage of the project which is prior to OEM approval.

NOTE 14 PROPERTY, PLANT AND EQUIPMENT

Changes in property, plant and equipment are as follows:

(in € millions)	Land and buildings	Plant and industrial equipment	Other equipment	Total
Gross carrying amounts at January 1, 2018	**6,731**	**18,609**	**1,496**	**26,836**
Translation adjustments	16	79	(1)	94
Additions (including finance leases: €65 million)	334	1,118	80	1,532
Disposals	(145)	(504)	(48)	(697)
Change in scope of consolidation(1)	198	274	15	487
Transfers and other	(220)	215	6	1
Gross carrying amounts at December 31, 2018(1)	**6,914**	**19,791**	**1,548**	**28,253**
Translation adjustments	136	357	26	519
Change in acounting method (note 2.3.1)	672	70	74	816
Additions (including leases: €217 million)	463	1,202	146	1,811
Disposals	(137)	(546)	(56)	(739)
Change in scope of consolidation	192	232	1	425
Transfers and other	(136)	91	39	(6)
Gross carrying amounts at December 31, 2019	**8,104**	**21,197**	**1,778**	**31,079**
Depreciation and impairment at January 1, 2018	**(2,916)**	**(12,021)**	**(1,016)**	**(15,953)**
Translation adjustments	(4)	(53)	2	(55)
Depreciation	(180)	(947)	(81)	(1,208)
Net impairment	(7)	(9)	(4)	(20)
Disposals	106	454	43	603
Change in scope of consolidation(1)	-	18	4	22
Transfers and other	-	1	1	2
Depreciation and impairment at December 31, 2018	**(3,001)**	**(12,557)**	**(1,051)**	**(16,609)**
Translation adjustments	(48)	(219)	(15)	(282)
Change in acounting method (note 2.3.1)	(19)	(1)	-	(20)
Depreciation	(335)	(1,130)	(124)	(1,589)
Net impairment	(18)	(54)	-	(72)
Disposals	100	497	65	662
Change in scope of consolidation	-	1	2	3
Transfers and other	(9)	11	(5)	(3)
Depreciation and impairment at December 31, 2019	**(3,330)**	**(13,452)**	**(1,128)**	**(17,910)**
NET CARRYING AMOUNTS AT DECEMBER 31, 2019	**4,774**	**7,745**	**650**	**13,169**
Net carrying amounts at December 31, 2018(1)	**3,913**	**7,234**	**497**	**11,644**

(1) The 2018 figures have been restated for comparison purposes (see note 2.5 to the consolidated financial statements).

PP&E in progress amount to €1,949 million (2018: €2,121 million).

Accumulated impairment losses amount to €386 million (2018: €309 million).

Borrowing costs capitalized in 2019 in PP&E amounted to €5 million (2018: €15 million).

14.1 Right-of-use assets

Right-of-use assets included in PP&E can be analyzed as follows:

(in € millions)	Right-of-use assets Land and buildings	Right-of-use assets Plant and industrial equipment	Right-of-use assets Other equipment	Total
Gross carrying amounts at December 31, 2018[1]	**267**	**1**	**134**	**402**
Translation adjustments	20	1	3	24
Change in accounting method (note 2.3.1)	672	70	74	816
New leases	157	30	30	217
Disposals	(9)	(1)	(2)	(12)
Change in scope of consolidation	1	-	-	1
Transfers and other	(11)	(1)	(4)	(16)
Gross carrying amounts at December 31, 2019	**1,097**	**100**	**235**	**1,432**
Depreciation and impairment at December 31, 2018[1]	**(40)**	**-**	**(30)**	**(70)**
Translation adjustments	(2)	-	-	(2)
Depreciation	(148)	(34)	(44)	(226)
Net impairment	(1)	-	-	(1)
Disposals	9	1	2	12
Change in scope of consolidation	-	-	-	-
Change in accounting method (note 2.3.1)	(19)	(1)	-	(20)
Transfers and other	(7)	8	1	2
Depreciation and impairment at December 31, 2019	**(208)**	**(26)**	**(71)**	**(305)**
NET CARRYING AMOUNTS AT DECEMBER 31, 2019	**889**	**74**	**164**	**1,127**
Net carrying amounts at December 31, 2018[1]	**227**	**1**	**104**	**332**

(1) The 2018 figures have been restated for comparison purposes (see note 2.5 to the consolidated financial statements).

The principles and criteria applied by the Group and the impact of first-time application of IFRS 16 are described in note 2.3.1.

As explained in note 3.16.1, some leases are recorded directly as an expense in the income statement on a straight-line basis over the life of the lease:

- short-term leases, representing an expense of €40 million in 2019;
- leases of low-value assets, representing an expense of €41 million in 2019;
- variable lease payments not taken into account to determine the lease liability, representing an expense of €24 million in 2019.

Undiscounted future lease payments are analyzed by maturity in note 33.2.1 "Liquidity risk".

NOTE 15 NON-CURRENT FINANCIAL ASSETS AND OTHER NON-CURRENT ASSETS

The carrying amount of the non-current financial assets and other non-current assets is analyzed in the table below:

(in € millions)	December 31, 2019	December 31, 2018[(1)]
Equity investments (note 15.1)	237	233
Loans and deposits (note 15.2)	277	265
Derivative instruments (note 16.1)	127	93
Other	155	108
NON-CURRENT FINANCIAL ASSETS AND OTHER NON-CURRENT ASSETS	**796**	**699**

(1) The 2018 figures have been restated for comparison purposes (see note 2.5 to the consolidated financial statements).

15.1 Equity investments

Unconsolidated equity investments consist primarily of a portfolio of shares in unlisted companies (note 33.4. "Classification of financial assets").

Movements in the portfolio during the year are presented in the table below:

(in € millions)	2019	2018
At January 1	**233**	**285**
Translation adjustments	2	4
Additions	15	18
Disposals	(17)	(27)
Change in scope of consolidation[(1)]	1	(55)
Fair value changes	3	8
AT DECEMBER 31	**237**	**233**

(1) Equity investments at January 1, 2018 include €55 million for companies acquired in 2017 which were consolidated in 2018.

15.2 Loans and deposits

The carrying amount of loans and deposits is analyzed in the table below:

(in € millions)	December 31, 2019	December 31, 2018[(1)]
Gross loans and deposits	320	308
Impairment	(43)	(43)
TOTAL	**277**	**265**

(1) The 2018 figures have been restated for comparison purposes (see note 2.5 to the consolidated financial statements).

The balance includes loans to employees and customers, as well as loans to equity accounted entities.

NOTE 16 DERIVATIVE INSTRUMENTS

As mentioned in note 3.5 "Hedging", some derivatives, while complying with the Group's financial risk management policies, do not qualify or have not been designated as hedging instruments for hedge accounting purposes.

16.1 Derivatives recognized as assets

	December 31, 2019	December 31, 2018[1]
(in € millions)	Fair value	Fair value
Derivatives qualifying as fair value hedges	-	-
Derivatives qualifying as cash flow hedges		
▶ Currency derivatives	74	33
▶ Interest-rate derivatives	-	-
▶ Other derivatives	-	-
Derivatives not qualifying for hedge accounting		
▶ Currency derivatives	14	43
▶ Interest-rate derivatives	-	4
▶ Other derivatives[2]	39	13
Non-current derivative instruments (note 15)	**127**	**93**
Derivatives qualifying as fair value hedges	-	7
Derivatives qualifying as cash flow hedges		
▶ Currency derivatives	2	1
▶ Interest-rate derivatives	-	-
▶ Other derivatives	1	-
Derivatives not qualifying for hedge accounting		
▶ Currency derivatives	18	24
▶ Interest-rate derivatives	-	-
▶ Other derivatives	-	-
Current derivative instruments (note 21)	**21**	**32**
TOTAL ASSETS	**148**	**125**

(1) The 2018 figures have been restated for comparison purposes (see note 2.5 to the consolidated financial statements).
(2) Corresponds to financial instruments acquired as hedges of the options embedded in convertible bonds (note 26.1).

The Group grants cash collateral to cover counterparties' credit risk on derivatives with a positive fair value. Cash collateral at December 31, 2019 amounted to €103 million (2018: €34 million).

16.2 Derivatives recognized in liabilities

(in € millions)	December 31, 2019 Fair value	December 31, 2018[(1)] Fair value
Derivatives qualifying as fair value hedges	-	1
Derivatives qualifying as cash flow hedges		
▶ Currency derivatives	-	25
▶ Interest-rate derivatives	-	-
▶ Other derivatives	-	-
Derivatives not qualifying for hedge accounting		
▶ Currency derivatives	131	42
▶ Interest-rate derivatives	3	-
▶ Other derivatives[(2)]	39	13
Non-current derivative instruments (note 26)	**173**	**81**
Derivatives qualifying as fair value hedges	-	1
Derivatives qualifying as cash flow hedges		
▶ Currency derivatives	1	6
▶ Interest-rate derivatives	-	-
▶ Other derivatives	1	6
Derivatives not qualifying for hedge accounting		
▶ Currency derivatives	19	59
▶ Interest-rate derivatives	-	-
▶ Other derivatives	-	-
Current derivative instruments (note 26)	**21**	**72**
TOTAL LIABILITIES	**194**	**153**

(1) The 2018 figures have been restated for comparison purposes (see note 2.5 to the consolidated financial statements).
(2) Corresponds to the options embedded in convertible bonds (note 26.1).

The Group holds cash collateral covering its credit risk on derivatives with a negative fair value. Collateral received at December 31, 2019 amounted to €58 million (2018: €21 million).

16.3 Contractual amounts of derivatives

The contractual amounts of derivative instruments are presented in the table below:

	December 31, 2019			December 31, 2018[(1)]		
(in € millions)	Current	Non-current	Total	Current	Non-current	Total
Currency derivatives	3,340	1,736	**5,076**	5,096	1,507	**6,603**
Interest rate derivatives	19	89	**108**	200	106	**306**
Other	-	2,144	**2,144**	-	2,094	**2,094**
Derivatives not qualifying for hedge accounting	**3,359**	**3,969**	**7,328**	**5,296**	**3,707**	**9,003**
Interest rate derivatives	-	-	**-**	383	-	**383**
Derivatives qualifying as fair value hedges	**-**	**-**	**-**	**383**	**-**	**383**
Currency derivatives	63	1,011	**1,074**	163	1,048	**1,211**
Interest rate derivatives	-	-	**-**	22	105	**127**
Other	12	1	**13**	15	1	**16**
Derivatives qualifying as cash flow hedges	**75**	**1,012**	**1,087**	**200**	**1,154**	**1,354**
TOTAL	**3,434**	**4,981**	**8,415**	**5,879**	**4,861**	**10,740**

(1) The 2018 figures have been restated for comparison purposes (see note 2.5 to the consolidated financial statements).

The decrease in the notional amount of currency derivatives not qualifying for hedge accounting is mainly due to the short-term management of foreign exchange exposures at the end of 2018, primarily influenced by the acquisition of Camso (note 4.2.1. Camso).

16.4 Hedge accounting

Summarized financial data for hedging instruments are set out in the table below:

(in € millions)	Notional amount of the hedging instrument	Carrying amount of the hedging instrument in assets/ (liabilities)	Hedging reserve	Amount recognized in profit or loss	Line item affected in profit or loss
Derivatives qualifying as cash flow hedges					
Forward foreign exchange contracts on bonds denominated in foreign currencies	941	71	8	46	Cost of net debt/Other financial income and expense
Commodity price risk – forward purchase contracts	13	-	1	1	Operating income
Interest rate swaps	-	-	(21)	(2)	Cost of net debt
Interest component of cross currency swaps	100	5	-	-	Cost of net debt
Forward foreign exchange contracts on forecast sales	18	(1)	-	(1)	Operating income
Hedges of currency risk on raw materials purchases	15	-	(1)	-	Operating income
Current and non-current hedging instruments	**1,087**	**75**	**(13)**	**44**	

Gains and losses on cash flow hedges are included in equity, under "Other reserves" (note 25 "Reserves"). These reserves are used to recognize the effective portion of derivatives that qualify for hedge accounting (note 3.5.2 "Cash flow hedges"). The gains and losses accumulated in the reserve are subsequently reclassified as part of the initial cost of a non-financial asset or transferred to the income statement. The largest amount recognized in "Other reserves" during the period was €21 million for interest rate pre-hedging transactions on bond issues in August 2018 (note 26.1 "Bonds and commercial paper"). The gains and losses are transferred to the income statement when the interest on the hedged bonds affects profit or loss, through 2025 and 2030 respectively.

NOTE 17 INVESTMENTS IN EQUITY-ACCOUNTED COMPANIES

Associates and joint ventures are listed in note 36 "List of consolidated companies" to the consolidated financial statements.

17.1 Joint venture with Sumitomo Corporation of Americas (TBC)

Summarized financial data for the TBC joint venture are set out in the table below:

(in € millions)	December 31, 2019	December 31, 2018
Dividends received	-	-
Current assets	1,543	1,308
of which cash and cash equivalents	49	56
Non-current assets	1,949	1,177
Total assets	**3,492**	**2,485**
Current liabilities	1,037	762
of which current financial liabilities	294	64
Non-current liabilities	1,341	608
of which non-current financial liabilities	1,190	411
Total liabilities	**2,378**	**1,370**
Sales	4,401	2,869
Interest income	1	-
Interest expense	(53)	(16)
Depreciation and amortization	(164)	(47)
Income tax expense	14	(4)
Net income from continuing operations	(32)	20
Other comprehensive income	-	(6)
Total comprehensive income *(a)*	(32)	14
Elimination of profit from downstream transactions (net of tax) *(b)*	6	(34)
Share of comprehensive income 50% x *(a)* + *(b)*	**(10)**	**(27)**
Net assets (excluding goodwill)	974	942
Goodwill	140	173
Net assets (including goodwill)	**1,114**	**1,115**
Share of net assets (including goodwill) = 50%	557	558
Elimination of profit from downstream transactions (net of tax)	(29)	(34)
Carrying amount of net interest in the joint venture	**528**	**524**

17.2 Investments in equity-accounted companies

Changes in investments in equity-accounted companies are as follows:

(in € millions)	Investments in associates	Investments in joint ventures	Total investments in equity-accounted companies
At January 1, 2018	**233**	**123**	**356**
Share of profit/(loss) from equity-accounted companies	(2)	(36)	(38)
Impairment	(8)	-	(8)
Dividends	(5)	(5)	(10)
Changes in scope of consolidation/capital increases	75	557	632
Currency translation differences	1	20	21
At December 31, 2018(1)	**294**	**659**	**953**
Share of profit/(loss) from equity-accounted companies	(11)	(36)	(47)
Impairment	-	-	-
Dividends	(4)	(7)	(11)
Changes in scope of consolidation/capital increases	25	146	171
Currency translation differences	4	16	20
Others/reclassifications	(97)	98	1
AT DECEMBER 31, 2019	**211**	**876**	**1,087**

(1) The 2018 figures have been restated for comparison purposes (see note 2.5 to the consolidated financial statements).

In the consolidated income statement, the line "Share of profit/(loss) from equity accounted companies" also includes the remeasurement at fair value of investments previously accounted for by the equity method and of which the Group has taken control.

In addition, the Group acquired 425,036 SIPH shares for €36 million.

In 2018, the Group invested €519 million in the TBC joint venture (note 4.2.3) and €60 million for the acquisition of an interest in the associate that is the holding company for the A.T.U. distribution network.

17.3 Financial information about equity-accounted companies

The financial statements of equity-accounted companies other than TBC, which are not material taken individually, include the following amounts (information presented on a 100% basis):

(in € millions)	2019	2018 (1)
Assets	2,168	1,851
Liabilities	1,263	1,065
Sales	2,926	2,357
Net income/(loss)	(76)	(30)

(1) The 2018 figures have been restated for comparison purposes (see note 2.5 to the consolidated financial statements).

17.4 Transactions with equity-accounted companies (related parties)

Transactions and balances between the Group and its associates and joint ventures are presented in the table below:

(in € millions)	2019	2018
Income statement		
Income for the sale of goods or supply of services	463	334
Expenses for the purchase of products or supply of services	(180)	(175)
Statement of financial position		
Financial liabilities	(5)	(6)
Trade payables	(6)	(7)
Financial assets	274	237
Accounts receivable	183	174

NOTE 18 TAXES

18.1 Deferred tax assets and liabilities

Deferred taxes in the consolidated statement of financial position are as follows:

(in € millions)	December 31, 2019	December 31, 2018[1]
Deferred tax assets	814	752
Deferred tax liabilities	(455)	(435)
NET DEFERRED TAX ASSET	**359**	**317**

(1) The 2018 figures have been restated for comparison purposes (see note 2.5 to the consolidated financial statements).

Deferred tax assets and liabilities at the end of the period, before netting, are as follows:

(in € millions)	December 31, 2019	December 31, 2018[1]
Employee benefit obligations	694	675
Inventories	112	98
Financial instruments	99	76
Provisions	51	55
Unused tax losses	158	126
Unused tax credits	1	2
Goodwill & intangible assets	(338)	(361)
Property, plant and equipment (PP&E)	(614)	(494)
Other	196	140
NET DEFERRED TAX ASSET	**359**	**317**

(1) The 2018 figures have been restated for comparison purposes (see note 2.5 to the consolidated financial statements).

Deferred tax assets have been recognized for tax loss carryforwards to the extent that it is probable that future taxable profit will be available against which the unused tax losses can be utilized. The probability that unused tax losses will be utilized is assessed according to the entity and its taxable profit projections. These projections are prepared using assumptions that are consistent with the short- and medium-term budgets prepared by Group entities.

In 2018, deferred tax assets recognized for tax loss carryforwards amounted to €61 million and concerned China and Germany.

The change in the net deferred tax asset over the year is as follows:

(in € millions)	2019	2018[1]
At January 1	**317**	**777**
Translation adjustments	(9)	5
Deferred tax benefit/(expense) (note 11)	42	-
Tax recognized in other comprehensive income	13	(101)
Changes in the scope of consolidation	(4)	(363)
Other	-	(1)
AT DECEMBER 31	**359**	**317**

(1) The 2018 figures have been restated for comparison purposes (see note 2.5 to the consolidated financial statements).

In 2019, excluding the impact of tax recognized in other comprehensive income and translation adjustments, the increase in net deferred taxes was mainly due to the recognition of deferred tax assets of €47 million on tax losses incurred during the year in Mexico and Germany.

In 2018, excluding the impact of tax recognized in other comprehensive income and translation adjustments, the decrease in net deferred taxes was mainly due to the recognition of the deferred tax liability resulting from purchase price allocations for Fenner (€256 million) and Camso (€97 million).

The deferred income tax recognized in other comprehensive income is as follows:

(in € millions)	December 31, 2019	December 31, 2018[1]
Post-employment benefits	345	330
Equity investments	(19)	(19)
Financial instruments	(1)	1
TOTAL DEFERRED TAX RECOGNIZED IN OTHER COMPREHENSIVE INCOME	**325**	**312**

(1) *The 2018 figures have been restated for comparison purposes (see note 2.5 to the consolidated financial statements).*

In 2019, the change in deferred tax recognized in other comprehensive income primarily reflects increased pension benefit obligations.

In 2018, the change in deferred tax recognized in other comprehensive income is mainly due to lower applicable tax rates and to the review of the recoverability of some deferred tax assets.

Unrecognized deferred tax assets break down as follows:

(in € millions)	December 31, 2019	December 31, 2018
Deductible temporary differences	**121**	**126**
Tax losses		
▶ of which expiring in less than one year	17	27
▶ of which expiring in one to five years	80	92
▶ of which expiring in more than five years	45	34
▶ of which evergreen	336	288
Total tax losses	**478**	**441**
Tax credits	**5**	**4**
TOTAL UNRECOGNIZED DEFERRED TAX ASSETS	**604**	**571**

18.2 Current taxes

Current taxes in the consolidated statement of financial position are as follows:

(in € millions)	2019	2018[1]
Tax receivables (note 22)	322	426
Taxes payable (note 30)	(203)	(186)
Net total at January 1	**119**	**240**
Current tax expense (note 11)	(548)	(570)
Income tax paid	619	497
Changes in the scope of consolidation	(19)	(39)
Translation adjustments and other	1	(9)
Total changes	**53**	**(121)**
Tax receivables (note 22)	317	322
Taxes payable (note 30)	(145)	(203)
NET TOTAL AT DECEMBER 31	**172**	**119**

(1) *The 2018 figures have been restated for comparison purposes (see note 2.5 to the consolidated financial statements).*

NOTE 19 INVENTORIES

Inventories include the following:

(in € millions)	December 31, 2019	December 31, 2018(1)
Raw materials and supplies	1,333	1,288
Work in progress	467	556
Finished goods	2,994	2,949
Total gross inventory	**4,794**	**4,793**
Impairment of raw materials and supplies	(42)	(37)
Impairment of work in progress	(1)	(4)
Impairment of finished goods	(57)	(50)
Total impairment	**(100)**	**(91)**
NET INVENTORY	**4,694**	**4,702**

(1) The 2018 figures have been restated for comparison purposes (see note 2.5 to the consolidated financial statements).

Movements in inventory write-downs were as follows:

(in € millions)	2019	2018(1)
At January 1	**(91)**	**(85)**
Translation adjustments and other	(1)	1
Change in scope of consolidation	(3)	(7)
Impairment of inventories recognized as an expense in the period	(43)	(22)
Impairment reversals	38	22
AT DECEMBER 31	**(100)**	**(91)**

(1) The 2018 figures have been restated for comparison purposes (see note 2.5 to the consolidated financial statements).

NOTE 20 TRADE RECEIVABLES

The carrying amount of trade receivables is analyzed in the table below:

(in € millions)	December 31, 2019	December 31, 2018(1)
Gross trade receivables	3,629	3,556
Impairment	(97)	(103)
TRADE RECEIVABLES	**3,532**	**3,453**

(1) The 2018 figures have been restated for comparison purposes (see note 2.5 to the consolidated financial statements).

All trade receivables are due within 12 months.

The following table presents an aging analysis of trade receivables at December 31, 2019:

(in € millions)	Gross	Impairment	Net
Trade receivables not yet due	**3,201**	**(13)**	**3,188**
Overdue			
▶ by less than three months	270	(3)	267
▶ by three to six months	54	(3)	51
▶ by more than six months	104	(78)	26
Overdue trade receivables	**428**	**(84)**	**344**
TRADE RECEIVABLES	**3,629**	**(97)**	**3,532**

Movements in impairment are analyzed in the table below:

(in € millions)	2019	2018[(1)]
At January 1	**(103)**	**(104)**
Translation adjustments and other	(1)	1
Write-downs of inventories recognized as an expense in the period	(50)	(65)
Impairment reversals	56	69
Change in scope of consolidation	1	(4)
AT DECEMBER 31	**(97)**	**(103)**

(1) The 2018 figures have been restated for comparison purposes (see note 2.5 to the consolidated financial statements).

Impairment provisions of €26 million were reversed during the period following the write-off of the underlying receivables (2018: €28 million).

NOTE 21 CURRENT FINANCIAL ASSETS

The carrying amount of current financial assets is analyzed in the table below:

(in € millions)	December 31, 2019	December 31, 2018[(1)]
Loans and deposits	195	103
Cash management financial assets (note 26)	180	180
Derivative instruments (note 16.1)	21	32
CURRENT FINANCIAL ASSETS	**396**	**315**

(1) The 2018 figures have been restated for comparison purposes (see note 2.5 to the consolidated financial statements).

Although cash management financial assets are highly liquid and have very limited exposure to interest rate risk, they do not strictly fulfill the criteria for classification as cash and cash equivalents (note 3.21 "Cash and cash equivalents"). Cash management financial assets are measured at amortized cost (note 3.18 "Non-derivative financial assets").

Loans and deposits include collateral exchanged with financial institutions of €103 million (2018: €34 million) that is not freely available.

NOTE 22 OTHER CURRENT ASSETS

The carrying amount of other current assets is analyzed in the table below:

(in € millions)	December 31, 2019	December 31, 2018[(1)]
Prepayments to suppliers	153	139
Income tax prepayments	317	322
Other taxes receivable	265	331
Other	325	316
Impairment	(5)	(5)
OTHER CURRENT ASSETS	**1,055**	**1,103**

(1) The 2018 figures have been restated for comparison purposes (see note 2.5 to the consolidated financial statements).

Other taxes receivable mainly concern VAT.

NOTE 23 CASH AND CASH EQUIVALENTS

The carrying amount of cash and cash equivalents is analyzed in the table below:

(in € millions)	December 31, 2019	December 31, 2018[(1)]
Cash at bank and in hand	229	282
Short-term bank deposits of less than three months and other cash equivalents (primarily money market funds)	1,237	1,846
CASH AND CASH EQUIVALENTS	**1,466**	**2,128**

(1) The 2018 figures have been restated for comparison purposes (see note 2.5 to the consolidated financial statements).

The average effective interest rate on short-term bank deposits was 0.25% in 2019 (2018: 0.09%).

Cash and cash equivalents are mainly held in euros (2019: 83%, 2018: 89%).

Restricted deposits consist mainly of cash and cash equivalents subject to prudential rules in Ireland specific to captive insurance companies (2019: €82 million, 2018: €81 million).

NOTE 24 SHARE CAPITAL AND SHARE PREMIUMS

Changes in share capital and share premiums are analyzed in the table below:

(in € millions)	Share capital	Share premiums	Total
At January 1, 2018	**359**	**2,942**	**3,301**
Issuance of shares upon exercise of stock options and performance share rights	2	56	58
Cancellation of shares	(1)	(74)	(75)
Other	-	(1)	(1)
At December 31, 2018	**360**	**2,923**	**3,283**
Issuance of shares upon exercise of stock options and performance share rights	-	4	4
Cancellation of shares	(3)	(138)	(141)
Other	-	-	-
AT DECEMBER 31, 2019	**357**	**2,789**	**3,146**

Changes in outstanding shares are analyzed in the table below:

(number of shares)	Shares issued	Treasury shares	Shares outstanding
At January 1, 2018	**179,520,987**	**-**	**179,520,987**
Issuance of shares upon exercise of stock options and performance share rights	974,876	-	974,876
Share buybacks	-	(648,231)	(648,231)
Sales of treasury shares	-	-	-
Cancellation of shares	(648,231)	648,231	-
Other	-	-	-
At December 31, 2018	**179,847,632**	**-**	**179,847,632**
Issuance of shares upon exercise of stock options and performance share rights	125,744	-	125,744
Share buybacks	-	(1,354,049)	(1,354,049)
Sales of treasury shares	-	8,228	8,228
Cancellation of shares	(1,345,821)	1,345,821	-
Other	-	-	-
AT DECEMBER 31, 2019	**178,627,555**	**-**	**178,627,555**

The par value per share amounts to €2 (unchanged since 2018). All outstanding shares are fully paid and registered. Shares held for more than four years have a double voting right.

The 2018 dividend paid to shareholders in 2019 was €3.70 per share (2017 dividend paid in 2018: €3.55 per share). The dividend was paid in full in cash for a net amount of €665 million.

The Managing Chairman will propose that shareholders approve the payment of a 2019 dividend in 2020 of €3.85 per share.

NOTE 25 RESERVES

(in € millions)	Translation reserve	Treasury shares	Other reserves	Retained earnings	Total
At January 1, 2018	**(496)**	**-**	**99**	**8,322**	**7,925**
Dividends and other appropriations	-	-	-	(647)	(647)
Share-based payments – current service cost (notes 7 and 8)	-	-	-	7	7
Share buybacks	-	(75)	-	-	(75)
Sale/cancellation of treasury shares	-	75	-	-	75
Other	-	-	-	-	-
Transactions with the shareholders of the Company	**-**	**-**	**-**	**(640)**	**(640)**
Net income attributable to the shareholders of the Company	-	-	-	1,677	1,677
Post-employment benefits	-	-	-	*71*	*71*
Tax effect – Post-employment benefits	-	-	-	*(101)*	*(101)*
Other comprehensive income that will not be reclassified to the income statement	-	-	-	(30)	(30)
Cash flow hedges – changes in fair value	-	-	*(37)*	-	*(37)*
Currency translation differences[1]	*(57)*	-	*(1)*	-	*(58)*
Other	*41*	-	*(10)*	*7*	*38*
Other comprehensive income that may be reclassified to the income statement	(16)	-	(48)	7	(57)
Comprehensive income	**(16)**	**-**	**(48)**	**1,654**	**1,590**
At December 31, 2018[1]	**(512)**	**-**	**51**	**9,336**	**8,875**
Dividends and other appropriations	-	-	-	(675)	(675)
Share-based payments – current service cost (notes 7 and 8)	-	-	-	7	7
Share buybacks	-	(141)	-	-	(141)
Sale/cancellation of treasury shares	-	141	-	-	141
Other	-	-	-	(41)	(41)
Transactions with the shareholders of the Company	**-**	**-**	**-**	**(709)**	**(709)**
Net income attributable to the shareholders of the Company	-	-	-	1,751	1,751
Post-employment benefits	-	-	-	*(131)*	*(131)*
Tax effect – Post-employment benefits	-	-	-	*16*	*16*
Equity instruments at fair value through OCI – changes in fair value	-	-	*20*	-	*20*
Tax effect – equity instruments at fair value through OCI	-	-	*6*	-	*6*
Other comprehensive income that will not be reclassified to the income statement	-	-	26	(115)	(89)
Cash flow hedges – changes in fair value	-	-	*46*	-	*46*
Currency translation differences	*204*	-	*(3)*	-	*201*
Other	*21*	-	*(42)*	*26*	*5*
Other comprehensive income that may be reclassified to the income statement	225	-	1	26	252
Comprehensive income	**225**	**-**	**27**	**1,662**	**1,914**
AT DECEMBER 31, 2019	**(287)**	**-**	**78**	**10,289**	**10,080**

(1) The 2018 figures have been restated for comparison purposes (see note 2.5 to the consolidated financial statements).

Under the share buyback program authorized at the May 19, 2018 Annual Shareholders Meeting, two agreements were signed in February 2019 and August 2019 with an investment services provider, under which the Group undertook to buy back a variable number of shares for a maximum total amount of €140 million. Under the first agreement, capped at €70 million, the Group bought back 665,642 shares at an average price per share of €105.16.Under the second agreement, also capped at €70 million, the Group bought back 680,044 shares at an average price per share of €102.93. All of these shares were canceled during the year.

Pursuant to the authorization given at the May 19, 2017 Annual Shareholders Meeting, an agreement was signed in February 2018 with an investment services provider, under which the Group undertook to buy back a variable number of shares before November 22, 2018, for a maximum amount of €75 million. The investment services provider having exercised its option to ask the Group to accelerate the buybacks, all of the shares were bought back and canceled in the period ended June 30, 2018. The average unit price of the 648,231 shares bought back during the first half of 2018 was €115.70.

NOTE 26 FINANCIAL LIABILITIES

The carrying amount of financial liabilities is presented in the table below:

(in € millions)	December 31, 2019	December 31, 2018[(1)]
Bonds	4,535	4,484
Loans from financial institutions and other	318	454
Lease liabilities	897	-
Obligations under finance leases	-	283
Derivative instruments	173	81
Non-current financial liabilities	**5,923**	**5,302**
Bonds and commercial paper	295	580
Loans from financial institutions and other	616	537
Lease liabilities	226	-
Obligations under finance leases	-	33
Derivative instruments	21	72
Current financial liabilities	**1,158**	**1,222**
FINANCIAL LIABILITIES	**7,081**	**6,524**

(1) The 2018 figures have been restated for comparison purposes (see note 2.5 to the consolidated financial statements).

Further to the first-time application of IFRS 16 "Leases", the finance lease liabilities related to the previous finance lease contracts are recorded in the line "Lease liabilities" as presented in the reconciliation of the note 2.3.1.

Group net debt is analyzed in the table below:

(in € millions)	December 31, 2019	December 31, 2018[(1)]
Financial liabilities	7,081	6,524
Derivatives recognized as assets (note 16.1)	(148)	(125)
Borrowing collaterals (note 32.3.2)	(103)	(35)
Cash management financial assets (note 21)	(180)	(180)
Cash and cash equivalents (note 23)	(1,466)	(2,128)
NET DEBT	**5,184**	**4,056**

(1) The 2018 figures have been restated for comparison purposes (see note 2.5 to the consolidated financial statements).

The fair value of non-current financial liabilities, calculated in accordance with note 3.6 "Fair value of financial instruments", is presented in the table below:

(in € millions)	December 31, 2019	December 31, 2018[(1)]
Bonds	4,965	4,463
Loans from financial institutions and other	318	454
Lease liabilities	897	-
Obligations under finance leases	-	283
Derivative instruments	173	81
FAIR VALUE OF NON-CURRENT FINANCIAL LIABILITIES	**6,353**	**5,281**

(1) The 2018 figures have been restated for comparison purposes (see note 2.5 to the consolidated financial statements).

Changes in financial liabilities and derivatives are analyzed by flow in the table below:

(in € millions)	At January 1, 2019[(1)]	Cash flows from financial liabilities	Non-cash movements		At December 31, 2019
			Conversions	Other	
Bonds, loans from financial institutions and other	4,938	(194)	16	93	4,853
Lease liabilities	-	(1)	18	880	897
Obligations under finance leases	283	-	-	(283)	-
Derivative instruments	81	111	2	(21)	173
Non-current financial liabilities	**5,302**	**(84)**	**36**	**669**	**5,923**
Bonds, loans from financial institutions and other	1,117	(486)	127	153	911
Lease liabilities	-	(237)	4	459	226
Obligations under finance leases	33	-	-	(33)	-
Derivative instruments	72	(39)	1	(13)	21
Current financial liabilities	**1,222**	**(762)**	**132**	**566**	**1,158**
TOTAL FINANCIAL LIABILITIES	**6,524**	**(846)**	**168**	**1,235**	**7,081**
Derivatives recognized as assets	(125)	(24)	-	1	(148)
Net impact on the consolidated statement of cash flows		**(870)**			

(1) The 2018 figures have been restated for comparison purposes (see note 2.5 to the consolidated financial statements).

26.1 Bonds and commercial paper

The table below provides detailed information about the bonds and commercial paper issued by the Group:

(in € millions)	December 31, 2019		December 31, 2018	
	Current	Non-current	Current	Non-current
Bonds issued by Michelin Luxembourg SCS ▸ nominal amount of €302 million ▸ issued in September 2015 and September 2016 and due in September 2045 ▸ nominal interest rate of 3.25% ▸ effective interest rate of 3.02%	-	315	-	315
Bonds issued by Compagnie Générale des Établissements Michelin ▸ nominal amount of €750 million ▸ issued in August 2018 and due in September 2038 ▸ nominal interest rate of 2.50% ▸ effective interest rate of 2.56%	-	743	-	743
Bonds issued by Compagnie Générale des Établissements Michelin ▸ nominal amount of €1,000 million ▸ issued in August 2018 and due in September 2030 ▸ nominal interest rate of 1.75% ▸ effective interest rate of 1.84% (2.00% after hedging)	-	991	-	990
Bonds issued by Michelin Luxembourg SCS ▸ nominal amount of €300 million ▸ issued in May 2015 and due in May 2027 ▸ nominal interest rate of 1.75% ▸ effective interest rate of 1.86% (1.80% after hedging)	-	298	-	297
Bonds issued by Compagnie Générale des Établissements Michelin ▸ nominal amount of €750 million ▸ issued in August 2018 and due in September 2025 ▸ nominal interest rate of 0.875% ▸ effective interest rate of 1.045% (1.169% after hedging)	-	743	-	742

(in € millions)	December 31, 2019 Current	December 31, 2019 Non-current	December 31, 2018 Current	December 31, 2018 Non-current
Debt component of zero-coupon convertible bonds issued by Compagnie Générale des Établissements Michelin				
▶ nominal amount of USD 600 million				
▶ issued in January 2018 and due in November 2023				
▶ nominal interest rate of 0%				
▶ effective interest rate of 2.50% (0.16% after hedging)				
▶ conversion price at December 31, 2019 of €166.25	-	487	-	464
Private placement loan notes issued by Fenner				
▶ nominal amount of USD 160 million				
▶ issued in 2011 and due in 2021 (USD 95 million) and 2023 (USD 65 million)				
▶ nominal and effective interest rate of 5.144% (2021) and 5.420% (2023)	-	143	-	140
Bonds issued by Michelin Luxembourg SCS				
▶ nominal amount of €300 million				
▶ issued in May 2015 and due in May 2022				
▶ nominal interest rate of 1.125%				
▶ effective interest rate of 1.17%	-	300	-	300
Debt component of zero-coupon convertible bonds issued by Compagnie Générale des Établissements Michelin				
▶ nominal amount of USD 600 million				
▶ issued in January 2017 (USD 500 million) and April 2017 (USD 100 million) and due in January 2022				
▶ nominal interest rate of 0%				
▶ effective interest rate of 1.98% (-0.38% after hedging)				
▶ conversion price at December 31, 2019 of €13159	-	515	-	493
Bonds issued by Michelin Luxembourg SCS				
▶ nominal amount of €383 million				
▶ issued in June 2012 and due in June 2019				
▶ nominal interest rate of 2.75% (1.105% after hedging)				
▶ hedged through interest rate swaps on a notional amount of €383 million expiring in June 2019 (fair value hedge) (note 16)	-	-	386	-
Commercial paper issued by Compagnie Générale des Établissements Michelin				
▶ nominal amount in € equivalent: €250 million (2018: €181 million, GBP 13 million)				
▶ effective interest rate of -0.41% at December 31, 2019	250	-	194	-
Commercial paper issued by Michelin Luxembourg SCS				
▶ nominal amount of USD 50 million (2018: USD 0 million)				
▶ effective interest rate of 2.05% at December 31, 2019	45	-	-	-
TOTAL	**295**	**4,535**	**580**	**4,484**

At December 31, 2019, the weighted average nominal interest rate for bonds and commercial paper is 1.88% (1.46% after hedging).

26.1.1 Bond redemptions

The June 2012 bonds issued by Michelin Luxembourg SCS were redeemed at maturity at par in June 2019. The interest rate instruments hedging these bonds also matured in June 2019.

26.1.2 Convertible bond issue

In January 2018, the Group issued non-dilutive convertible bonds, redeemable for cash only, with a total face value of USD 600 million. The bonds were issued at 95.5% of their face value. They do not pay interest and are redeemable at par on November 10, 2023.

At the time of issue, cash-settled call options were purchased as a hedge of the Group's exposure to the exercise of the conversion rights embedded in the bonds.

The bonds and options have been swapped for euros, providing the Group with the equivalent of classic euro-denominated bond financing at an advantageous cost.

These operations have been accounted for in accordance with the accounting policies described in sections 3.4 to 3.6.

The conversion option embedded in the convertible bonds and the related hedges are recorded under "Non-current financial assets and other non-current assets" and "Non-current financial liabilities".

26.1.3 Bond issues

At the end of August 2018, the Group, through Compagnie Générale des Etablissements Michelin, issued three tranches of bonds, maturing in 7 years, 12 years and 20 years respectively, for a total of €2.5 billion.

The 7-year tranche amounts to €750 million and has a coupon of 0.875% per annum and was issued at 99.099% of the nominal amount.

The 12-year tranche of €1 billion has a coupon of 1.75% per annum and was issued at 99.262% of the nominal amount.

The 20-year tranche amounts to €750 million and has a coupon of 2.50% per annum and was issued at 99.363% of the nominal amount.

26.1.4 Private placement

Fenner's main credit facilities consist of dollar-denominated private placement loan notes issued in three tranches for a total of USD 160 million. The three tranches mature between 2021 and 2023 and pay interest at fixed rates averaging 5.26%.

26.2 Loans from financial institutions and other

Loans from financial institutions and other include mainly amounts drawn on credit lines, and borrowings secured by trade receivables as explained in note 32.3.3 "Trade receivables".

At December 31, 2019, loans from financial institutions totaled €934 million (2018: €991 million). Most of the loans were denominated in euros, USD and THB and were at variable interest rates.

The contractual re-pricing of the interest rates of these loans is generally less than six months.

NOTE 27 EMPLOYEE BENEFIT OBLIGATIONS

In accordance with the laws and regulations applicable in each country, as well as in application of its social responsibility policy, the Group takes part mainly in pension, healthcare, death and disability and end-of-service benefit plans, for which the amount of benefits paid varies based on a number of factors including the employee's years of service, salary, accumulated funds with an independent manager or contributions paid to insurers.

Such plans can be either defined benefit plans or defined contribution plans. In the case of defined benefit plans, Group commitments are measured using the projected credit unit method. These commitments are calculated with the help of independent actuaries. In the case of defined contribution plans, liabilities correspond to the contributions due.

Since 2003 the Group has been closing its defined benefit plans to new entrants and, in some cases, to future accruals, in order to reduce the risk on the Group's consolidated statement of financial position. New defined contribution plans have correspondingly been put in place or existing ones improved.

In 2005, the Group set up a governance body, the Global Employee Benefits Committee, to monitor benefits granted to employees. Its role is to define Group policies on employee benefits and ensure that local benefit programs comply with them (approval of amendments, introduction of new benefits, etc.). At the same time, it monitors asset returns and benchmarks, as well as the de-risking policies put in place by local boards or committees, and proposes an audit plan. The Committee is assisted by two teams, the Global Benefits Policy Team composed of members from the accounting, finance and human resources departments and the Global Benefits Investment Team composed of the chairs of the investment committees or Chief Investment Officers of the main funded pension plans and Group experts. In countries with substantial benefit obligations similar organization exists.

27.1 Defined benefit plans

The Group's defined benefit plans are retirement plans and retiree healthcare plans, the vast majority of which are now closed to new entrants, and in some cases to future accruals, as well as some minor plans such as long-service awards or end-of-service benefits.

In Europe, the discount rates are determined with the assistance of the Group's actuary, based on the yield of investment-grade corporate bonds. The rates are applied for the duration of the corresponding liabilities. The discount rate in the United States is based on the local actuary's AA Only Bond yield curve rates. The discount rate in Canada is based on the Canadian Institute of Actuaries' Canadian Corporate AA Bond yield curve rates. For countries that have several plans (but only one material plan), the discount rate calculated for the main plan is used for all plans. For countries with several plans of comparable size but quite different durations, several rates are used.

The inflation assumptions are set using different methods. For the Eurozone, the Group's actuarial model is used with reference to different sources of information, such as the target inflation rates set by central banks, the forecasts from Consensus Economics and inflation swap curves. In the United Kingdom, the market-implied inflation rate is also considered (corresponding to the differential between gilts and index-linked gilts, less a spread). In the United States and Canada, the cost-of-living increases for some pensions are set using historical averages, central bank targets and implied inflation (corresponding to the differential between indexed and non-indexed bonds).

The salary increase assumptions can be either spreads above inflation (either RPI or CPI) or absolute values. These assumptions take into account expected long-term yearly average salary increases as well as the effects of promotions. In some cases, assumptions by category of personnel can be used.

The post-employment mortality tables used for the pension plans that are funded through insured contracts are the insurers' tables. For the other main post-employment plans, the following tables are used: (i) United States: Pri-2012 private retirement plans table with the MP-2019 projection scale; (ii) Canada: 105% of CPM 2014 Private – MI-2017; (iii) United Kingdom: Generational SPA CMI with a 1.5% floor and a weighting of 117% for men and 100% for women, and (iv) Germany: Heubeck RT 2018 G.

	December 31, 2019				December 31, 2018			
	United States	Canada	United Kingdom	Germany	United States	Canada	United Kingdom	Germany
Life expectancy for males at 65 at the end of the reporting period	19.0	21.6	21.1	20.2	18.7	21.6	21.1	20.2
Life expectancy for males at 65 (15 years after the end of the reporting period)	19.9	22.8	22.4	22.3	19.8	22.7	22.3	22.3
Life expectancy for females at 65 at the end of the reporting period	20.9	24.1	23.9	23.7	21.0	24.1	24.0	23.7
Life expectancy for females at 65 (15 years after the end of the reporting period)	21.9	25.2	25.2	25.4	22.1	25.1	25.4	25.4

The financial position of the main defined benefit plans is summarized below:

(in € millions)	Pension plans	Other plans	December 31, 2019	December 31, 2018[1]
Present value of fully or partly funded obligations	8,074	-	8,074	7,311
Fair value of plan assets	(7,341)	-	(7,341)	(6,294)
Funded status deficit/(surplus)	**733**	**-**	**733**	**1,017**
Present value of unfunded obligations	1,143	1,897	3,040	2,753
Unrecognized assets due to the effect of the asset ceiling	55	-	55	88
NET DEFINED BENEFIT OBLIGATION	**1,931**	**1,897**	**3,828**	**3,858**
Amounts recognized in the statement of financial position:				
▶ As assets under non-current financial assets and other non-current assets (note 15)			(45)	-
▶ As liabilities under employee benefit obligations			3,873	3,858
NET LIABILITY	**1,931**	**1,897**	**3,828**	**3,858**

(1) The 2018 figures have been restated for comparison purposes (see note 2.5 to the consolidated financial statements).

At December 31, 2019, the projected defined benefit obligation comprised €4,113 million for active members (current employees), €1,305 million for members who have deferred their vested benefits and €5,696 million for retired members (2018: respectively €3,840 million, €1,132 million and €5,084 million).

At December 31, 2019, the projected defined benefit obligation comprised €8,939 million for vested benefits and €2,175 million for unvested benefits (2018: respectively €7,921 million and €2,135 million).

Actuarial gains and losses on post-employment defined benefit plans are recognized in other comprehensive income when they occur.

The Group does not recognize as an asset any surplus in excess of the present value of any economic benefits available in the form of refunds from the plan or reductions in future contributions to the plan. If a defined benefit plan is subject to a minimum funding requirement (MFR), the Group immediately recognizes a liability for any surplus resulting from the contributions paid under the MFR which would not be fully recoverable through economic benefits available to the Group.

Any reduction in assets or increase in liabilities resulting from the effect of the asset ceiling is recognized in other comprehensive income.

The movements in net defined benefit obligations recognized in the consolidated statement of financial position are shown below:

(in € millions)	Pension plans	Other plans	2019	2018[1]
At January 1	**2,098**	**1,760**	**3,858**	**3,969**
Contributions paid to the funds	(192)	-	(192)	(189)
Benefits paid directly to the beneficiaries	(34)	(105)	(139)	(140)
Other movements	10	(2)	8	29
Items recognized in operating income				
Current service cost	44	67	111	107
Actuarial (gains) or losses recognized on other long-term benefit plans	-	5	5	(5)
Past service cost resulting from plan amendments	(68)	-	(68)	54
Effect of plan curtailments or settlements	(10)	-	(10)	-
Effect of plan curtailments recognized within reorganizations and adaptation of activities	(12)	(18)	(30)	(21)
Other items	13	-	13	13
Items recognized outside operating income				
Net interest on employee benefit obligations	48	49	97	89
Items recognized in other comprehensive income				
Translation adjustments	14	30	44	23
Actuarial (gains) or losses	63	111	174	(87)
Unrecognized assets due to the effect of the asset ceiling	(43)	-	(43)	16
AT DECEMBER 31	**1,931**	**1,897**	**3,828**	**3,858**

(1) The 2018 figures have been restated for comparison purposes (see note 2.5 to the consolidated financial statements).

The amount of actuarial gains or losses presented in the statement of comprehensive income and recognized in equity is detailed in the table below:

(in € millions)	Pension plans	Other plans	2019	2018
At January 1	**1,751**	**461**	**2,212**	**2,283**
Actuarial (gains) or losses recognized during the year due to changes in demographic assumptions:				
▶ due to change in actuarial assumptions	(77)	(15)	(92)	(22)
▶ due to experience adjustments	31	(30)	1	(2)
Actuarial (gains) or losses recognized during the year due to changes in financial assumptions:				
▶ due to change in actuarial assumptions	862	174	1,036	(324)
▶ due to experience adjustments	(753)	(18)	(771)	260
Unrecognized assets due to the effect of the asset ceiling	(43)	-	(43)	16
Change in scope of consolidation	-	-	-	1
AT DECEMBER 31	**1,771**	**572**	**2,343**	**2,212**
Of which actuarial gains or (losses)	*1,716*	*572*	*2,288*	*2,124*
Of which asset ceiling effect	*55*	*-*	*55*	*88*

In 2019, the net amount recognized in the consolidated income statement was an expense of €118 million (2018: expense of €237 million), broken down as follows:

(in € millions)	Pension plans	Other plans	2019	2018
Current service cost	44	67	111	107
Net interest on the defined benefit liability (asset)	48	49	97	89
Actuarial (gains) or losses recognized during the year on other long-term defined benefit plans	-	5	5	(5)
Past service cost recognized during the year:				
▶ due to the introduction of or amendments to defined benefit plans	(68)	-	(68)	54
▶ due to curtailments of defined benefit plans	-	-	-	-
Effect of defined benefit plan settlements	(10)	-	(10)	-
Other items	13	-	13	13
Portion of defined benefit expenses recognized under provisions for reorganizations and adaptation of activities	(12)	(18)	(30)	(21)
TOTAL RECOGNIZED IN THE INCOME STATEMENT	**15**	**103**	**118**	**237**

Annual costs are determined with the assistance of independent actuaries at the beginning of each financial year based on the following factors:

- cost corresponding to acquisition of an additional year of rights ("Current service cost");
- income/expense corresponding to the discounting adjustment made to reflect the impact of the passage of time ("Net interest");
- income/expense from annual recognition of actuarial gains or losses on other long-term defined benefit plans ("Actuarial (gains) or losses recognized during the year");
- gain/loss resulting from plan amendments or the introduction of benefit plans ("Past service cost recognized during the year");
- gain/loss resulting from curtailments of any benefit plans ("Past service cost recognized during the year");
- gain/loss resulting from the settlement of any benefit plans.

27.1.1 Pension plans

The Group offers its employees in some countries different pension plans that vary according to local laws and regulations and the collective bargaining agreements applicable in each subsidiary.

Under defined benefit plans, the future level of benefits is defined by the plan regulations. The valuation of such defined benefit plans is carried out with the assistance of independent actuaries using actuarial techniques. Defined benefit pension plans may be funded through payments to external funds or to insurers. In the case of unfunded plans, such as the German pension plans, a provision is recognized in the consolidated statement of financial position.

The main pension plans provided within the Group are as follows:

United States

The defined benefit plan in the United States is the Michelin Retirement Plan (MRP). The provisions applicable to the main population are described below.

The plan was closed to new entrants as of January 1, 2004. Accruals were frozen under the plan as of December 31, 2016. These participants have been enrolled in a defined benefit contribution plan.

The plan sets the normal retirement age at 65. However, employees who have reached age 55 and have completed at least ten years of service are eligible for early retirement benefits under the applicable provisions.

In the event of early retirement, the amount of the pension is reduced but a supplemental benefit may be granted to employees who have reached the age of 55 and completed 30 years of service, to bridge the gap between early retirement and social security eligibility.

The plan provides for a guaranteed monthly annuity based on a set formula (with a lower accrual rate on the amount corresponding to the social security wage base) that takes into consideration the years of plan membership and average pensionable earnings. Only employees who have voluntarily joined the defined contribution plan (in 2004 or 2007) may receive a lump sum payment.

The plan includes provisions for death-in-service benefits as well as a spouse reversionary pension and orphan's pension upon the death of the retiree. The plan also provides for disability benefits.

The plan includes a cost-of-living adjustment clause applicable to the pensions of employees hired before January 1, 1991.

The plan is fully funded by employer contributions.

Canada

There is one major defined benefit plan in Canada, the Pension Plan for the Employees of Michelin North America (Canada) Inc. and Participating Employers (MR Plan). Other minor defined benefit plans, which are closed to new entrants, are valued but not detailed further.

The MR Plan was closed to new entrants as from January 1, 2005. Since this date, new entrants have been enrolled in a defined contribution plan. Accruals for most of the participants were frozen under the plan as of December 31, 2015. All employees are enrolled in a defined benefit contribution plan.

The plan sets the normal retirement age at 65. However, employees who have reached the age 55 or completed 30 years of service are eligible for early retirement benefits under the applicable provisions.

In the event of early retirement, the amount of the pension is reduced but a supplemental benefit is granted to employees who have completed 30 years of service, to partially bridge the gap between early retirement and social security eligibility.

The plan provides for a guaranteed monthly annuity at retirement based on a set formula that takes into consideration the years of plan membership and total pensionable earnings.

The plan includes provisions for death-in-service benefits as well as a spouse reversionary pension or a beneficiary pension upon the death of the retiree. The plan also provides for disability benefits.

The plan includes an indexation clause applicable to the benefits, based on the increase in the Consumer Price Index less a deduction.

The plan is currently fully funded by employer contributions.

United Kingdom

The defined benefit retirement plan in the United Kingdom is the Michelin Pension and Life Assurance Plan.

This plan was closed to new entrants as from March 31, 2005. It was closed to all future accruals as of January 1, 2009 and has been replaced by a defined contribution plan.

Accruals up to December 31, 2008 are frozen but pensions are still linked to the average final salary at retirement.

The plan sets the normal retirement age at 65. However, employees who have reached the age of 55 are eligible for early retirement under the applicable provisions, with the Group's consent. In the case of early retirement, the accrued benefit is reduced by an actuarial reduction factor.

The amount of the annual pension is based on the employee's pensionable earnings. Most employees opt to receive the maximum amount allowed by tax legislation in the form of a lump sum.

The plan includes provisions for death-in-service benefits, a spouse reversionary pension and disability benefits.

The amount of the pension benefit is indexed to a capped inflation rate for members who did not choose the pension increase exchange option.

The plan is fully funded by employer contributions.

Germany

There is one major defined benefit retirement plan in Germany, the "Versorgungsordnung 1979" (VO 1979).

The plan was closed to new entrants as from January 1, 2000. Since this date, new entrants have been enrolled in defined contribution plans.

The plans set the normal retirement age at 65.

They provide for a lifetime monthly annuity which is based on the employee's pensionable earnings.

A flat rate applies to the amount of earnings exceeding the social security ceiling and an additional rate, calculated based on years of service, is applied to the total pensionable earnings.

The plan includes provisions for death-in-service benefits, a spouse reversionary pension, an orphan's pension and disability benefits.

There is a legal obligation to adjust the pension annuity every three years for inflation up to the average increase in the employees' salaries.

France

There is one major defined benefit pension plan in France, "Régime de retraite supplémentaire MFPM".

In order to be eligible, employees must have completed ten years of service and still be on the payroll at the retirement date.

This plan was set up in 1996 in order to provide additional retirement income to all employees in the event that their pension under the mandatory government-sponsored plans represents less than a certain replacement rate (top hat plan). The additional benefit is calculated based on years of service and pensionable earnings.

It is capped so that the sum of the pension paid under the mandatory government-sponsored plans and the additional benefit from this plan does not exceed the specified replacement rate. As the plan cannot be closed to new members, the historical replacement rate of 55% is gradually being reduced to 0% over the period until 2046. In return, employees participate in a mandatory defined contribution plan ("Article 83" plan) and can also participate in a voluntary defined contribution plan (PERCO pension savings plan).

In accordance with government order 201-697 dated July 3, 2019, this plan was closed to new members on July 3, 2019 and the vesting period was frozen at December 31, 2019.

The plan provides for the payment of a pension to the surviving spouse and a disability pension. It is funded by contributions to two insurance companies.

Pension benefits may be adjusted or increased if the plan has a surplus but this is not automatic.

The following table analyzes changes in the financial position of the Group's defined benefit pension plans:

(in € millions)	2019 North America	2019 Europe	2019 Other	2019 Total	2018 North America	2018 Europe	2018 Other	2018 Total
Present value of the obligations at the beginning of the year	3,764	4,493	47	8,304	4,017	4,378	48	8,443
Translation adjustments	131	164	1	296	76	(46)	(6)	24
Change in scope of consolidation	-	9	-	9	8	270	-	278
Current service cost	4	39	1	44	2	44	1	47
Interest cost on the defined benefit obligation	156	99	3	258	143	96	3	242
Administrative costs	7	6	-	13	7	5	1	13
Plan reorganization costs generated during the year:								
▶ past service cost due to the introduction of or amendments to defined benefit plans	-	(68)	-	(68)	-	40	-	40
▶ past service cost due to curtailments of defined benefit plans	-	(12)	-	(12)	-	(13)	-	(13)
▶ (gains) or losses on settlement of defined benefit plans	-	(10)	-	(10)	-	-	-	-
Benefits paid during the year	(260)	(180)	(3)	(443)	(256)	(216)	(3)	(475)
Other items	-	35	1	36	-	-	-	-
Actuarial (gains) or losses generated during the year	403	375	12	790	(233)	(65)	3	(295)
Present value of the obligations at the end of the year	**4,205**	**4,950**	**62**	**9,217**	**3,764**	**4,493**	**47**	**8,304**
Fair value of plan assets at the beginning of the year	3,484	2,772	38	6,294	3,739	2,585	43	6,367
Translation adjustments	128	161	(1)	288	60	(45)	(4)	11
Change in scope of consolidation	-	-	-	-	9	242	-	251
Interest income on plan assets	143	66	4	213	132	66	4	202
Contributions paid to the funds	-	192	-	192	22	167	-	189
Benefits paid by the plans during the year	(259)	(148)	(2)	(409)	(257)	(183)	(2)	(442)
Other items	-	35	1	36	-	-	-	-
Actual return on plan assets excluding interest income	402	316	9	727	(221)	(60)	(3)	(284)
Fair value of plan assets at the end of the year	**3,898**	**3,394**	**49**	**7,341**	**3,484**	**2,772**	**38**	**6,294**
Deficit/(Surplus) at the end of the year	**307**	**1,556**	**13**	**1,876**	**280**	**1,721**	**9**	**2,010**
Deferred items at the beginning of the year	(86)	-	(2)	(88)	(66)	-	(7)	(73)
Translation adjustments	(6)	-	-	(6)	4	-	-	4
Unrecognized assets due to the effect of the asset ceiling	37	-	2	39	(24)	-	5	(19)
Deferred items at the end of the year	**(55)**	**-**	**-**	**(55)**	**(86)**	**-**	**(2)**	**(88)**
NET LIABILITY/(ASSET) RECOGNIZED IN THE STATEMENT OF FINANCIAL POSITION AT THE END OF THE YEAR	**362**	**1,556**	**13**	**1,931**	**366**	**1,721**	**11**	**2,098**

France

The need to align supplementary pension plans with the requirements of government order 2019-697 dated July 3, 2019 led to the following measures:

- the plan has been closed to new participants with effect from July 4, 2019;
- participants' vested rights have been frozen at December 31, 2019;
- no further rights will vest in respect of future periods of service after January 1, 2020.

An assessment of the effects of these measures led to the recognition of negative past service costs (income) of €68 million.

For Canadian pension plans, the Group does not have any rights to a refund of the plan surplus. The available economic benefits are measured as the present value of the future service cost. These pension plans are subject to a minimum funding requirement. The surplus recognized as an asset is the sum of:

- any prepaid amount that would reduce the future minimum funding requirement; and
- the estimated future service cost in each period less the estimated minimum funding requirement contributions that would be required for future service.

Any amount exceeding this limit is immediately recognized within other comprehensive income.

In 2019, the amount recognized resulting from the effect of the asset ceiling was -€43 million (2018: €16 million).

In 2019, the projected defined benefit pension obligation increased by €913 million due to:

(in € millions)	2019	2018
Effect of changes in exchange rates for the US dollar, pound sterling and Canadian dollar against the euro	(296)	(24)
Actuarial gains or (losses) from changes in actuarial assumptions and the difference between assumptions and actual experience	(790)	296
Difference between the costs (service cost and interest cost) and the benefits paid during the year	128	173
Changes in plan rules	90	(27)
Changes in the scope of consolidation	(9)	(279)
Other items	(36)	-

The fair value of plan assets amounted to €7,341 million at December 31, 2019, representing an increase of €1,047 million compared to December 31, 2018 due to:

(in € millions)	2019	2018
Effect of changes in exchange rates for the US dollar, pound sterling and Canadian dollar against the euro	288	11
Difference between the contributions paid to the funds and the benefits paid by the funds	(217)	(253)
Actual return on plan assets	940	(82)
Changes in the scope of consolidation	-	251
Other items	36	-

The present value of the defined benefit obligation, the fair value of the plan assets, the surplus or deficit in the plan and the experience adjustments are as follows for 2019 and the previous four periods:

(in € millions)	2019	2018	2017	2016	2015
Defined benefit obligation	(9,217)	(8,304)	(8,443)	(9,216)	(8,852)
Plan assets	7,341	6,294	6,367	6,520	6,448
SURPLUS/(DEFICIT)	**(1,876)**	**(2,010)**	**(2,076)**	**(2,696)**	**(2,404)**
Experience adjustments to:					
▸ plan liabilities	(5)	15	32	38	75
▸ plan assets	727	(284)	415	315	(107)

The experience adjustments expressed as a percentage of the present value of the obligation and the fair value of plan assets are presented in the table below:

Experience adjustments to:	2019	2018	2017	2016	2015
▸ the plan liabilities as a percentage of the present value of the obligation (DBO)	0.05%	-0.18%	-0.38%	-0.41%	-0.85%
▸ the plan assets as a percentage of the fair value of the assets	9.90%	-4.51%	6.52%	4.83%	-1.66%

The main actuarial weighted average assumptions used to measure pension plan obligations are as follows:

	December 31, 2019			December 31, 2018		
	North America	Europe	Other	North America	Europe	Other
Discount rate	3.15%	1.46%	7.10%	4.12%	2.18%	9.20%
Inflation rate	2.36%	2.43%	3.80%	2.37%	2.60%	4.00%
Rate of salary increases	2.75%	2.90%	4.64%	2.82%	2.76%	4.84%
Weighted average duration of the defined benefit obligation	12.2	15.6	11.2	11.6	15.4	12.1

The discount rates, salary increase rates and inflation rates are the main financial assumptions used in the measurement of the defined benefit obligation (DBO) and changes in these rates may have a significant effect on the amounts reported.

For each plan, all the actuaries calculate the sensitivities of the DBO and current service cost to changes in the main assumptions. In the case of a change in one of these assumptions, DBO and current service cost sensitivities are expressed as weighted average changes in these items.

Regarding the sensitivity of the fair market value of plan assets due to interest rate movements, it is considered that the entire yield curve moves up or down by 0.5 point and that only the values of the bonds are impacted, with the values of all other assets remaining unchanged. The level of sensitivity indicated corresponds to the change in the total value of the portfolio due to the change in interest rates.

A 0.5-point change in these rates compared with those used for 2019, all else being equal, would have the following effect:

	0.5-point increase	0.5-point decrease
Discount rate on the defined benefit obligation (DBO)	-6.70%	7.43%
Discount rate on the aggregate of current service cost and interest cost on the obligation	10.43%	-12.38%
Inflation rate on the defined benefit obligation (DBO)	3.82%	-3.53%
Inflation rate on the aggregate of current service cost and interest cost on the obligation	3.69%	-3.44%
Salary increase rate on the defined benefit obligation (DBO)	0.87%	-0.80%
Salary increase rate on the aggregate of current service cost and interest cost on the obligation	1.49%	-1.37%
Interest rates on the fair market value of plan assets	-5.82%	6.41%

Net income and expenses recognized in the income statement as well as the actual return on plan assets are as follows:

	2019				2018			
(in € millions)	North America	Europe	Other	Total	North America	Europe	Other	Total
Current service cost	5	38	1	44	2	44	1	47
Interest cost on the defined benefit obligation	155	100	3	258	143	96	3	242
Interest income on plan assets	(141)	(66)	(3)	(210)	(130)	(66)	(3)	(199)
Actuarial (gains) or losses recognized during the year on other long-term defined benefit plans	-	-	-	-	-	-	-	-
Past service cost recognized during the year:								
▶ due to the introduction of or amendments to defined benefit plans	-	(68)	-	(68)	-	40	-	40
▶ due to curtailments of defined benefit plans	-	-	-	-	-	-	-	-
Effect of defined benefit plan settlements	-	(10)	-	(10)	-	-	-	-
Other items	7	6	-	13	7	5	1	13
Portion of defined benefit expenses recognized under provisions for reorganizations and adaptation of activities	-	(12)	-	(12)	-	(13)	-	(13)
TOTAL DEFINED PENSION BENEFIT COST	**26**	**(12)**	**1**	**15**	**22**	**106**	**2**	**130**
Actual return on plan assets	**545**	**382**	**13**	**940**	**(89)**	**6**	**1**	**(82)**

The asset allocation of fully and partly funded pension plans is as follows:

	December 31, 2019					December 31, 2018				
	Canada	United States	United Kingdom	Other	Total	Canada	United States	United Kingdom	Other	Total
Listed securities										
Local equities	2.0%	7.8%	0.0%	0.0%	3.2%	2.0%	6.7%	0.0%	0.0%	2.9%
Foreign and global equities	5.7%	6.4%	4.3%	0.0%	5.0%	5.7%	6.2%	3.7%	0.0%	4.8%
Alternative investments	0.7%	9.1%	3.5%	0.0%	5.0%	3.4%	10.9%	8.1%	0.0%	8.0%
Real estate	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%
Index-linked bonds	0.1%	0.2%	17.9%	9.4%	8.0%	0.1%	0.2%	11.7%	11.5%	5.3%
Government and government agency bonds	30.3%	20.3%	17.5%	0.0%	19.6%	35.3%	19.5%	12.6%	0.0%	18.4%
Corporate bonds	13.0%	27.7%	14.3%	0.0%	18.3%	11.8%	26.8%	13.9%	0.0%	17.8%
Other fixed income securities, multi-asset credit and emerging market bonds	39.8%	16.8%	25.9%	0.0%	23.3%	33.6%	18.2%	24.3%	0.0%	22.2%
Cash and cash equivalents	4.2%	2.5%	4.2%	2.5%	3.5%	1.3%	1.7%	10.1%	0.7%	4.9%
Total listed securities	**95.8%**	**90.7%**	**87.6%**	**11.9%**	**85.8%**	**93.4%**	**90.0%**	**84.5%**	**12.3%**	**84.4%**
Unlisted securities										
Funds managed by insurance companies	0.0%	0.0%	0.0%	88.1%	5.0%	0.0%	0.0%	0.0%	87.7%	4.5%
Private placements(1)	1.8%	1.0%	7.7%	0.0%	3.8%	2.9%	1.6%	8.2%	0.0%	4.3%
Real estate	2.4%	8.3%	4.7%	0.0%	5.4%	3.7%	8.4%	7.4%	0.0%	6.8%
Total unlisted securities	**4.2%**	**9.3%**	**12.4%**	**88.1%**	**14.2%**	**6.6%**	**10.0%**	**15.5%**	**87.7%**	**15.6%**
TOTAL	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**
Duration in years of the bond portfolio, excluding cash and cash equivalents and funds managed by insurance companies	**14.3**	**13.7**	**22.7**	**13.9**	**17.9**	**16.9**	**13.1**	**29.2**	**9.2**	**20.1**

(1) Private equity and private debt

In the above allocation, assets reported under "Listed securities" are assets that have a regularly quoted market value at which they can be sold and those reported under "Unlisted securities" are assets managed by insurance companies and less liquid assets that could be sold on short notice or in difficult markets, at a discount.

An internal group of experts, composed of the chairs or Chief Investment Officers of the main investment committees and Group specialists, has issued investment guidelines for the local investment committees presenting investment best practices. In particular, the guidelines state that direct investments should not be made in Michelin securities or properties used by the Group. Fund managers are not subject to such restrictions. The Group has not invested material amounts in its own securities. Michelin does not occupy or use any of the real estate assets included in the various portfolios. The Group is not in possession of comprehensive information on the underlying assets held in insurance funds or alternative investments.

Alternative investments are composed of hedge funds and multi-asset products such as diversified growth funds in the United Kingdom. These kinds of investments are expected to deliver absolute returns with lower volatility than equities.

Other fixed income securities include emerging market bonds, mutual funds, liability hedging portfolios for which the managers invest in government and corporate bonds or in derivatives, as well as, in the United Kingdom, in multi-asset funds allowing the managers to switch between the main credit products depending on market conditions. This kind of investment is expected to have a return similar to that of corporate bonds, but with lower volatility due to its diversified profile (including asset backed securities, loans and high-yield bonds as well as cash, government and corporate bonds).

Regarding the UK real estate portfolio, the Group has opted to invest in a limited price index property fund composed of long-term leases that is expected to hedge inflation risk.

In most countries, assets are managed by local independent boards, in accordance with local pension laws. The boards are required by their bylaws as well as by law to act in the best interest of the fund and all relevant stakeholders, *i.e.,* current and future beneficiaries as well as employers.

Asset allocation analyses are performed periodically, generally every three to five years, by an independent fiduciary body (Investment Board, Board of Trustees) based on recommendations made by independent advisors (actuaries, consultants, banks or investment management firms). The asset allocation takes into account the structure of employee-related liabilities and their terms. In the event of a sharp increase in the funding ratio, an asset allocation analysis should be performed to ensure the target allocation is still appropriate.

The largest pension plans have implemented a dynamic asset allocation policy, whereby the target asset allocations are based on the plan's funded status. An improvement in funded status results in the de-risking of the portfolios, allowing more funds to be allocated to liability hedging assets (LHA) and less to return seeking assets (RSA). In the event of a decrease in the funding ratio, the target allocation remains unchanged, as the re-risking of the portfolios is not permitted. These pension plans have also implemented an interest rate hedging policy and, in the United Kingdom, an inflation hedging policy. The hedging ratio increases as the funding level improves.

The RSA are diversified with the objective of targeting efficient portfolios where the level of volatility is minimized for the targeted return. These portfolios combine domestic and global equities with real estate and alternative assets such as hedge funds and private placements. Special attention is given to less liquid asset classes that may complicate the de-risking process by creating concentrated positions or requiring transactions at discounted prices.

The LHA are used to hedge the duration risk as well as, in some cases, the credit spread and inflation risks. The LHA portfolios are primarily composed of government and corporate bonds. The larger plans also use completion managers to implement custom solutions in order to hedge key rates in accordance with the policy set by each pension fund.

Foreign exchange risks may be hedged when the exposure to a foreign currency is considered to be non-negligible. For instance, the UK fund is exposed to many currencies and has a policy of hedging 75% of its exposure. In Canada, 50% of the US dollar exposure is hedged. In other cases, investment managers are given discretion to hedge currency exposure as they deem necessary.

Group contributions to pension plans and benefit payments made by these plans in 2019 and to be made over the following ten years are as follows:

(in € millions)	North America	Europe	Other	Total
Contributions paid and benefits paid directly by the Group				
2019	1	224	1	226
Estimates of contributions to be paid and benefits to be paid directly by the Group				
2020	2	155	-	157
2021	2	111	-	113
2022	2	75	-	77
2023	2	75	-	77
2024	21	86	-	107
2025-2029	142	469	-	611

The Group makes contributions to fully and partly funded plans in order to meet its future benefit payment obligations to the beneficiaries. The level of contributions is periodically determined by the Group based on factors such as current funding levels, legal and tax considerations and local practice, in consultation, as the case may be, with local boards and actuaries.

In the United States, the following year's contribution is determined annually in accordance with Internal Revenue Service (IRS) rules, in particular as regards temporary funding relief provided for under the Bipartisan Budget Act of 2015 (BBA15).

In Canada, the contributions are determined on a triennial basis and the funding plan is spread over 15 years as required under local regulations.

In the United Kingdom, the contributions are determined based on triennial actuarial valuations as required by the Pension Act. In the event of a deficit, the employer must implement a recovery plan in agreement with the Trustees. The current recovery plan matures in 2021.

In 2019, in addition to the ordinary contributions, the decision was made to prepay contributions in the United Kingdom for an amount of €125 million.

In the case of unfunded plans, the payments are made on the due dates, either directly to the beneficiaries or indirectly *via* the relevant fund managers.

Future payments for unfunded plans are estimated based on data included in the calculation of the projected defined benefit obligation according to expected leaving dates each year. The same method is used for calculating the amount of the constitutive capital invested in partially funded plans with insurance companies.

27.1.2 Other defined benefit plans

In many countries, Group employees receive other post-employment benefits and long-term benefits throughout their term of employment. Other post-employment benefits mainly include health insurance and end-of-service benefits. Other defined benefit plans are mainly found in the United States, Canada and France. Other long-term benefits include mainly long-service awards provided under local company-specific agreements. Such defined benefit plans chiefly concern the Group's European companies.

As in the case of the above-described defined benefit pension plans, other defined benefit plans are valued with the assistance of independent actuaries using actuarial techniques. The obligations under these plans are not covered by assets and are recognized in full as liabilities.

The main plans provided within the Group are detailed below:

United States

The Group provides healthcare coverage to Pre-Medicare and Medicare-eligible retirees and their dependents.

Eligible retirees are mainly those who were employed prior to January 1, 2004 and who will have reached the age of 55 and completed at least ten years of service at the date of retirement.

For Medicare-eligible retirees, the healthcare coverage is provided in addition to Medicare.

Medical and prescription drug expenses are covered by the plan. The retirees contribute to the cost of the pre-Medicare post-retirement medical plan.

In 2016, the plan was amended to move non-union Medicare-eligible retirees from a company-sponsored retirement offering to private Medicare exchanges. For this population, the plan provides the following benefit improvements:

- Retiree Reimbursement Account (RRA): this account is funded in a fixed annual amount per retiree and eligible dependents through a Retiree Health Exchange program to either reimburse Medicare, Medicare supplement and/or prescription drug premiums;
- Catastrophic Retiree Reimbursement Account (CRRA): if the retiree or dependent reaches the eligibility threshold for catastrophic drug coverage, he or she can receive reimbursement for the 5% of the out-of-pocket cost not covered by Medicare Part D.

The Group pays a premium for the administrative services. This plan is not pre-funded.

Canada

The Group provides healthcare coverage to certain retirees and their dependents. Medical and prescription drug expenses are covered by the plan.

This plan was closed to new entrants as from January 1, 2005.

The Group pays a premium for the administrative services. This plan is not pre-funded.

France

The main plan is a mandatory rubber division end-of-service benefit plan.

The plan provides for the payment of a lump sum to employees who are present at their retirement date. The normal retirement age is set at 65. The amount of the lump sum corresponds to a number of months of salary based on years of service at the time of retirement.

This plan is not pre-funded.

Changes in the financial position of other defined benefit plans are as follows:

(in € millions)	2019				December 31, 2018[1]			
	North America	Europe	Other	Total	North America	Europe	Other	Total
Present value of the obligations at the beginning of the year	**724**	**983**	**53**	**1,760**	**790**	**990**	**40**	**1,820**
Translation adjustments	28	-	2	**30**	14	-	-	**14**
Change in scope of consolidation	-	(10)	11	**1**	-	(6)	8	**2**
Current service cost	9	50	8	**67**	10	46	4	**60**
Interest cost on the defined benefit obligation	30	17	2	**49**	28	16	2	**46**
Administrative costs	-	-	-	**-**	-	-	-	**-**
Plan reorganization costs generated during the year:								
▶ past service cost due to the introduction of or amendments to defined benefit plans	(9)	-	9	**-**	11	3	-	**14**
▶ past service cost due to curtailments of defined benefit plans	-	(18)	-	**(18)**	-	(8)	-	**(8)**
▶ (gains) or losses on settlement of defined benefit plans	-	-	-	**-**	-	-	-	**-**
Benefits paid during the year	(47)	(53)	(5)	**(105)**	(46)	(59)	(2)	**(107)**
Other items	(3)	-	-	**(3)**	-	-	-	**-**
Actuarial (gains) or losses generated during the year	27	78	11	**116**	(83)	1	1	**(81)**
Present value of the obligations at the end of the year	**759**	**1,047**	**91**	**1,897**	**724**	**983**	**53**	**1,760**
Fair value of plan assets at the beginning of the year	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Translation adjustments	-	-	-	**-**	-	-	-	**-**
Change in scope of consolidation	-	-	-	**-**	-	-	-	**-**
Interest income on plan assets	-	-	-	**-**	-	-	-	**-**
Contributions paid to the funds	-	-	-	**-**	-	-	-	**-**
Benefits paid by the plans during the year	-	-	-	**-**	-	-	-	**-**
Other items	-	-	-	**-**	-	-	-	**-**
Actual return on plan assets excluding interest income	-	-	-	**-**	-	-	-	**-**
Fair value of plan assets at the end of the year	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Deficit/(Surplus) at the end of the year	**759**	**1,047**	**91**	**1,897**	**724**	**983**	**53**	**1,760**
NET LIABILITY/(ASSET) RECOGNIZED IN THE STATEMENT OF FINANCIAL POSITION AT THE END OF THE YEAR	**759**	**1,047**	**91**	**1,897**	**724**	**983**	**53**	**1,760**

(1) The 2018 figures have been restated for comparison purposes (see note 2.5 to the consolidated financial statements).

United States

In 2019, the Group adjusted the eligibility conditions for participants in a disability pension plan. The change in the plan rules led to the recognition of negative past service costs (income) of €9 million.

Thailand

In May 2019, the rules of a plan for the payment of length-of-service awards to employees on retirement were amended following the adoption of new legislation. This rule change led to a significant increase in the amount of these awards and the recognition of positive past service costs (expense) of €9 million.

In 2019, the present value of other defined benefit plans increased by €137 million, due to:

	2019	2018
Effect of changes in exchange rates for the US dollar, pound sterling and Canadian dollar against the euro	(30)	(14)
Actuarial gains or (losses) from changes in actuarial assumptions and the difference between assumptions and actual experience	(116)	81
Difference between the costs (service cost and interest cost) and the benefits paid during the year	(11)	1
Changes in plan rules	18	(6)
Changes in the scope of consolidation	(1)	6
Other items	3	-

The present value of the defined benefit obligation and experience adjustments are as follows for 2019 and the previous four periods:

(in € millions)	2019	2018	2017	2016	2015
Defined benefit obligation	(1,897)	(1,760)	(1,820)	(2,021)	(2,271)
Experience adjustments to plan liabilities	48	14	46	16	25
Experience adjustments to plan liabilities (as a % of the present value of the obligation – DBO)	-2.53%	-0.80%	-2.53%	-0.79%	-1.10%

The main actuarial weighted average assumptions used to measure obligations for other defined benefit plans are as follows:

	December 31, 2019			December 31, 2018		
	North America	Europe	Other	North America	Europe	Other
Discount rate	3.07%	0.85%	2.82%	4.12%	1.76%	5.28%
Weighted average duration of the defined benefit obligation	11.9	15.1	12.1	10.8	14.1	10.8

Assumptions concerning healthcare cost trends are as follows:

	December 31, 2019		December 31, 2018	
	United States	Canada	United States	Canada
Expected growth in healthcare costs in the first year	7.49%	3.83%	7.89%	6.10%
Minimum long-term rate of annual growth in healthcare costs	4.95%	4.05%	4.93%	4.25%
Year in which the minimum growth rate will be achieved	2026	2040	2026	2028

The discount rate is one of the main assumptions used in the measurement of the defined benefit obligation and changes in this rate may have a significant effect on the amounts reported. For each plan, all the actuaries calculate the sensitivities of the DBO and current service cost to changes in the main assumptions. The sensitivities of the DBO and cost (meaning in this case the aggregate of the current service cost and interest cost on the obligation) correspond to the weighted average change in the DBO and the cost, respectively, when one of these assumptions changes.

A 0.5-point change in these rates compared with those used for 2019, all else being equal, would have the following effect:

	0.5-point increase	0.5-point decrease
Discount rate on the defined benefit obligation (DBO)	-6.44%	7.15%
Discount rate on the aggregate of the current service cost and interest cost on the obligation	0.17%	-0.33%
Healthcare cost trend rate on the healthcare defined benefit obligation	1.76%	-1.61%
Healthcare cost trend rate on the aggregate of the current service cost and interest cost on the healthcare plan obligation	1.35%	-1.22%

Net income and expenses recognized in the income statement are as follows:

	2019				2018			
(in € millions)	North America	Europe	Other	Total	North America	Europe	Other	Total
Current service cost	9	50	8	**67**	10	46	4	**60**
Interest cost on the defined benefit obligation	30	17	2	**49**	28	16	2	**46**
Interest income on plan assets	-	-	-	**-**	-	-	-	**-**
Actuarial (gains) or losses recognized during the year on other long-term defined benefit plans	-	4	1	**5**	(1)	(3)	(1)	**(5)**
Past service cost recognized during the year:								
▸ due to the introduction of or amendments to defined benefit plans	(9)	-	9	**-**	11	3	-	**14**
▸ due to curtailments of defined benefit plans	-	-	-	**-**	-	-	-	**-**
Effect of defined benefit plan settlements	-	-	-	**-**	-	-	-	**-**
Portion of defined benefit expenses recognized under provisions for reorganizations and adaptation of activities	-	(18)	-	**(18)**	-	(8)	-	**(8)**
TOTAL OTHER DEFINED BENEFIT EXPENSES	**30**	**53**	**20**	**103**	**48**	**54**	**5**	**107**

Benefit payments made under other defined benefit plans in 2019 and to be made over the following ten years are as follows:

(in € millions)	North America	Europe	Other	Total
Benefit payments made				
2019	47	53	5	105
Estimates of benefit payments to be made				
2020	45	41	1	87
2021	45	48	1	94
2022	46	45	2	93
2023	46	49	2	97
2024	45	51	2	98
2025-2029	218	229	19	466

For unfunded plans, such payments are made on the due dates, either directly to the beneficiaries or indirectly to the relevant administrators.

27.2 Defined contribution plans

In some Group companies, employees are covered by defined contribution plans. Such plans mainly provide benefits in addition to those of mandatory post-employment plans.

In 2019, the contributions paid to defined contribution plans and expensed amounted to €226 million (2018: €223 million).

These plans are mainly found in the United States, Canada, the United Kingdom and France.

United States

The defined contribution plans in the United States include the Michelin Retirement Account Plan (MRAP) and various 401(k) plans. The MRAP plan is fully funded by employer contributions. The contribution levels are based on age and years of service. The 401(k) plans are voluntary and are funded by employee contributions with employer matching contributions. In both the MRAP and 401(k) plans, asset allocation decisions are made by the employees. The asset allocation choices are determined and monitored by the North American Investment Committee under the authority of the US Pension Board.

Canada

The defined contribution plans in Canada include the Defined Contribution Plan for the Employees of Michelin North America (Canada) Inc. as well as a registered retirement savings plan (RRSP). The defined contribution plan is funded by core employer contributions and optional employee contributions with employer matching. The core contribution levels, modified at January 1, 2016, are based on years of service and age. The RRSP plan is voluntary and is funded by employee contributions with employer matching contributions. In both the DC and RRSP plans, asset allocation decisions are made by the employees. The asset allocation choices are determined and monitored by the North American Investment Committee under the authority of the US Pension Board.

United Kingdom

The main defined contribution pension plan in the United Kingdom is the Michelin Pension and Life Assurance plan DC section (for Michelin and ATS employees). It has been implemented as of December 1, 2004 for new entrants and as of January 1, 2009 for all employees who did not opt out.

For Michelin employees, there are employee and employer contributions to this plan. The contributions are based on a percentage of the eligible pay and age of the employee. Employees may also make optional contributions to the plan and the Group will match some of these optional contributions.

For ATS employees, there are employee and employer contributions. The level of contribution is chosen by the employee and matched by the employer. Contributions are a flat-rate amount whatever the age of the employee.

All contributions to the plan are held in a Pension Account in a Trust. The employees choose how to invest these contributions among the different options made available for the plan. The asset allocation choices are determined and monitored by the Board of Trustees.

France

There are two defined contribution pension plans in France: the "Article 83" plan and the "PERCO" plan.

The defined contribution "Article 83" retirement savings plan has been implemented as of January 1, 2012 in order to replace the defined benefit plan which will be gradually terminated. Article 83 is a mandatory retirement plan for all employees of the French companies concerned by the applicable agreement. Contributions are paid by the employee and the employer based on the capped gross annual salary. An individual account is opened in the name of each employee. Employees can claim an additional benefit when they become entitled to their pension under a compulsory retirement plan.

The PERCO was implemented on June 1, 2007 and revised on January 1, 2012. It is a voluntary retirement savings plan. Each employee can contribute to the plan and the Group will match the voluntary contributions made by the employee up to a cap.

NOTE 28 SHARE-BASED PAYMENTS

28.1 Employee stock option plans

Changes in the number of options granted under stock option plans and their weighted average exercise price are as follows:

	2019		2018	
	Weighted average exercise price *(in € per option)*	Number of options	Weighted average exercise price *(in € per option)*	Number of options
At January 1	**56.87**	**111,409**	**53.81**	**360,951**
Granted	-	-	-	-
Forfeited	52.05	(10,046)	51.17	(47,596)
Exercised	58.00	(64,178)	52.73	(201,946)
AT DECEMBER 31	**56.23**	**37,185**	**56.87**	**111,409**

All of the 37,185 options outstanding at December 31, 2019 were exercisable at that date (2018: 111,409 exercisable out of a total of 111,409).

Stock option plans have the following exercise prices and expiration dates:

			December 31, 2019		December 31, 2018	
Grant date	**Vesting date**	**Expiration date**	**Exercise price** *(in € per option)*	**Number of stock options outstanding**	**Exercise price** *(in € per option)*	**Number of stock options outstanding**
November 2009	November 2013	November 2018	-	-	51.16	-
May 2010	May 2014	May 2019	52.13	-	52.13	34,304
May 2011	May 2015	May 2020	66.00	12,696	66.00	40,637
June 2012	June 2016	June 2021	51.16	24,489	51.16	36,468
NUMBER OF OPTIONS OUTSTANDING				**37,185**		**111,409**

28.2 Performance share plans

Changes in the number of performance share rights are as follows:

	2019	2018
	Number of performance share rights outstanding	Number of performance share rights outstanding
At January 1	**623,239**	**883,512**
Granted	377,292	129,270
Forfeited	(68,160)	(195,252)
Shares delivered	(61,566)	(194,291)
AT DECEMBER 31	**870,805**	**623,239**

In November 2019, 377,292 rights to performance shares were granted to Group employees. The rights are subject to a vesting period of four years ending in November 2023 and the vested shares are not subject to any lock-up period. The shares will vest providing that the performance conditions (stock market performance, environmental performance of the Group's manufacturing operations, employee engagement level and growth in operating income) are met. The fair value of each performance share right is estimated at €62.01.

This fair value is based on the share price at the grant date, less the present value of expected dividends that will not be received by grantees during the vesting period. The estimated value of the stock market performance condition is deducted from the grant-date fair value of the performance share rights based on the probability of this condition being met. The total cost for the plans set up in 2019 is estimated at €16 million.

The performance share plans have the following characteristics:

Grant date	Vesting date		Lock-up period		Fair value at grant date		December 31, 2019 Number of performance share rights outstanding	December 31, 2018 Number of performance share rights outstanding
	France	Other countries	France	Other countries	France	Other countries		
2015	2019	2019	None	None	82.24	82.24	-	83,464
2016	2020	2020	None	None	66.41	66.41	81,518	119,540
2017	2021	2021	None	None	66.84	66.84	283,965	290,965
2018	2022	2022	None	None	47.91	47.91	128,030	129,270
2019	2023	2023	None	None	62.01	62.01	377,292	-
NUMBER OF PERFORMANCE SHARE RIGHTS OUTSTANDING							**870,805**	**623,239**

The expense recognized in 2019 for performance share plans amounts to €7 million (2018: €9 million) and is included in "Segment other income and expenses".

28.3 Employee share ownership plans

No new employee share ownership plans were carried out in 2019.

In 2018, the Group launched a share offer for all its employees located in countries where the legal and tax requirements were met. This share ownership plan (Bib'Action), carried out under the Company savings plan *(Plan d'Épargne Groupe),* is a standard plan allowing employees to invest in Michelin shares at a discounted price. The shares acquired by the employees participating in the plan cannot be sold or transferred during a five-year period.

The purchase price was set at €82.31 per share, representing a 20% discount on the reference price of €102.89 corresponding to the average of the opening prices for Michelin shares over the 20 trading days preceding the pricing date. Employees were granted one free share for each share purchased up to four shares.

578,639 shares were purchased during this share offer.

The total expense recognized in the income statement by the Group in 2019 in relation to this plan amounted to €13 million, after deducting the effect of the five-year lock-up.

The main features of the plan and the assumptions used to determine the final cost were as follows:

Maturity of the plan	5 years
Number of shares purchased	578,639
Reference price *(in €)*	102.89
Purchase price for employees *(in €)*	82.31
Five-year risk-free interest rate(1)	0.20%
Five-year market participant rate(2)	5.85%
Dividend yield	3.45%
Cost of the lock-up period *(as a % of the reference price)*	23.99%
Recognized cost *(in € per share)*	22.68

(1) The risk-free interest rate is based on the yield on French government bonds with an equivalent maturity.
(2) The five-year market participant rate is the average cost for market participants of a five-year loan for general corporate purposes.

NOTE 29 PROVISIONS AND OTHER NON-CURRENT LIABILITIES

Provisions and other non-current liabilities amount to €1,104 million (2018: €1,319 million) and include provisions for reorganizations and adaptation of activities, provisions for litigation and for warranties, contract liabilities as described in note 3.8 "Revenue recognition", as well as other provisions and non-current liabilities.

29.1 Charge in provisions (current and non current)

Changes in provisions during the period are presented below:

(in € millions)	Reorganizations and adaptation of activities	Litigation, warranties and other provisions	Total
At January 1, 2019(1)	**374**	**455**	**829**
Additional provisions	239	137	376
Provisions utilized during the year	(169)	(134)	(303)
Unused provisions reversed during the year	(39)	(20)	(59)
Translation adjustments	6	3	9
Other effects	3	(5)	(2)
AT DECEMBER 31, 2019	**414**	**436**	**850**
Of which short-term portion (note 30)	233	68	301

(1) The 2018 figures have been restated for comparison purposes (see note 2.5 to the consolidated financial statements).

The €436 million balance for litigation, warranties and other provisions mainly includes amounts arising from social security disputes (URSSAF in France), as well as civil liability claims in North America and obligations arising from warranties given to customers, in particular in the United States.

29.2 Reorganizations and adaptation of activities

At December 31, the remaining provisions for reorganizations and adaptation of activities relate to following countries:

(in € millions)	December 31, 2019	December 31, 2018(1)
France(2)	183	187
Germany(3)	123	37
United Kingdom	86	122
Italy	11	21
Other countries	11	7
TOTAL	**414**	**374**

(1) The 2018 figures have been restated for comparison purposes (see note 2.5 to the consolidated financial statements).
(2) Consisting mainly of the provision for reorganization of the La Roche-sur-Yon plant (note 9.2).
(3) Consisting mainly of the provision for the closure of the Bamberg plant (note 9.2).

NOTE 30 OTHER CURRENT LIABILITIES

The carrying amount of other current liabilities is presented in the table below:

(in € millions)	December 31, 2019	December 31, 2018[1]
Deferred customer rebates	879	848
Employee benefit obligations	613	598
Payroll tax liabilities	302	325
Provisions for reorganizations and adaptation of activities	233	168
Income tax payable	145	203
Other taxes	237	227
Other	429	400
OTHER CURRENT LIABILITIES	**2,838**	**2,769**

(1) The 2018 figures have been restated for comparison purposes (see note 2.5 to the consolidated financial statements).

NOTE 31 DETAIL OF THE STATEMENT OF CASH FLOWS

Cash flows are presented in detail in the table below:

(in € millions)	2019	2018
Investment grants recognized in profit or loss	(13)	(12)
Change in employee benefit obligations	(217)	(218)
Change in litigation and other provisions	(23)	(24)
Costs related to reorganizations and adaptation of activities	(172)	(172)
Other	26	13
Other operating income and expenses (cash) and change in provisions	**(399)**	**(413)**
Interest and other financial expenses paid	(371)	(216)
Interest and other financial income received	34	21
Dividends received	12	13
Interest and other financial income and expenses received and paid, net	**(325)**	**(182)**
Change in inventories	147	4
Change in trade receivables and advances	(81)	(52)
Change in trade payables and advances	(140)	(47)
Change in trade payables under reverse factoring agreements	5	(77)
Change in other receivables and payables	(30)	(24)
Change in working capital, net of impairment	**(99)**	**(196)**
Purchases of intangible assets (note 13)	(207)	(201)
Purchases of PP&E (note 14)	(1,594)	(1,467)
Government grants received	8	20
Change in capital expenditure payables	11	(68)
Purchases of intangible assets and PP&E	**(1,782)**	**(1,716)**
Increase in other non-current financial assets	(34)	(209)
Decrease in other non-current financial assets	19	9
Net cash flows from cash management financial assets	-	-
Net cash flows from borrowing collaterals	(68)	7
Net cash flows from other current financial assets	(26)	(31)
Cash flows from other financial assets	**(109)**	**(224)**
Increase in non-current financial liabilities	184	2,974
Decrease in non-current financial liabilities	(378)	(80)
Repayment of lease liabilities	(238)	(19)
Net cash flows from current financial liabilities	(486)	191
Derivatives	48	(46)
Cash flows relating to financial liabilities, net	**(870)**	**3,020**
Details of non-cash transactions:		
▶ new leases (note 14)	217	65
▶ new emission rights	9	7

NOTE 32 COMMITMENTS AND CONTINGENCIES

32.1 Commitments

32.1.1 Capital expenditure commitments

Capital expenditure for the main extension projects that was contracted but not delivered before December 31, 2029, amounts to €230 million (of which €73 million is expected to be delivered as from 2021).

32.1.2 Other commitments

The Group has many purchase commitments for goods and services. These commitments are in line with the level of activity expected in the first half of 2020. They are entered into on arm's length terms in the normal course of business.

32.2 Contingencies

32.2.1 Michelin Pension Trust Ltd UK

Following adoption of the "Pension Act 2004" in the United Kingdom, a multi-annual plan of contributions to the UK pension fund (the "Recovery Plan") was established between Michelin Pension Trust Ltd UK and Michelin UK. In order to limit the amount of the contributions and potentially spread them over more than ten years, the Group has given a guarantee to the pension fund covering the contributions which its subsidiary will have to make.

A similar guarantee was given to the trustees of the Fenner Pension Scheme UK following the acquisition of Fenner.

The Recovery Plan liability is recalculated every three years. The last recalculation was carried out as of March 31, 2017. The actuarial assumptions used to measure the Recovery Plan liability are generally more conservative than the ones used to measure defined benefit obligations under IAS 19.

The amount of the Group's guarantee is equal to the difference, if positive, between the present value of future contributions and the amount of the provision booked in the accounts. At December 31, 2019, the present value of future contributions in excess of the provision booked in the consolidated financial statements was €75 million, including €68 million for the guarantee given to the trustees of the Michelin Pension Trust Ltd UK and €7 million for the guarantee given to the Fenner Pension Scheme UK trustees.

32.2.2 Tax audit in Germany

Following a tax audit covering the years 2005 to 2009, a German subsidiary was notified in 2015 of certain proposed reassessments. The tax inspectors' final report was received in 2018 along with the final tax reassessment notice.

In these documents, the subsidiary was notified of a €382 million reassessment of its corporate income tax base, determined by estimating its taxable income for the audited period by reference to the Group's average margin. The reassessment includes an amount of €298 million corresponding to the effects on the subsidiary of the Group's transfer pricing policy, which was challenged by the tax administration. The transfer pricing issue had previously been raised in the notification of proposed reassessments received in 2015. The tax administration considered in its final report that the subsidiary had not provided all the requested information justifying the transfer prices paid by the subsidiary.

The Group has challenged all of the German tax administration's arguments.

On July 17, 2018, the Group initiated the following procedures with the German tax administration:

- an application to defer payment of the tax deficiency and late interest while the dispute procedure was in progress; as a result of this application, the payments made were not material;
- a procedure challenging the methodology used by the tax administration and based on the Group's average margin.

The Group filed on December 16, 2019, a Mutual Agreement Procedure (MAP) under the EU Arbitration Convention or the respective Double Tax Treaties, for the total reassessment amounting to €382 million.

The Group considers that it has strong arguments in support of its position and that it is more likely than not that it will be successful in each of the actions initiated or about to be initiated.

On that basis, the Group considers that the estimated financial risk is not material.

In 2016, a new tax audit covering the years 2010 to 2014 was launched but no conclusion could be drawn in its respect at the date of these consolidated financial statements were published. The Group considers that there was no evidence of a risk of reassessment at December 31, 2019 in connection with this audit.

32.2.3 Legal claims in Brazil

In 2010, a Brazilian subsidiary of the Group was awarded a tax benefit in connection with an investment project at its Resende plant (State of Rio de Janeiro). The benefit, which was confirmed in a decree issued by the State governor, consisted of the right to defer tax payments on imports of machines and raw materials, as well as access to a BRL 1,029 million (around €227 million at the 2019 year-end exchange rate) credit line.

In 2013, legal proceedings were initiated against the subsidiary, on the grounds that the decree granting the benefit was unconstitutional and that the State had incurred a financial loss by not collecting the deferred tax payments. These proceedings are still in progress.

A favorable initial ruling handed down in April 2015 was followed by an unfavorable appeal ruling in October 2016. The judgment only concerned the deferred tax payments on imports of industrial machines for the Resende plant. In June 2017, the Group filed two appeals to bring the matter before the Superior Court of Justice and the Supreme Court, which will first have to decide whether these appeals are admissible before the case is decided on its merits. The Group estimates that the financial risk related to this dispute is in the region of BRL 32 million.

In November 2016, the Prosecutor of the State of Rio de Janeiro initiated new legal proceedings against the subsidiary based on the October 2016 appeal ruling and called on the subsidiary to return the total amount represented by the benefits granted under the decree. The subsidiary launched a procedure to have the legal proceedings suspended, but its request was rejected by the judge who ordered the sequestration of the subsidiary's assets for an amount equal to the credit line granted by the State of Rio de Janeiro. The subsidiary, which has never made use of the credit line, entered an appeal for an immediate suspension and cancellation of the decision. The request for a suspension was rejected but as of December 31, 2017, the preliminary decision to freeze the Company's assets had not been executed.

On June 4, 2018, the judge hearing the charges brought in November 2016 by the Prosecutor of the State of Rio de Janeiro, decided to dismiss the charges, as they were no longer admissible following the adoption of a new law enacted in 2017. In his ruling, the Judge also revoked the legal order to freeze the subsidiary's assets. The State Prosecutor has appealed this decision.

The Federal Prosecutor has also lodged an appeal, on the grounds that States could legally approve the type of benefits granted to the subsidiary only if certain mandatory conditions were met. Citing the absence of evidence that the mandatory conditions had been met, the Federal Prosecutor called for the Judge's ruling to be set aside. Michelin defended its position by providing evidence that all the conditions stipulated in the new legislation (Act No. 160/2017) had been met by the State of Rio Janeiro, meaning that the Federal Prosecutor's appeal was inadmissible.

Before ruling on these various appeals, the Court asked the Prosecutor to provide a legal opinion on the merits of the case. In his opinion, the Prosecutor maintained his arguments and added a further one, *i.e.,* that the new law is unconstitutional. Each party has presented its arguments concerning this latter point, and the matter is ready to be heard by a panel of three appeal judges.

The Group contests all of the positions expressed by the Brazilian legal authorities in the legal proceedings and considers that it is more likely than not that its arguments will prevail.

32.2.4 Other contingencies

In the normal course of business, the Group companies may be involved in administrative proceedings, litigation and claims. Although provisions have been recognized when the risks are established and an outflow of financial resources is probable, there exist uncertainties concerning some of these administrative proceedings, litigation and claims.

In the opinion of Group management, there are no other governmental, judicial or arbitration proceedings likely to have a material impact on the Group's financial position or cash position.

32.3 Assets pledged as collateral

32.3.1 Property, plant and equipment (PP&E)

PP&E pledged as collateral for debt amounted to €33 million (2018: €33 million).

32.3.2 Financial assets

Loans and deposits amounting to €103 million (2018: €34 million) are pledged as collateral for debt (note 16 "Derivative instruments").

32.3.3 Trade receivables

The Group runs two separate programs whereby certain European and North American subsidiaries have transferred ownership interests in portfolios of eligible trade receivables. The maximum financing that can be raised from these programs amounts to €479 million (2018: €474 million). Since the Group has retained substantially all the risks and rewards of ownership, the ownership interests in the trade receivable portfolios sold by the European and North American subsidiaries have not been derecognized and the financing received from the financial institutions, amounting to €15 million at December 31, 2019 (2018: €15 million), has been accounted for as secured debt (note 26.2 "Loans from financial institutions and other").

NOTE 33 FINANCIAL RISK MANAGEMENT

33.1 Financial risk management policy

33.1.1 Organization of financial risk management

Financial risk control, measurement and supervision are carried out under the responsibility of the Corporate Financing Department, at subsidiary and geographic region level as well as at Group level. The Corporate Financing Department reports directly to the Group Finance Department.

One of the Corporate Financing Department's ongoing missions is the formulation of financial risk management policies, monitored on the basis of a full array of internal standards, procedures and authoritative literature. Regional (Geographic Zone) finance directors oversee implementation of the Group's financial risk management policies by the finance managers of the companies in their region. Compliance with financial risk policies is assessed through internal audit reviews to evaluate risk control efficiency and identify areas of improvement.

All strategic decisions regarding Group financial risk hedging policy are made by the Group Finance Department. As a general rule, the Group strictly limits the use of derivatives to the sole purpose of hedging clearly identified exposures.

A Financial Risks Committee is responsible for establishing and validating financial risk management policies, identifying and measuring these risks and validating and monitoring hedging programs. The Financial Risks Committee, which is chaired by a Manager, meets on a monthly basis and includes members of the Group Finance Department and the Corporate Financing Department.

33.1.2 Liquidity risk

33.1.2.1 Risk factors

Liquidity is defined as the ability to repay borrowings when they fall due and to find new stable sources of financing so that there is always sufficient money to cover expenses. In the course of its business, the Group is exposed to the risk of having insufficient liquid resources to finance its operations and make the investments needed to drive its growth. It must therefore manage its cash reserves and confirmed lines of credit on a continuous basis.

33.1.2.2 Risk management response

The Corporate Financing Department is responsible for ensuring that the Group has access to adequate financing and liquidity at the lowest cost. The Group raises financing through long-term debt issues (bonds) on the capital markets, as well as through bank facilities (loans and credit lines), commercial paper programs and receivables securitization programs. The Group has also negotiated confirmed back-up credit lines and maintains cash reserves that are calibrated in order to ensure the refinancing of short-term debt. Long-term financing and confirmed back-up credit lines are essentially concentrated at the level of the Group financial holding companies.

Except in the case of particular restrictions due to the specific features of local financial markets, the Group companies are financed in accordance with the following model:

- cash pooling with the Group for the management of day-to-day liquidity requirements;
- intercompany credit lines and loans to meet medium and long-term requirements.

For subsidiaries that do not participate in the cash pool, short-term financing is the responsibility of the local treasurer.

The management of liquidity risk is supported by a system that forecasts short- and long-term financing requirements based on business forecasts and the strategic plans of the operating entities.

As a matter of prudent financial policy, the Group guards against the inclusion in its financial contracts of hard covenants or material adverse change clauses that could affect its ability to draw down credit lines or the facilities' term. At December 31, 2019, none of the Group's loan agreements included any clauses of this type. Concerning default and acceleration clauses included in the Group's loan agreements, the probability of trigger events occurring is low and the possible impact on the Group's financial position would not be material.

33.1.3 Currency risk

33.1.3.1 Risk factors

Currency risk is defined as the impact on financial indicators of fluctuations in the exchange rates of foreign currencies used in the normal course of business. The Group is exposed to currency risks on its foreign currency transactions (transaction risk) and also on the translation of its net investment in foreign subsidiaries (translation risk).

Foreign currency transaction risk arises from the monetary assets and liabilities of the Group and its subsidiaries (mainly cash and cash equivalents, receivables, payables and borrowings) that are denominated in foreign currencies. It corresponds to the risk of a change in the exchange rate between the date when these monetary assets and liabilities are recorded in the accounts and the date when they are recovered or settled.

Foreign currency translation risk arises from the Group's net investment in foreign subsidiaries. It corresponds to the risk of a change in the exchange rate used to translate the net investment in the foreign subsidiary into euros during the consolidation process.

33.1.3.2 Risk management response

Foreign currency transaction risk

Foreign currency transaction risk is monitored by the Corporate Financing Department.

Each Group company continually calculates its accounting exposure in relation to its functional currency and hedges it systematically. Temporary exemptions can, however, be approved by the Group Finance Department when it is not possible to hedge a currency on the market or when an exemption is justified due to exceptional market conditions.

Foreign currency payables and receivables of the same type and with equivalent maturities are netted off and only the net exposure is hedged. This is normally carried out through the financial holding company, or, alternatively, through a bank. The financial holding company in turn assesses its own resulting exposure and hedges it with its banking partners. The main hedging instruments used are forward currency contracts. The structural exposure is hedged using long-term instruments (with a life of up to eight years) and the operational exposure is hedged using short-term instruments (generally expiring within three months). Currency risk monitoring and hedging is based on Group internal standards and procedures. A system to closely monitor foreign currency transaction risk is implemented throughout the Group under the responsibility of the Corporate Financing Department. Gains and losses on foreign currency transactions are tracked on a monthly basis in a detailed management report.

Currency translation risk

The Group does not use hedging instruments to actively manage this risk.

Investments in foreign subsidiaries are booked in the functional currency of the parent company and are not included in the latter's foreign exchange position.

33.1.4 Interest rate risk

33.1.4.1 Risk factors

The Group's income statement may be affected by interest rate risk. An unfavorable change in interest rates may adversely affect future finance costs and cash flows. The Group is in a net debt position and is exposed to the risk of an increase in interest rates on the portion of its debt that is at variable rates. It may also be exposed to an opportunity risk in the case of a fall in interest rates, if too great a proportion of debt is at fixed rates, as well as on financial investments, depending on their interest terms.

33.1.4.2 Risk management response

The objective of interest rate management is to minimize financing costs whilst protecting future cash flows against unfavorable movements in interest rates. For this purpose, the Group uses various derivative instruments available in the market, but restricts itself to the use of "plain vanilla" instruments (interest rate swaps, mainly).

Interest rate exposure is analyzed and monitored by the Financial Risks Committee using monthly performance indicators and management reports.

The interest rate position is centralized by currency by the Corporate Financing Department, which is the only department permitted to undertake hedging operations. Interest rate hedging is concentrated on the main currencies. The Financial Risks Committee sets hedging limits by currency, taking into consideration the Group's gearing as hedging needs change in line with this ratio.

33.1.5 Equity risk

33.1.5.1 Risk factors

The Group owns shares in listed companies whose share price fluctuates, among other things, in line with changes in the global stock markets, the multiples applied by the markets to the industries in which these companies operate and their specific economic and financial metrics.

Equity investments are made for strategic rather than trading purposes. Equities are held under a medium or long-term strategy, and not for short-term trading portfolio management.

33.1.5.2 Risk management response

The Group Investment Committee, which includes representatives of the Finance, Legal and Corporate Finance Departments, is responsible for the application of investment management and monitoring rules. To this end, it reviews investments at annual intervals to assess the risk level and actual results compared to defined targets.

33.1.6 Counterparty risk

33.1.6.1 Risk factors

Counterparty risk is the risk of a debtor refusing or being unable to fulfill all or part of its obligations. The Group is exposed to counterparty risk on its contracts and financial instruments. Counterparty risk may lead to an impairment loss or a loss of liquidity. The Group is exposed to the risk of impairment losses arising from the investment of available cash in money market instruments and other marketable securities, as well as on finance receivables, derivative instruments and third party guarantees. It is exposed to the risk of a loss of liquidity on its undrawn confirmed lines of credit.

33.1.6.2 Risk management response

The Group chooses its banks extremely carefully, particularly when it comes to the management of its cash investments. As it would be inappropriate to add financial risk to the industrial and commercial risks that are associated with its operations, the Group gives priority to the security and the liquidity of its cash investments. Cash investments consist of (i) financial instruments that are subject to no risk or an insignificant risk of changes in value purchased from a sufficiently diversified group of leading banks, and (ii) unrestricted units in diversified money market funds or short-term bond funds.

The Group is also exposed to counterparty risk on derivative instruments used for hedging purposes that have a positive fair value. These hedging instruments and the level of concentration by bank are tracked weekly by Group Treasury and monitored monthly by the Financial Risks Committee.

In order to mitigate counterparty risk on its derivatives instruments, the Group exchanges collateral with its main banks.

33.1.7 Credit risk

33.1.7.1 Risk factors

Credit risks may arise when the Group grants credit to its customers. If a customer becomes insolvent or files for bankruptcy, it may default on the receivables held by the Group and this may have a negative impact on the Group's income statement.

33.1.7.2 Risk management response

The Credit Department, which is part of the Group Finance Department, sets the maximum payment terms and customer credit limits to be applied by the operating companies. It manages and controls credit activity, risk and results, and is also responsible for credit and collection processes. The main policies and procedures are defined at Group level and are monitored and controlled at both regional and Group level. A monthly credit reporting system operates within the Group.

33.2 Financial risk data

33.2.1 Liquidity risk

At December 31, 2019, the debt repayment schedule (principal and interest) and the maturities of undrawn confirmed credit lines are as follows:

(in € millions)	2020	2021	2022	2023	2024	2025	2026 and beyond
Bonds	367	156	882	611	62	803	2,875
Loans from financial institutions and other	637	140	7	76	35	35	36
Lease liabilities	257	230	181	149	130	108	231
Derivative instruments	-	31	2	3	2	2	6
DEBT REPAYMENT SCHEDULE	**1,261**	**557**	**1,072**	**839**	**229**	**948**	**3,148**
LONG-TERM UNDRAWN CONFIRMED CREDIT LINES	**-**	**1,500**	**-**	**-**	**-**	**-**	**-**

This table analyzes principal and interest payments on debt by payment date, as projected using available market data at the reporting date (interest is calculated in each currency on the basis of market rates, and converted into euros at period-end rates). The amounts shown are not discounted.

The short-term debt refinancing risk is covered by undrawn confirmed credit lines (€1,500 million), cash and cash equivalents (€1,466 million) and cash management financial assets (€180 million).

In 2014, the Group rolled over its five-year syndicated credit line. In 2015 and 2016, the Group exercised its two extension options, extending the maturity from 2019 to 2021.

33.2.2 Currency risk

Foreign currency transaction risk

The following table presents the Group's exposure to foreign currency transaction risk (*i.e.,* the risk arising when a recognized monetary asset or liability is denominated in a currency other than the functional currency), before and after hedging:

	December 31, 2019				December 31, 2018[1]			
(in € millions)	EUR	CNY	USD	Other	EUR	CNY	USD	Other
Monetary assets	549	571	5,278	2,459	691	605	5,367	2,482
Monetary liabilities	(1,435)	(111)	(5,015)	(1,333)	(1,536)	(85)	(4,188)	(1,488)
Net position before hedging	**(886)**	**460**	**263**	**1,126**	**(845)**	**520**	**1,179**	**994**
Hedges	863	(479)	(354)	(1,122)	874	(521)	(1,293)	(1,040)
NET POSITION AFTER HEDGING	**(23)**	**(19)**	**(91)**	**4**	**29**	**(1)**	**(114)**	**(46)**

(1) The 2018 figures have been restated for comparison purposes (see note 2.5 to the consolidated financial statements).

An unfavorable change in each of the foreign currencies mentioned in the table above against the functional currencies of the companies exposed to foreign currency transaction risk would have an aggregate negative impact, after hedging, of €1 million (2018: €1 million) on the consolidated income statement for every cent change. A favorable change would have a symmetrical positive impact. This relatively low sensitivity to foreign currency transaction risk is consistent with the objective described in section 33.1.3 "Currency risk".

Because of the low volume of cash flow hedges (note 16 "Derivative instruments"), the sensitivity of equity to currency risk is not material.

Most of the open positions at December 31, 2019 were hedged in early January 2020.

Currency translation risk

A breakdown of equity by currency is provided in the following table:

(in € millions)	December 31, 2019	December 31, 2018[1]
EUR	4,449	5,141
USD	4,142	2,806
BRL	1,104	1,088
THB	586	525
CNY	540	562
CAD	335	457
INR	177	211
GBP	1,394	1,137
Other	502	254
TOTAL	**13,229**	**12,181**

(1) The 2018 figures have been restated for comparison purposes (see note 2.5 to the consolidated financial statements).

33.2.3 Interest rate risk

Net debt at December 31, 2019 breaks down as follows by type of hedge and by currency:

	Net debt before hedging			Currency hedging	Net debt after currency hedging but before interest rate hedging			Interest rate hedging		Net debt after hedging		
(in € millions)	Fixed	Variable	Total		Fixed	Variable	Total	Fixed	Variable	Fixed	Variable	Total
USD	1,406	447	**1,853**	(275)	334	1,244	**1,578**	688	(688)	1,022	556	**1,578**
EUR	3,740	(935)	**2,805**	(2,035)	4,812	(4,042)	**770**	(9)	9	4,803	(4,033)	**770**
CNY	21	(14)	**7**	693	21	679	**700**	250	(250)	271	429	**700**
THB	168	125	**293**	281	168	406	**574**	200	(200)	368	206	**574**
MXN	1	1	**2**	447	1	448	**449**	215	(215)	216	233	**449**
GBP	61	(10)	**51**	359	61	349	**410**	82	(82)	143	267	**410**
Other currencies	138	(11)	**127**	530	138	519	**657**	207	(207)	345	312	**657**
Total before derivatives	**5,535**	**(397)**	**5,138**	**-**	**5,535**	**(397)**	**5,138**	**1,633**	**(1,633)**	**7,168**	**(2,030)**	**5,138**
Fair value of derivatives included in net debt			**46**				**46**					**46**
NET DEBT (NOTE 26)			**5,184**				**5,184**					**5,184**

A 1-point parallel shift in the yield curves applied to the net debt components would have the following impact at December 31, 2019:

		Fair value impact			
(in € millions)	Annualized cash impact recognized in the income statement	Recognized in the income statement[1]	Recognized in other comprehensive income[2]	Not recognized[3]	Total
1-point decrease	(20)	(35)	1	(424)	(458)
1-point increase	20	34	(1)	424	457

(1) The Group's interest rate management policy aims at hedging perfectly identified future cash flows. However, some derivative instruments do not qualify for hedge accounting under IFRS and are measured at fair value through profit or loss.
(2) For derivatives qualifying for hedge accounting (cash flow hedges).
(3) Some fair value impacts are not accounted for because the underlying net debt component is not measured at fair value but at amortized cost.

33.2.4 Equity risk

Equity risk is the risk of a 10% unfavorable change in the price of equities held by the Group.

(in € millions)	December 31, 2019	December 31, 2018
Carrying amount (note 15.1)	237	233
IMPACT ON EQUITY OF A 10% UNFAVORABLE CHANGE IN THE PRICE OF EQUITIES HELD BY THE GROUP	**(19)**	**(18)**

33.2.5 Counterparty risk

At December 31, 2019, 42% of cash and cash equivalents (including cash management financial assets) was invested in money market or short-term bond funds to allow for a maximum diversification of counterparty risk. The balance is invested directly with international banks that meet the counterparty risk management criteria defined by the Group.

Furthermore, most derivatives are contracted with the same banks.

33.2.6 Credit risk

At December 31, 2019, net receivable balances from the ten largest customers amounted to €451 million (2018: €449 million). Six of these customers are located in Europe, two in North America and two in Asia. At the same date, 67 customers (2018: 72) had been granted credit limits in excess of €10 million. Out of these, 26 are located in Europe, 25 in North America, one in Central America, one in South America, five in Asia and nine in Africa, India and the Middle East. No material collateral has been received to limit the related credit risk. In 2019, credit losses represented 0.11% of sales (2018: 0.13%).

33.2.7 Commodities derivatives

In 2019, the Group did not have any significant hedges of commodities purchases (note 16.3 "Derivative contractual amounts").

33.3 Capital risk management

The Group's objectives when managing its capital are to protect its ability to continue as a going concern and to ensure its development, so that it can provide returns for shareholders and benefits for other stakeholders.

The main indicator used for capital management purposes is gearing. Gearing corresponds to the ratio of net debt to equity.

(in € millions)	December 31, 2019	December 31, 2018[1]
Net debt (note 26)	5,184	4,056
Total equity	13,229	12,181
GEARING	**0.39**	**0.33**

(1) The 2018 figures have been restated for comparison purposes (see note 2.5 to the consolidated financial statements).

33.4 Classification of financial assets

Group financial assets break down as follows between the categories "at fair value through profit or loss (FVPL)", "at fair value through other comprehensive income (FVOCI)" and "at amortized cost" at December 31, 2019:

(in € millions)	FVPL	FVOCI	Amortized cost	Total 2019
Trade receivables	-	-	3,532	3,532
Current financial assets	18	3	375	396
Cash and cash equivalents	973	-	493	1,466
Non-current financial assets	144	274	378	796
TOTAL FINANCIAL ASSETS	**1,135**	**277**	**4,778**	**6,190**

33.5 Fair value measurement hierarchy

The following tables present Group assets and liabilities measured at fair value at December 31, 2019 and 2018 by level in the fair value measurement hierarchy:

(in € millions)	Level 1	Level 2	Level 3	Total 2019
Cash and cash equivalents	973	-	-	973
Borrowing collaterals	103	-	-	103
Derivative instruments (note 16.1)	-	148	-	148
Equity investments (note 15.1)	21	-	216	237
TOTAL ASSETS	**1,097**	**148**	**216**	**1,461**
Derivative instruments (note 16.2)	-	194	-	194
TOTAL LIABILITIES	**-**	**194**	**-**	**194**

(in € millions)	Level 1	Level 2	Level 3	2018 Total(1)
Cash and cash equivalents	1,695	-	-	1,695
Borrowing collaterals	34	-	1	35
Derivative instruments (note 16.1)	-	125	-	125
Equity investments (note 15.1)	38	-	195	233
TOTAL ASSETS	**1,767**	**125**	**196**	**2,088**
Derivative instruments (note 16.2)	-	153	-	153
TOTAL LIABILITIES	**-**	**153**	**-**	**153**

(1) The 2018 figures have been restated for comparison purposes (see note 2.5 to the consolidated financial statements).

There were no material transfers between level 1 and level 2 in 2019 or 2018.

The following table presents the changes in level 3 instruments for the year ended December 31, 2019:

(in € millions)	
At January 1, 2019(1)	**195**
Additions	14
Disposals	(17)
Changes in the scope of consolidation	1
Transfers from level 1 or 2 to level 3	-
Transfers from level 3 to level 1 or 2	-
Gains or losses for the year recognized in net income	-
Gains or losses for the year recognized in other comprehensive income	20
Other	3
AT DECEMBER 31, 2019	**216**

(1) The 2018 figures have been restated for comparison purposes (see note 2.5 to the consolidated financial statements).

NOTE 34 RELATED-PARTY TRANSACTIONS

Management and Supervisory Bodies

The Annual Shareholders Meeting of May 18, 2018 approved the appointment of Florent Menegaux as Managing General Partner of Compagnie Générale des Établissements Michelin. In May 2019, he was appointed Managing Chairman of Compagnie Générale des Etablissements Michelin.

Florent Menegaux did not receive any statutory distribution in 2018 based on 2017 net income. The statutory distribution allocated to Florent Menegaux, Managing Chairman and General Partner of Compagnie Générale des Établissements Michelin, in 2019 based on 2018 net income amounted to €0.7 million.

He was entitled to compensation of €1.2 million (payroll taxes included) as General Manager of Manufacture Française des Pneumatiques Michelin (2018: €0.8 million). The benefits that vested during the period in respect of a post-employment defined benefit plan amounted to €0.5 million (2018: €0.7 million).

The statutory distribution allocated to Jean-Dominique Senard, Managing Chairman and General Partner of Compagnie Générale des Établissements Michelin (until May 2019), in 2019 based on 2018 net income amounted to €3.0 million (2018 based on 2017 net income: €2.7 million).

He was entitled to compensation of €0.5 million (payroll taxes included) as General Manager of Manufacture Française des Pneumatiques Michelin (2018: €1.5 million) for the period until he stepped down from this position in May 2019. The benefits that vested during the period in respect of a post-employment defined benefit plan amounted to €0.3 million (2018: €0.6 million).

Yves Chapot was entitled to compensation of €1.1 million (payroll taxes included) as General Manager of Compagnie Générale des Établissements Michelin (2018: €0.5 million). The benefits that vested during the period in respect of a post-employment defined benefit plan amounted to €0.4 million (2018: €0.3 million). A provision of €1.0 million (payroll taxes included) has been recognized based on the present value of the vested rights in a long-term incentive bonus program and a variable compensation program.

At December 31, 2019, the Group Executive Committee had eight members (2018: 10* members). Employee benefits costs for members of the Group Executive Committee amounted to €11 million in 2019 (2018: €20 million). This amount breaks down as follows:

(in € millions)	2019	2018
Short-term benefits	7.2	14.6
Post-employment benefits	2.3	3.0
Other long-term benefits	-	-
Termination benefits	-	-
Share-based payments	1.5	2.5
COMPENSATION GRANTED TO MEMBERS OF THE GROUP EXECUTIVE COMMITTEE	**11.0**	**20.1**

The attendance fees paid in 2019 to the Supervisory Board members for 2018 meetings were €0.7 million (2018 for 2017: €0.5 million).

NOTE 35 SUBSEQUENT EVENTS

Share buyback program

On January 7, 2020, the Group called on the assistance of an investment services provider for the implementation of its share buyback program as authorized by the Annual Shareholders Meeting of May 17, 2019. The investment services provider has agreed to sell to CGEM, and CGEM has agreed to purchase, between January 8, 2020 and November 19, 2020, a certain quantity of CGEM shares for a maximum consideration of €100 million. All of the acquired shares will be canceled.

No other significant event occurred between the reporting date and the date when the Managing Chairman approved the consolidated financial statements for publication.

NOTE 36 LIST OF CONSOLIDATED COMPANIES

Countries are presented based on the Michelin geographical regions and are listed within each region according to the alphabetical order of the French names.

Companies	Consolidation method	Registered office	Type	% interest
EUROPE				
Germany				
Michelin Reifenwerke AG & Co. Kommanditgesellschaft auf Aktien	Full consolidation method	Karlsruhe	Manufacturing & commercial	100.00
Euromaster GmbH	Full consolidation method	Mannheim	Commercial	100.00
Euromaster Reifenservice Deutschland GmbH	Full consolidation method	Mannheim	Commercial	100.00
Euromaster Immobilien GmbH	Full consolidation method	Mannheim	Commercial	100.00
Advantico GmbH	Full consolidation method	Mannheim	Commercial	60.00
Michelin Deutschland GmbH	Full consolidation method	Karlsruhe	Financial	100.00
PTG Reifendruckregelsysteme GmbH	Full consolidation method	Neuss	Commercial	100.00
Michelin Finanz Gesellschaft für Beteiligungen AG & Co. OHG	Full consolidation method	Karlsruhe	Financial	100.00
Ihle Tires GmbH	Full consolidation method	Muggensturm	Commercial	100.00
Tirecorp GmbH	Full consolidation method	Muggensturm	Commercial	100.00
Ihle International GmbH	Full consolidation method	Muggensturm	Commercial	100.00
ProServ Produktionsservice und Personaldienste GmbH	Equity method	Karlsruhe	Miscellaneous	49.00
Dichtelemente Hallite GmbH	Full consolidation method	Hamburg	Manufacturing & commercial	100.00
Camso Deutschland GmbH	Full consolidation method	Duisbourg	Commercial	100.00
Masternaut GmbH	Full consolidation method	Munich	Commercial	100.00
Austria				
Michelin Reifenverkaufsgesellschaft m.b.H.	Full consolidation method	Vienna	Miscellaneous	100.00
Euromaster Reifenservice GmbH	Full consolidation method	Vienna	Commercial	100.00
Camso Austria GmbH	Full consolidation method	Korneubourg	Commercial	100.00
Belgium				
Michelin Belux S.A.	Full consolidation method	Zellik	Commercial	100.00
Michelin Travel Partner Belgium BVBA	Full consolidation method	Zellik	Commercial	100.00
Camsotech European R&D Centre NV	Full consolidation method	Ghent	Financial	100.00
Eurowheel BVBA	Full consolidation method	Herenthout	Manufacturing	100.00
ITC International Tire NV	Full consolidation method	Wommelgem	Commercial	85.00
Industrial International Tire Company NV	Full consolidation method	Wommelgem	Commercial	85.00
Bulgaria				
Michelin Bulgaria EOOD	Full consolidation method	Sofia	Miscellaneous	100.00
Croatia				
Michelin Hrvatska d.o.o.	Full consolidation method	Zagreb	Commercial	100.00
Denmark				
Euromaster Danmark A/S	Full consolidation method	Skanderborg	Commercial	100.00
Michelin Gummi Compagni A/S	Full consolidation method	Frederiksberg	Miscellaneous	100.00
Euromaster Ejendomme A/S	Full consolidation method	Skanderborg	Commercial	100.00
Viborg Direct A/S	Full consolidation method	Skanderborg	Commercial	100.00
Ihle Skandinavien ApS	Full consolidation method	Copenhagen	Commercial	100.00
Spain				
Michelin España Portugal, S.A.	Full consolidation method	Tres Cantos	Manufacturing & commercial	99.81
Euromaster Automoción y Servicios, S.A.	Full consolidation method	Madrid	Commercial	100.00
Nex Tyres, S.L.	Full consolidation method	Lleida	Commercial	50.00
Michelin Travel Partner España Portugal SrL	Full consolidation method	Tres Cantos	Commercial	99.81
Lehigh Spain S.L.	Full consolidation method	Barcelona	Miscellaneous	79.90
Servicios y Asistencia OK24, S.L.	Full consolidation method	Madrid	Commercial	60.80

Companies	Consolidation method	Registered office	Type	% interest
Fundación Michelin Desarrollo	Full consolidation method	Valladolid	Miscellaneous	99.81
Rodi Metro, S.L.	Equity method	Lleida	Miscellaneous	20.00
Fenner Dunlop S.L.	Full consolidation method	Esparreguera	Manufacturing & commercial	100.00
Camso Spain, S.L.	Full consolidation method	Saragossa	Commercial	100.00
Masternaut Iberica S.L.	Full consolidation method	Madrid	Commercial	100.00
Estonia				
Michelin Rehvide OÜ	Full consolidation method	Tallinn	Miscellaneous	100.00
Finland				
Oy Suomen Michelin Ab	Full consolidation method	Espoo	Miscellaneous	100.00
Suomen Euromaster Oy	Full consolidation method	Pori	Commercial	100.00
France				
Compagnie Générale des Établissements Michelin	Full consolidation method	Clermont-Ferrand	Parent	-
Manufacture Française des Pneumatiques Michelin	Full consolidation method	Clermont-Ferrand	Manufacturing & commercial	100.00
Pneu Laurent	Full consolidation method	Avallon	Manufacturing & commercial	100.00
Simorep et Cie – Société du Caoutchouc Synthétique Michelin	Full consolidation method	Bassens	Manufacturing	100.00
Euromaster France	Full consolidation method	Montbonnot-Saint-Martin	Commercial	98.61
Michelin Aircraft Tyre	Full consolidation method	Clermont-Ferrand	Commercial	100.00
Transityre France	Full consolidation method	Clermont-Ferrand	Commercial	100.00
Alliance Réseaux	Full consolidation method	Saint-Jean-de-Maurienne	Commercial	100.00
One Shot Pay	Full consolidation method	Saint-Jean-de-Maurienne	Commercial	60.00
Michelin Travel Partner	Full consolidation method	Boulogne-Billancourt	Commercial	100.00
Spika	Full consolidation method	Clermont-Ferrand	Financial	100.00
Michelin Air Services	Full consolidation method	Clermont-Ferrand	Miscellaneous	100.00
Société Nationale des Établissements Piot Pneu	Full consolidation method	Montbonnot-Saint-Martin	Commercial	96.81
Tyredating	Full consolidation method	Lyon	Commercial	100.00
Ihle France	Full consolidation method	Schiltigheim	Commercial	100.00
Euromaster Services et Management	Full consolidation method	Clermont-Ferrand	Commercial	100.00
GIE Michelin Placements	Full consolidation method	Clermont-Ferrand	Financial	100.00
Simp	Full consolidation method	Clermont-Ferrand	Financial	51.00
Société d'Investissements et de Mécanique	Full consolidation method	Montagny	Miscellaneous	100.00
Michelin Ventures SAS	Full consolidation method	Clermont-Ferrand	Financial	100.00
Mon Tour en France	Full consolidation method	Saint-Jean-de-Maurienne	Commercial	59.85
Oxymore	Full consolidation method	Montbonnot-Saint-Martin	Commercial	96.15
Jean Estager et Cie	Full consolidation method	Montbonnot-Saint-Martin	Commercial	96.81
Teleflow SAS	Full consolidation method	Mably	Miscellaneous	100.00
V Data Services	Full consolidation method	Nantes	Miscellaneous	100.00
Adaran	Full consolidation method	Montbonnot-Saint-Martin	Commercial	100.00
Michelin Middle East	Full consolidation method	Clermont-Ferrand	Financial	100.00
Michelin Europe (EEIG)	Full consolidation method	Clermont-Ferrand	Miscellaneous	99.96
AddUp.	Equity method	Cébazat	Manufacturing	50.00
MMM !	Equity method	Paris	Miscellaneous	42.11
Allopneus	Equity method	Aix-en-Provence	Commercial	39.99
Société Internationale de Plantations d'Hévéas	Equity method	Courbevoie	Miscellaneous	44.41
Symbio SAS	Equity method	Fontaine	Miscellaneous	50.00

Companies	Consolidation method	Registered office	Type	% interest
Taquipneu	Equity method	Montauban	Miscellaneous	22.92
Fenner Dunlop SARL	Full consolidation method	Elancourt	Manufacturing & commercial	100.00
Camso France SAS	Full consolidation method	Le Malesherbois	Commercial	100.00
Masternaut SAS	Full consolidation method	Puteaux (Paris)	Commercial	100.00
Masternaut International SAS	Full consolidation method	Louviers	Financial	100.00
Runa	Equity method	Lyon	Miscellaneous	48.99
Resicare	Full consolidation method	Clermont-Ferrand	Manufacturing	100.00
Greece				
Elastika Michelin A.E.	Full consolidation method	Halandri	Commercial	100.00
Hungary				
Michelin Hungaria Tyre Manufacture Ltd	Full consolidation method	Nyíregyháza	Manufacturing & commercial	100.00
Ihle Magyarország Kft.	Full consolidation method	Komárom	Commercial	100.00
Camso Industrielle Hungary Kft.	Full consolidation method	Budapest	Financial	100.00
Ireland				
Miripro Insurance Company DAC	Full consolidation method	Dublin	Miscellaneous	100.00
Async Technologies Limited	Equity method	Ennis	Miscellaneous	25.00
Italy				
Società per Azioni Michelin Italiana	Full consolidation method	Turin	Manufacturing & commercial	100.00
Fondazione Michelin Sviluppo	Full consolidation method	Turin	Miscellaneous	100.00
Euromaster Italia S.r.l.	Full consolidation method	Milan	Commercial	100.00
Michelin Travel Partner Italia S.r.l.	Full consolidation method	Milan	Commercial	100.00
Hallite Italia S.r.l.	Full consolidation method	Collesalvetti	Manufacturing & commercial	100.00
Fenner Dunlop Italia S.r.l.	Full consolidation method	Milan	Manufacturing & commercial	100.00
Camso Manufacturing Italy S.r.l.	Full consolidation method	Milan	Manufacturing	100.00
Camso Italy S.p.A.	Full consolidation method	Ozzero	Commercial	100.00
Webraska Italia Srl	Full consolidation method	Milan	Miscellaneous	100.00
Latvia				
Michelin Riepas SIA	Full consolidation method	Riga	Miscellaneous	100.00
Lithuania				
UAB Michelin Padangos	Full consolidation method	Vilnius	Miscellaneous	100.00
Luxembourg				
Michelin Luxembourg SCS	Full consolidation method	Luxembourg	Financial	100.00
Michelin Finance (Luxembourg) S.àr.l.	Full consolidation method	Luxembourg	Financial	100.00
Camso International S.à.r.l.	Full consolidation method	Luxembourg	Financial	100.00
Camso Holding S.à.r.l.	Full consolidation method	Luxembourg	Financial	100.00
Artic Investments S.A.	Full consolidation method	Luxembourg	Financial	100.00
Norway				
Norsk Michelin Gummi AS	Full consolidation method	Oslo	Miscellaneous	100.00
Fenner Mandals AS	Full consolidation method	Mandal	Manufacturing & commercial	100.00
The Netherlands				
Euromaster Bandenservice B.V.	Full consolidation method	Deventer	Commercial	100.00
Michelin Nederland N.V.	Full consolidation method	Drunen	Commercial	100.00
Transityre B.V.	Full consolidation method	Breda	Commercial	100.00
Michelin Distribution B.V.	Full consolidation method	Breda	Commercial	100.00
Actor B.V.	Full consolidation method	Deventer	Commercial	100.00
Euromaster Vastgoed B.V.	Full consolidation method	Deventer	Commercial	100.00
MC Projects B.V.	Equity method	Maastricht	Miscellaneous	50.00
Dunlop Service B.V.	Full consolidation method	Klazienaveen	Manufacturing & commercial	100.00

Companies	Consolidation method	Registered office	Type	% interest
Fenner Dunlop B.V.	Full consolidation method	Drachten	Manufacturing & commercial	100.00
De Bruin&Berends B.V.	Full consolidation method	Drachten	Financial	100.00
Dunlop Assets B.V.	Full consolidation method	Klazienaveen	Financial	100.00
Dunlop Enerka Netherlands B.V.	Full consolidation method	Drachten	Financial	100.00
Dunlop Enerka Netherlands Holding B.V.	Full consolidation method	Klazienaveen	Financial	100.00
Dunlop Industrielle Holdings B.V.	Full consolidation method	Klazienaveen	Financial	100.00
Dunlop Service International B.V.	Full consolidation method	Drachten	Financial	100.00
Dunlop Conveyor Belting International B.V.	Full consolidation method	Drachten	Financial	100.00
Dunlop Sales & Marketing B.V.	Full consolidation method	Klazienaveen	Financial	100.00
Fenner Dunlop Steelcord B.V.	Full consolidation method	Drachten	Financial	100.00
Camso Nederland B.V.	Full consolidation method	Nieuwegein	Commercial	100.00
Masternaut B.V.	Full consolidation method	Breda	Commercial	100.00
Portugal				
Michelin-Companhia Luso-Pneu, Limitada	Full consolidation method	Lisbon	Miscellaneous	100.00
Euromaster Portugal – Sociedade Unipessoal, LDA	Full consolidation method	Lisbon	Commercial	100.00
Poland				
Michelin Polska S.A.	Full consolidation method	Olsztyn	Manufacturing & commercial	100.00
Euromaster Polska sp. z.o.o.	Full consolidation method	Olsztyn	Commercial	100.00
Michelin Development Foundation (Fundacja Rozwoju Michelin)	Full consolidation method	Olsztyn	Miscellaneous	100.00
Dunlop Conveyor Belting Polska sp.zo.o	Full consolidation method	Mikołów	Manufacturing & commercial	100.00
Camso Polska S.A.	Full consolidation method	Warsaw	Commercial	100.00
Czech Republic				
Euromaster Česká republika s.r.o. (Euromaster Ceska republika s.r.o.)	Full consolidation method	Prague	Commercial	100.00
Michelin Česká republika s.r.o. (Michelin Ceska republika s.r.o.)	Full consolidation method	Prague	Miscellaneous	100.00
Ihle Czech, s.r.o.	Full consolidation method	Plzen	Commercial	100.00
Romania				
Michelin Romania S.A.	Full consolidation method	Voluntari	Manufacturing & commercial	99.86
Euromaster Tyre & Services Romania S.A.	Full consolidation method	Voluntari	Commercial	100.00
Ihle Anvelope SRL	Full consolidation method	Pitesti	Commercial	100.00
United Kingdom				
Michelin Tyre Public Limited Company	Full consolidation method	Stoke-on-Trent	Manufacturing & commercial	100.00
ATS Euromaster Limited	Full consolidation method	Birmingham	Commercial	100.00
Associated Tyre Specialists (Investment) Limited	Full consolidation method	Birmingham	Commercial	100.00
ATS Property and Real Estate Limited	Full consolidation method	Birmingham	Commercial	100.00
Blackcircles.com Limited	Full consolidation method	Edinburg	Commercial	100.00
Black Circles Holdings Limited	Full consolidation method	Edinburg	Miscellaneous	100.00
LB Central Limited	Full consolidation method	London	Commercial	100.00
Michelin Finance (U.K.) Limited	Full consolidation method	London	Financial	100.00
Michelin Lifestyle Limited	Full consolidation method	Stoke-on-Trent	Commercial	100.00
Michelin Development Limited	Full consolidation method	Stoke-on-Trent	Miscellaneous	100.00
TFM Holdings Limited	Full consolidation method	Eastleigh	Commercial	100.00
Michelin Travel Partner UK Limited	Full consolidation method	Stoke-on-Trent	Commercial	100.00
Fenner Group Holdings Limited	Full consolidation method	Stoke-on-Trent	Financial	100.00
Fenner International Limited	Full consolidation method	Stoke-on-Trent	Financial	100.00
J.H. Fenner & Co. Limited	Full consolidation method	Stoke-on-Trent	Manufacturing & commercial	100.00
Hallite Seals International Limited	Full consolidation method	Stoke-on-Trent	Manufacturing & commercial	100.00

Companies	Consolidation method	Registered office	Type	% interest
James Dawson & Son Limited	Full consolidation method	Stoke-on-Trent	Manufacturing & commercial	100.00
Dunlop Conveyor Belting Investments Limited	Full consolidation method	Stoke-on-Trent	Financial	100.00
Fenner N.A. Limited	Full consolidation method	Stoke-on-Trent	Financial	100.00
Hall & Hall Limited	Full consolidation method	Stoke-on-Trent	Financial	100.00
J.H. Fenner & Co. (Advanced Engineering Products) Limited	Full consolidation method	Stoke-on-Trent	Financial	100.00
J.H. Fenner & Co. (India) Limited	Full consolidation method	Stoke-on-Trent	Financial	100.00
James Dawson (China) Limited	Full consolidation method	Stoke-on-Trent	Financial	100.00
Fenner Pension Scheme Trustee Limited	Full consolidation method	Stoke-on-Trent	Miscellaneous	100.00
Fenner International Australia Limited	Full consolidation method	Stoke-on-Trent	Financial	100.00
CDI Energy Products UK Limited	Full consolidation method	Hull	Manufacturing & commercial	100.00
BTL Limited	Full consolidation method	Hull	Financial	100.00
Fenner Advanced Sealing Investments Limited	Full consolidation method	Hull	Financial	100.00
Fenner Advanced Sealing Technologies Limited	Full consolidation method	Hull	Financial	100.00
Fenner Drives Limited	Full consolidation method	Hull	Financial	100.00
Fenner Dunlop Limited	Full consolidation method	Hull	Financial	100.00
Fenner Dynamics Limited	Full consolidation method	Hull	Financial	100.00
Hallite (France) Limited	Full consolidation method	Hull	Financial	100.00
Hallite Limited	Full consolidation method	Hull	Financial	100.00
Hallite Polytek Limited	Full consolidation method	Hull	Financial	100.00
Indico (Europe) Limited	Full consolidation method	Hull	Financial	100.00
J.H. Fenner & Co. (Fenaplast) Limited	Full consolidation method	Hull	Financial	100.00
J.H. Fenner & Co. (Special Belting) Limited	Full consolidation method	Hull	Financial	100.00
Norwegian Seals UK Limited	Full consolidation method	Hull	Financial	100.00
Turner Belting Limited	Full consolidation method	Hull	Financial	100.00
Vulcanisers International Limited	Full consolidation method	Hull	Financial	100.00
Camso UK Limited	Full consolidation method	Cowbridge	Commercial	100.00
Masternaut Group Holdings Limited	Full consolidation method	Marlow	Financial	100.00
Masternaut Limited	Full consolidation method	Aberford	Commercial	100.00
Masternaut Bidco Limited	Full consolidation method	London	Financial	100.00
Masternaut Holdings Limited	Full consolidation method	Marlow	Commercial	100.00
Masternaut ITS Limited	Full consolidation method	Aberford	Commercial	100.00
Masternaut Risk Solutions Limited	Full consolidation method	Marlow	Commercial	100.00
Old World Limited	Full consolidation method	London	Miscellaneous	100.00
Telefleet Limited	Full consolidation method	London	Miscellaneous	100.00
Easy Sailing Limited	Full consolidation method	Aberford	Miscellaneous	100.00
Serbia				
Tigar Tyres d.o.o.	Full consolidation method	Pirot	Manufacturing & commercial	100.00
Slovakia				
Michelin Slovensko, s.r.o.	Full consolidation method	Bratislava	Miscellaneous	100.00
Ihle Slovakia s.r.o.	Full consolidation method	Bratislava	Commercial	100.00
Ihle Slovakia Logistic a Servis s.r.o.	Full consolidation method	Bratislava	Commercial	100.00
Slovenia				
Michelin Slovenija, pnevmatike, d.o.o.	Full consolidation method	Ljubljana	Miscellaneous	100.00
Ihle pnevmatike, d.o.o.	Full consolidation method	Maribor	Commercial	100.00
Sweden				
Euromaster AB	Full consolidation method	Varberg	Commercial	100.00
Michelin Nordic AB	Full consolidation method	Stockholm	Commercial	100.00
Masternaut AB	Full consolidation method	Stockholm	Commercial	100.00
Switzerland				
Euromaster (Suisse) S.A.	Full consolidation method	Givisiez	Commercial	100.00

Companies	Consolidation method	Registered office	Type	% interest
Nitor S.A.	Full consolidation method	Granges-Paccot	Financial	100.00
Michelin Suisse S.A.	Full consolidation method	Givisiez	Commercial	100.00
Compagnie Financial Michelin SCmA	Full consolidation method	Granges-Paccot	Financial	100.00
Compagnie Financière Michelin Suisse S.A.	Full consolidation method	Granges-Paccot	Financial	100.00
Michelin Recherche et Technique S.A.	Full consolidation method	Granges-Paccot	Miscellaneous	100.00
Michelin Mexico Properties Sàrl	Full consolidation method	Granges-Paccot	Financial	100.00
Michelin Inter Assistance S.A.	Full consolidation method	Granges-Paccot	Miscellaneous	100.00
Michelin Finanz Gesellschaft fuer Beteiligungen S.A.	Full consolidation method	Granges-Paccot	Financial	100.00
Michelin Invest S.A.	Full consolidation method	Granges-Paccot	Financial	100.00
Michelin Trésorerie Europe de l'Est S.A.	Full consolidation method	Granges-Paccot	Financial	100.00
Michelin Trésorerie Europe S.A.	Full consolidation method	Granges-Paccot	Financial	100.00
Ihle Service & Logistik Schweiz AG	Full consolidation method	Bülach	Commercial	100.00
Swissco Project S.A.	Equity method	Neuchâtel	Miscellaneous	20.00
Camso Schweiz AG	Full consolidation method	Schaffhouse	Commercial	100.00
Turkey				
Michelin Lastikleri Ticaret A.S.	Full consolidation method	Istanbul	Commercial	100.00
Euromaster Lastik Ve Servis Limited Sirketi	Full consolidation method	Istanbul	Commercial	100.00
Camso Lastik Ticaret Limited Sirketi	Full consolidation method	Istanbul	Commercial	100.00
AFRICA/INDIA/MIDDLE EAST				
South Africa				
Michelin Tyre Company South Africa Proprietary Limited	Full consolidation method	Boksburg	Commercial	100.00
Fenner (South Africa) (Pty) Limited	Full consolidation method	Isando	Financial	100.00
Fenner Conveyor Belting (South Africa) (Pty) Limited	Full consolidation method	Isando	Manufacturing & commercial	71.00
Camso Africa (Pty) Ltd	Full consolidation method	Centurion	Commercial	100.00
Algeria				
Michelin Algérie SPA	Full consolidation method	Algiers	Commercial	100.00
Société d'Applications Techniques Manufacturings	Full consolidation method	Algiers	Commercial	100.00
Cameroon				
Société Moderne du Pneumatique Camerounais	Full consolidation method	Douala	Commercial	100.00
Ghana				
Dunlop Conveyor Belting Ghana Limited	Full consolidation method	Accra	Manufacturing & commercial	100.00
Morocco				
Fenner Dunlop Maroc SARL	Full consolidation method	Casablanca	Manufacturing & commercial	100.00
Nigeria				
Michelin Tyre Services Company Ltd	Full consolidation method	Lagos	Commercial	95.48
India				
Michelin India Private Limited	Full consolidation method	Chennai	Manufacturing	100.00
Michelin India Technology Center Limited	Full consolidation method	Gurgaon	Miscellaneous	100.00
Fenner Conveyor Belting Private Limited	Full consolidation method	Madurai	Manufacturing & commercial	100.00
Hallite Sealing Solutions India Private Limited	Full consolidation method	Bangalore	Manufacturing & commercial	100.00
Camso India LLP	Full consolidation method	Gurgaon	Commercial	100.00
Saudi Arabia				
E.A. Juffali & Brothers for Tyres	Equity method	Jeddah	Commercial	50.00
United Arab Emirates				
Michelin AIM FZE	Full consolidation method	Jafza (Dubai)	Miscellaneous	100.00
Michelin AIM FZCO	Full consolidation method	Dubai	Miscellaneous	100.00
Dunlop Conveyor Belting Distribution FZE	Full consolidation method	Dubai	Manufacturing & commercial	100.00
Dunlop Service Middle East, LLC	Full consolidation method	Dubai	Manufacturing & commercial	49.00

Companies	Consolidation method	Registered office	Type	% interest
Sri Lanka				
Camso Loadstar (Private) Limited	Full consolidation method	Ja-Ela	Manufacturing	100.00
Camso Trading (Private) Limited	Full consolidation method	Ja-Ela	Commercial	100.00
Camso Global Business Services (Private) Limited	Full consolidation method	Colombo	Financial	100.00
Kenya				
Tyre Distribution Africa Limited	Equity method	Nairobi	Miscellaneous	49.00
NORTH AMERICA				
Canada				
Michelin North America (Canada) Inc.	Full consolidation method	Laval	Manufacturing & commercial	100.00
Michelin Retread Technologies (Canada) Inc.	Full consolidation method	New Glasgow	Commercial	100.00
Michelin Development (Canada) Inc.	Full consolidation method	New Glasgow	Miscellaneous	100.00
Oliver Rubber Canada Limited	Full consolidation method	Granton, Nova Scotia	Commercial	100.00
Fenner Dunlop (Bracebridge), Inc.	Full consolidation method	Bracebridge	Manufacturing & commercial	100.00
Hallite Seals (Canada) Ltd	Full consolidation method	Mississauga	Manufacturing & commercial	100.00
Camso Inc.	Full consolidation method	Magog	Financial	100.00
Camso Distribution Canada Inc.	Full consolidation method	Mississauga	Commercial	100.00
Klinge Tire Management Consultants CA Ltd	Full consolidation method	Toronto	Miscellaneous	100.00
United States of America				
Michelin North America, Inc.	Full consolidation method	New York	Manufacturing & commercial	100.00
Michelin Retread Technologies, Inc.	Full consolidation method	Wilmington	Commercial	100.00
CR Funding Corporation	Full consolidation method	Wilmington	Financial	100.00
Michelin Corporation	Full consolidation method	New York	Financial	100.00
Oliver Rubber Company, LLC	Full consolidation method	Wilmington	Manufacturing	100.00
NexTraq LLC	Full consolidation method	Wilmington	Commercial	100.00
Tire Centers West, LLC	Full consolidation method	Wilmington	Commercial	100.00
Pelham 2 Corp.	Full consolidation method	Wilmington	Financial	100.00
Lehigh Technologies, Inc.	Full consolidation method	Wilmington	Commercial	100.00
ViaMichelin North America LLC	Full consolidation method	Greenville	Commercial	100.00
TBC Corporation	Equity method	Palm Beach Gardens	Commercial	50.00
Padfield Inc.	Equity method	Salt Lake City	Commercial	20.47
T & W Tire, LLC	Equity method	Oklahoma City	Commercial	25.00
Snider Tire, Inc.	Equity method	Greensboro	Commercial	31.03
Fenner Inc.	Full consolidation method	Harrisburg	Manufacturing & commercial	100.00
Fenner America, Inc.	Full consolidation method	Wilmington	Financial	100.00
Fenner Advanced Sealing Technologies, LLC	Full consolidation method	Wilmington	Financial	100.00
Fenner U.S., Inc.	Full consolidation method	Wilmington	Financial	100.00
American Industrial Plastics, LLC	Full consolidation method	Plantation	Manufacturing & commercial	100.00
CDI Energy Products, LLC	Full consolidation method	Dallas	Manufacturing & commercial	100.00
Hallite Seals Americas, LLC	Full consolidation method	Plymouth	Manufacturing & commercial	100.00
Solesis, Inc.	Full consolidation method	Harrisburg	Financial	100.00
Charter Medical, Limited	Full consolidation method	Raleigh	Manufacturing & commercial	100.00
SanaVita Medical, LLC	Full consolidation method	Harrisburg	Manufacturing & commercial	100.00
The Secant Group, LLC	Full consolidation method	Harrisburg	Manufacturing & commercial	100.00

Companies	Consolidation method	Registered office	Type	% interest
Fenner Dunlop Conveyor Systems and Services, LLC	Full consolidation method	Harrisburg	Manufacturing & commercial	100.00
Fenner Dunlop Americas, LLC	Full consolidation method	Harrisburg	Manufacturing & commercial	100.00
Fenner Dunlop (Port Clinton), LLC	Full consolidation method	Columbus	Manufacturing & commercial	100.00
Fenner Dunlop (Toledo), LLC	Full consolidation method	Columbus	Manufacturing & commercial	100.00
Camso Holding USA, LLC	Full consolidation method	Wilmington	Financial	100.00
Camso Industrielle USA, Ltd	Full consolidation method	Wilmington	Manufacturing	100.00
Camso USA Inc.	Full consolidation method	Tallahassee	Commercial	100.00
Industrial Tire/DFW, LLC	Full consolidation method	Irving	Commercial	67.00
Blacksmith OTR, LLC	Equity method	Rome	Miscellaneous	50.00
Airflash, Inc.	Full consolidation method	Saratoga	Miscellaneous	100.00
Achilles Tires USA, Inc.	Full consolidation method	Irvine	Commercial	99.64
The Wine Advocate, Inc.	Full consolidation method	Parkton	Miscellaneous	100.00
Tablet, Inc.	Full consolidation method	New York	Miscellaneous	100.00
Klinge Tire Management Consultants, Inc.	Full consolidation method	Carson City	Miscellaneous	100.00
Mexico				
Michelin Mexico Holding, S.A. de C.V.	Full consolidation method	Querétaro	Financial	100.00
Industrias Michelin, S.A. de C.V.	Full consolidation method	Querétaro	Manufacturing & commercial	100.00
AutopartesInternacionales de Guanajuato León, S.A. de C.V.	Full consolidation method	Ciudad de León	Miscellaneous	100.00
Michelin Sascar Mexico S.A. de C.V.	Full consolidation method	Querétaro	Commercial	100.00
Michelin Mexico Services, S.A. de C.V.	Full consolidation method	Querétaro	Miscellaneous	100.00
AutopartesInternacionales de Queretaro, S.A. de C.V.	Full consolidation method	Querétaro	Manufacturing & commercial	100.00
Camso Distribución México, S.A. de C.V.	Full consolidation method	Tultitlan	Commercial	100.00
Panama				
Michelin Panama Corp.	Full consolidation method	Panama	Miscellaneous	100.00
SOUTH AMERICA				
Argentina				
Michelin Argentina Sociedad Anónima, Industrial, Comercial y Financiera	Full consolidation method	Buenos Aires	Commercial	100.00
Rodaco Argentina S.A.U.	Full consolidation method	Buenos Aires	Commercial	100.00
Brazil				
Sociedade Michelin de Participações, Indústria e Comércio Ltda	Full consolidation method	Rio de Janeiro	Manufacturing & commercial	100.00
Sociedade Tyreplus Brasil Ltda	Full consolidation method	Rio de Janeiro	Commercial	100.00
Plantações Michelin da Bahia Ltda	Full consolidation method	Rio de Janeiro	Miscellaneous	100.00
Michelin Espírito Santo – Comércio, Importações e Exportações Ltda	Full consolidation method	Vila Velha	Commercial	100.00
Plantações E. Michelin Ltda	Full consolidation method	Rio de Janeiro	Miscellaneous	100.00
Sascar Tecnologia e Segurança Automotiva S.A.	Full consolidation method	Barueri	Miscellaneous	100.00
Industrial Levorin S.A.	Full consolidation method	Guarulhos	Manufacturing & commercial	100.00
Neotec Indústria e Comércio de Pneus Ltda	Full consolidation method	Manaus	Manufacturing & commercial	100.00
LevNeo Participações Ltda	Full consolidation method	Guarulhos	Miscellaneous	100.00
Seva Engenharia Eletrônica S.A.	Full consolidation method	Contagem	Miscellaneous	100.00
Camso Holding Brasil Ltda	Full consolidation method	São Paulo	Financial	100.00
CamsoIndústria de Produtos de Borracha Ltda	Full consolidation method	Alvorada	Commercial	100.00
Chile				
Michelin Chile Ltda	Full consolidation method	Santiago	Commercial	100.00
Conveyor Services S.A.	Full consolidation method	Antofagasta	Manufacturing & commercial	100.00

Companies	Consolidation method	Registered office	Type	% interest
Fenner International Chile Limitada	Full consolidation method	Las Condes	Financial	100.00
Fenner Dunlop Chile SpA	Full consolidation method	Las Condes	Financial	100.00
Colombia				
Industria Colombiana de Llantas S.A.	Full consolidation method	Bogotá	Commercial	99.96
Ecuador				
Michelin del Ecuador S.A.	Full consolidation method	Quito	Commercial	100.00
Peru				
Michelin del Perú S.A.	Full consolidation method	Lima	Commercial	100.00
Venezuela				
Michelin Venezuela, S.A.	Equity method	Valencia	Commercial	100.00
SOUTHEAST ASIA/AUSTRALIA				
Australia				
Michelin Australia Pty Ltd	Full consolidation method	Melbourne	Commercial	100.00
Klinge Holdings Pty Ltd	Full consolidation method	Brisbane	Miscellaneous	100.00
Hallite Seals Australia Pty Limited	Full consolidation method	Wetherill Park	Manufacturing & commercial	100.00
Transeals Pty Limited	Full consolidation method	Welshpool	Financial	100.00
Fenner Dunlop Australia Pty Limited	Full consolidation method	West Footscray	Manufacturing & commercial	100.00
Fenner (Pacific) Pty Limited	Full consolidation method	West Footscray	Financial	100.00
Fenner Australia Financing Pty Limited	Full consolidation method	West Footscray	Financial	100.00
Australian Conveyor Engineering Pty Limited	Full consolidation method	West Footscray	Manufacturing & commercial	100.00
Fenner Dunlop Conveyor Services Pty Limited	Full consolidation method	West Footscray	Financial	100.00
Fenner Investments Australia Limited Partnership	Full consolidation method	West Footscray	Financial	100.00
BBV Partnership	Full consolidation method	West Footscray	Manufacturing & commercial	100.00
Belle Banne Conveyor Services Pty Limited	Full consolidation method	West Footscray	Manufacturing & commercial	100.00
Bearcat Tyres Pty Ltd	Full consolidation method	Girraween	Commercial	100.00
Indonesia				
PT Michelin Indonesia	Full consolidation method	Jakarta	Commercial	100.00
PT Synthetic Rubber Indonesia	Full consolidation method	Jakarta	Manufacturing	55.00
PT Royal Lestari Utama	Equity method	Jakarta	Miscellaneous	49.07
PT Lestari Asri Jaya	Equity method	Jambi	Miscellaneous	29.80
PT Multi Kusuma Cemerlang	Equity method	Jakarta	Miscellaneous	29.33
PT Wanamukti Wisasa	Equity method	Jambi	Miscellaneous	23.22
PT Multistrada Arah Sarana Tbk	Full consolidation method	Bekasi	Manufacturing & commercial	99.64
PT Kawasan Industri Multistrada	Full consolidation method	Bekasi	Miscellaneous	99.60
PT Penta Artha Impressi	Equity method	Jakarta	Commercial	19.93
Malaysia				
Michelin Malaysia Sdn. Bhd.	Full consolidation method	Petaling Jaya	Commercial	100.00
Michelin Services (S.E.A.) Sdn. Bhd.	Full consolidation method	Petaling Jaya	Miscellaneous	100.00
New Zealand				
Tyreline Distributors Limited	Equity method	Hamilton	Commercial	25.00
Beau Ideal Limited	Equity method	Te Awamutu	Commercial	25.01
Camso New Zealand Limited	Full consolidation method	Auckland	Commercial	100.00
Singapore				
Michelin Asia (Singapore) Co. Pte. Ltd	Full consolidation method	Singapore	Commercial	100.00
Michelin Asia-Pacific Pte. Ltd	Full consolidation method	Singapore	Miscellaneous	100.00
Michelin Asia-Pacific Import (SG) Pte. Ltd	Full consolidation method	Singapore	Miscellaneous	100.00
Michelin Asia-Pacific Export (SG) Pte. Ltd	Full consolidation method	Singapore	Miscellaneous	100.00
Michelin Asia-Pacific Import-Export (SG) Pte. Ltd	Full consolidation method	Singapore	Miscellaneous	100.00

Companies	Consolidation method	Registered office	Type	% interest
Société des Matières Premières Tropicales Pte. Ltd	Full consolidation method	Singapore	Miscellaneous	100.00
Wine Advocate Pte. Ltd	Full consolidation method	Singapore	Miscellaneous	100.00
Fenner Singapore Pte. Ltd	Full consolidation method	Singapore	Financial	100.00
CDI Multiseals Pte. Ltd	Full consolidation method	Singapore	Manufacturing & commercial	100.00
Thailand				
Michelin Siam Company Limited	Full consolidation method	Bangkok	Manufacturing & commercial	100.00
Michelin Experience (E2A) Co., Ltd	Full consolidation method	Bangkok	Commercial	49.00
Michelin Roh Co., Ltd	Full consolidation method	Bangkok	Miscellaneous	100.00
NTeq Polymer Co., Ltd	Equity method	Surat Thani	Miscellaneous	45.00
Vietnam				
Michelin Vietnam Company Limited	Full consolidation method	Ho Chi Minh City	Commercial	100.00
Camso Vietnam Co., Ltd	Full consolidation method	Tan Uyen	Manufacturing	100.00
CHINA				
China				
Michelin Shenyang Tire Co., Ltd	Full consolidation method	Shenyang	Manufacturing	100.00
Shanghai Michelin Tire Co., Ltd	Full consolidation method	Shanghai	Manufacturing	100.00
Michelin Asia (Hong Kong) Limited	Full consolidation method	Hong Kong	Commercial	100.00
Michelin (China) Investment Co., Ltd	Full consolidation method	Shanghai	Commercial	100.00
Shanghai Suisheng Information Technology Co., Ltd	Full consolidation method	Shanghai	Commercial	100.00
Michelin Tire Research and Development Center (Shanghai) Co., Ltd	Full consolidation method	Shanghai	Miscellaneous	100.00
Tyre Plus (Shanghai) Auto Accessories Trading Co., Ltd	Full consolidation method	Shanghai	Commercial	100.00
Michelin (Shanghai) Aircraft Tires Trading Co., Ltd	Full consolidation method	Shanghai	Commercial	100.00
DT Asia Holding Co., Limited	Equity method	Hong Kong	Commercial	40.00
Dawson Polymer Products (Shanghai) Company Limited	Full consolidation method	Shanghai	Manufacturing & commercial	100.00
Hallite Shanghai Company Limited	Full consolidation method	Shanghai	Manufacturing & commercial	100.00
Dunlop Conveyor Belting (Shanghai) Company Limited	Full consolidation method	Shanghai	Manufacturing & commercial	100.00
Shanghai Fenner Conveyor Belting Company Limited	Full consolidation method	Shanghai	Manufacturing & commercial	85.00
Fenner Management (Shanghai) Company Limited	Full consolidation method	Shanghai	Manufacturing & commercial	100.00
Camso Rubber Products (Qingdao) Co., Ltd	Full consolidation method	Qingdao	Manufacturing	100.00
Camso Enterprise Management (China) Co., Ltd	Full consolidation method	Shanghai	Commercial	100.00
Wine Advocate (HK) Ltd	Full consolidation method	Hong Kong	Miscellaneous	100.00
Taiwan				
Michelin Tire Taiwan Co., Ltd	Full consolidation method	Taipei	Commercial	100.00
EASTERN EUROPE				
Russia				
Michelin Russian Tyre Manufacturing Company LLC	Full consolidation method	Davydovo	Manufacturing & commercial	100.00
Camso Cis LLC	Full consolidation method	Moscow	Commercial	100.00
Ukraine				
Michelin Ukraine LLC	Full consolidation method	Kiev	Commercial	100.00
JAPAN/KOREA				
Japan				
Nihon Michelin Tire Co., Ltd	Full consolidation method	Tokyo	Commercial	100.00
Camso Japan Co., Ltd	Full consolidation method	Yokohama	Commercial	100.00
South Korea				
Michelin Korea Co., Ltd	Full consolidation method	Seoul	Commercial	100.00
Camso Taeryuk Ltd	Full consolidation method	Busan	Financial	100.00

NOTE 37 STATUTORY AUDITORS' FEES

	Deloitte				PricewaterhouseCoopers			
	Issuer's auditor (Deloitte & Associés)		Network		Issuer's auditor (PricewaterhouseCoopers Audit)		Network	
(in € thousands)	Amount	%	Amount	%	Amount	%	Amount	%
Statutory audit and half-year review of the individual and consolidated financial statements								
▶ Issuer	572	38%	-	-	619	39%	-	-
▶ Fully consolidated subsidiaries	948	62%	3,156	100%	975	61%	4,220	100%
Sub-total	1,520	100%	3,156	100%	1,593	100%	4,220	100%
Non-audit services								
▶ Issuer(1)	18	31%	-	-	90	61%	-	-
▶ Fully consolidated subsidiaries(2)	40	69%	110	100%	58	39%	1,171	100%
Sub-total	**58**	**100%**	**110**	**100%**	**148**	**100%**	**1,171**	**100%**
TOTAL	**1,578**		**3,266**		**1,741**		**5,391**	

(1) These services include an independent third-party body engagement by the audit firm PricewaterhouseCoopers.
(2) These services include due diligences related to acquisition operations or acquisitions projects and to tax reviews.

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