Q2

Half-Year Financial Report 2019

BAYER

Bayer on track in operational business

// Group sales increase to €11.5 billion (Fx & portfolio adj. + 0.9%)

// EBITDA before special items advances to €2.9 billion (+ 24.7%)

// Crop Science sales decline (Fx & portfolio adj. and pro forma) in challenging environment; substantial earnings growth due to acquired business

// Pharmaceuticals posts higher sales and strong earnings growth

// Consumer Health increases sales and earnings

// Net income €0.4 billion (–49.1%), held back by special items for restructuring and impairments

// Core earnings per share €1.62 (+ 5.9%)

// Group outlook confirmed yet ambitious

Science for a **better life**

Contents

Bayer Group Key Data

€ million	Q2 2018	Q2 2019	Change %	H1 2018	H1 2019	Change %	Full Year 2018
Sales	**9,481**	**11,485**	**+21.1**	**18,619**	**24,500**	**+31.6**	**39,586**
Change (adjusted for currency and portfolio effects)[1]			+0.9			+2.4	+4.5%
Change in sales[1]							
Volume	+9.9%	+0.4%		+6.4%	+1.9%		+5.3%
Price	−1.4%	+0.5%		−1.3%	+0.5%		−0.8%
Currency	−5.8%	+1.2%		−6.7%	+1.2%		−4.1%
Portfolio	+6.1%	+19.0%		+2.8%	+28.0%		+12.7%
Sales by region							
Europe / Middle East / Africa	3,603	3,750	+4.1	7,510	8,193	+9.1	14,143
North America	2,887	4,200	+45.5	5,541	9,409	+69.8	11,569
Asia / Pacific	2,113	2,326	+10.1	4,040	4,530	+12.1	8,115
Latin America	878	1,209	+37.7	1,528	2,368	+55.0	5,759
EBITDA[1]	**2,031**	**2,486**	**+22.4**	**4,849**	**5,624**	**+16.0**	**10,266**
Special items[1]	(317)	(441)		(395)	(1,491)		719
EBITDA before special items[1]	**2,348**	**2,927**	**+24.7**	**5,244**	**7,115**	**+35.7**	**9,547**
EBITDA margin before special items[1]	24.8%	25.5%		28.2%	29.0%		24.1%
EBIT[1]	**1,346**	**926**	**−31.2**	**3,656**	**2,876**	**−21.3**	**3,914**
Special items[1]	(362)	(859)		(440)	(1,909)		(2,566)
EBIT before special items[1]	**1,708**	**1,785**	**+4.5**	**4,096**	**4,785**	**+16.8**	**6,480**
Financial result	**(323)**	**(477)**	**−47.7**	**(193)**	**(793)**	**.**	**(1,596)**
Net income (from continuing and discontinued operations)	**794**	**404**	**−49.1**	**2,748**	**1,645**	**−40.1**	**1,695**
Earnings per share[1] from continuing and discontinued operations (€)	0.87	0.41	−52.9	3.05	1.68	−44.9	1.80
Core earnings per share[1] from continuing operations (€)	1.53	1.62	+5.9	3.76	4.17	+10.9	5.94
Net cash provided by operating activities (from continuing and discontinued operations)	**2,240**	**1,600**	**−28.6**	**2,898**	**2,679**	**−7.6**	**7,917**
Cash outflows for capital expenditures	**459**	**458**	**−0.2**	**808**	**853**	**+5.6**	**2,593**
Research and development expenses	**1,267**	**1,351**	**+6.6**	**2,307**	**2,707**	**+17.3**	**5,246**
Depreciation, amortization and impairment losses / loss reversals	**685**	**1,560**	**+127.7**	**1,193**	**2,748**	**+130.3**	**6,352**
Number of employees at end of period[2]	**124,055**	**115,498**	**−6.9**	**124,055**	**115,498**	**−6.9**	**116,998**
Personnel expenses (including pension expenses)	2,566	3,029	+18.0	5,004	6,504	+30.0	11,548

2018 figures restated
[1] For definition see Annual Report 2018, A 2.4 “Alternative Performance Measures Used by the Bayer Group.”
[2] Employees calculated as full-time equivalents (FTEs)

Interim Group Management Report as of June 30, 2019

Key Events

In May, we announced the conclusion of an agreement to divest the Coppertone™ business to Beiersdorf AG for a purchase price of US$0.6 billion. The transaction includes the global product rights to Coppertone™, the transfer of the approximately 450 employees in the United States, Canada and China, and the production facility in Cleveland, Ohio, United States. The transaction is expected to close in the third quarter of 2019 subject to the customary closing conditions, including approval by the antitrust authorities.

In June, Bayer announced it would set itself higher standards for transparency, sustainability and communication with all stakeholder groups. We also intend to considerably cut the ecological footprint of our agricultural products and are targeting a 30% reduction in environmental impact by 2030.[1] We will invest some €5 billion in additional weed control methods over the next 10 years.

Also in June, the Supervisory Board of Bayer AG decided on measures in connection with the glyphosate litigations. Among them are the establishment of a new Supervisory Board committee to monitor the current litigations including trial and mediation activities, consult with the Board of Management and make recommendations on the litigation strategy. In addition, U.S. lawyer and product liability litigation expert John H. Beisner has been retained to advise the Supervisory Board on matters related to the glyphosate litigations on an ongoing basis.

On July 1, 2019, the sale of the global prescription dermatology business of Consumer Health to LEO Pharma A/S, Ballerup, Denmark, was completed following the transfer of the U.S. business in September 2018. The divested portfolio comprises prescription brands such as Advantan™, Skinoren™ and Travocort™. A production site in Segrate, Italy, and 347 employees were also transferred. The base purchase price for the remaining global business was €0.6 billion and is subject to customary purchase price adjustments. The divestment gain is provisionally estimated at €0.3 billion. The base purchase price for the divested business as a whole was therefore approximately €0.6 billion, with the divestment gain estimated at around €0.4 billion.

On July 19, 2019, Bayer entered into an agreement with Yellow Wood Partners, Boston, United States, regarding the sale of the Dr. Scholl's™ business of Consumer Health for a purchase price of US$0.6 billion. The transaction is expected to close in the fourth quarter of 2019 subject to the satisfaction of customary closing conditions, including approval by antitrust authorities.

[1] Calculated by comparing the Environmental Impact Quotient (EIQ), which relates volume to toxicity, against the current market standards.

1. Overview of Sales, Earnings and Financial Position

1.1 Earnings Performance of the Bayer Group[2]

The purchase price allocation for the Monsanto acquisition was finalized in the second quarter of 2019. The financial information for prior periods has been adjusted accordingly. Details on the adjustments are given in this report under "Acquisitions in 2018" in B Notes to the Condensed Consolidated Interim Financial Statements.

Second quarter of 2019

Group sales

Group sales in the second quarter of 2019 rose by 0.9% (Fx & portfolio adj.) to €11,485 million (reported: + 21.1%). Germany accounted for €933 million of this figure.

Crop Science registered a 3.1% (Fx & portfolio adj.) decline in sales to €4,788 million that resulted primarily from the extreme weather conditions in North America. On a reported basis, sales of Crop Science climbed by 59.0%, thanks mainly to portfolio effects of 61.0% (€1,835 million). Pharmaceuticals posted sales growth of 3.9% (Fx & portfolio adj.) to €4,422 million, with business in China developing especially positively. Sales of Consumer Health increased by 2.1% (Fx & portfolio adj.) to €1,442 million, due largely to growth in the Latin America and Europe / Middle East / Africa regions. At Animal Health, sales declined by 2.7% (Fx & portfolio adj.) to €454 million.

EBITDA before special items

Group EBITDA before special items rose by 24.7% to €2,927 million. Negative currency effects arising primarily from hedging diminished earnings by €59 million compared with the previous year. There was a positive effect of approximately €100 million from IFRS 16, which has been applied since January 1, 2019. Under the new standard, lease expenses are no longer recognized in operating income. Crop Science posted a 66.9% increase in EBITDA before special items to €1,075 million, mainly due to the acquired business. EBITDA before special items at Pharmaceuticals rose by 10.1% to €1,500 million, largely as a result of higher demand. At Consumer Health, EBITDA before special items increased by 5.5% to €270 million. EBITDA before special items of Animal Health declined by 3.1% to €124 million.

Depreciation and amortization

Depreciation, amortization and impairment losses amounted to €1,560 million in the second quarter of 2019 (Q2 2018: €685 million). The increase was primarily due to the acquisition of Monsanto and the related depreciation and amortization of acquired assets, and to the depreciation of right-of-use assets recognized for the first time within property, plant and equipment under IFRS 16. Amortization and impairments on intangible assets were €1,075 million (Q2 2018: €409 million), while depreciation and impairments on property, plant and equipment amounted to €485 million (Q2 2018: €275 million).

Impairment losses totaled €430 million (Q2 2018: €54 million), including €424 million (Q2 2018: €52 million) on intangible assets. Of this figure, €421 million pertained to the agreed divestment of our Dr. Scholl's™ foot care portfolio and partly resulted from the impairment of the proportionate goodwill to be transferred.

[2] For definition of alternative performance measures see Annual Report 2018, A 2.4 "Alternative Performance Measures Used by the Bayer Group."

EBIT and special items

EBIT of the Bayer Group fell by 31.2% to €926 million (Q2 2018: €1,346 million) after net special charges of €859 million (Q2 2018: €362 million). The special charges mainly comprised the above-mentioned impairment losses in connection with the agreed divestment of our Dr. Scholl's™ foot care portfolio and €249 million related to the announced restructuring measures. EBIT before special items increased by 4.5% to €1,785 million (Q2 2018: €1,708 million).

The following special effects were taken into account in calculating EBIT and EBITDA:

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Special Items by Category[1]

€ million	EBIT Q2 2018	EBIT Q2 2019	EBIT H1 2018	EBIT H1 2019	EBITDA Q2 2018	EBITDA Q2 2019	EBITDA H1 2018	EBITDA H1 2019
Total special items	**(362)**	**(859)**	**(440)**	**(1,909)**	**(317)**	**(441)**	**(395)**	**(1,491)**
Impairment losses/loss reversals	(43)	(418)	(43)	(418)	–	(1)	–	(1)
Litigations/legal risks	(2)	(77)	(6)	(128)	(2)	(77)	(6)	(128)
of which in the Reconciliation	–	(22)	(3)	(35)	–	(22)	(3)	(35)
Acquisition and integration costs	(287)	(112)	(348)	(604)	(285)	(112)	(346)	(604)
of which in the Reconciliation	(12)	(8)	(15)	(14)	(12)	(8)	(15)	(14)
Restructuring	(31)	(249)	(44)	(642)	(31)	(248)	(44)	(641)
of which in the Reconciliation	(13)	(251)	(18)	(616)	(13)	(249)	(18)	(614)
Divestments	1	(3)	1	(117)	1	(3)	1	(117)
of which in the Reconciliation	–	(6)	–	(6)	–	(6)	–	(6)

2018 figures restated
[1] For definition see Annual Report 2018, A 2.4 “Alternative Performance Measures Used by the Bayer Group.”

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Special Items by Functional Cost[1]

€ million	EBIT Q2 2018	EBIT Q2 2019	EBIT H1 2018	EBIT H1 2019	EBITDA Q2 2018	EBITDA Q2 2019	EBITDA H1 2018	EBITDA H1 2019
Total special items	**(362)**	**(859)**	**(440)**	**(1,909)**	**(317)**	**(441)**	**(395)**	**(1,491)**
Cost of goods sold	(147)	(64)	(157)	(506)	(144)	(65)	(154)	(507)
Selling expenses	(16)	(240)	(18)	(250)	(16)	(31)	(18)	(41)
Research and development expenses	(50)	–	(53)	(11)	(7)	–	(10)	(11)
General administration expenses	(149)	(281)	(207)	(756)	(149)	(280)	(207)	(755)
Other operating income/expenses	–	(274)	(5)	(386)	(1)	(66)	(6)	(178)

2018 figures restated
[1] For definition see Annual Report 2018, A 2.4 “Alternative Performance Measures Used by the Bayer Group.”

Income after income taxes from discontinued operations

Income after income taxes from discontinued operations was €0 million (Q2 2018: minus €8 million).

Net income

Including a financial result of minus €477 million (Q2 2018: minus €323 million), income before income taxes was €449 million (Q2 2018: €1,023 million). The financial result mainly comprised a net loss of €32 million from investments in affiliated companies (Q2 2018: net income of €56 million), net interest expense of €372 million (Q2 2018: €270 million) and interest cost of €87 million (Q2 2018: €42 million) for pension and other provisions. Reflected in the financial result are net special charges of €56 million (Q2 2018: €106 million) that resulted mainly from a change in the fair value of the interest in Covestro. After income tax expense of €44 million (Q2 2018: €215 million) and adjusted for income attributable to noncontrolling interest, net income for the second quarter of 2019 amounted to €404 million (Q2 2018: €794 million).

Core earnings per share

Earnings per share (total) declined in the second quarter of 2019 to €0.41 (Q2 2018: €0.87), largely because of the acquisition and integration costs and restructuring expenses recognized as special items, as well as the acquisition-related increase in amortization of intangible assets. Core earnings per share from continuing operations rose by 5.9% to €1.62 (Q2 2018: €1.53).

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Core Earnings per Share[1]

€ million	Q2 2018	Q2 2019	H1 2018	H1 2019
EBIT (as per income statements)	**1,346**	**926**	**3,656**	**2,876**
Amortization and impairment losses/loss reversals on goodwill and other intangible assets	409	1,075	706	1,781
Impairment losses/loss reversals on property, plant and equipment, and accelerated depreciation included in special items	2	7	9	5
Special items (other than accelerated depreciation, amortization and impairment losses/loss reversals)	317	441	395	1,491
Core EBIT	**2,074**	**2,449**	**4,766**	**6,153**
Financial result (as per income statements)	(323)	(477)	(193)	(793)
Special items in the financial result	106	56	(130)	2
Income taxes (as per income statements)	(215)	(44)	(709)	(442)
Special items in income taxes	–	–	–	–
Tax effects related to amortization, impairment losses/loss reversals and special items	(236)	(387)	(343)	(828)
Income after income taxes attributable to noncontrolling interest (as per income statements)	(6)	(1)	(6)	4
Above-mentioned adjustments attributable to noncontrolling interest	–	(1)	–	(1)
Core net income from continuing operations	**1,400**	**1,595**	**3,385**	**4,095**
Shares (million)				
Weighted average number of shares[2]	915.69	981.73	900.70	980.95
€				
Core earnings per share from continuing operations	**1.53**	**1.62**	**3.76**	**4.17**

2018 figures restated

[1] For definition see Annual Report 2018, A 2.4 “Alternative Performance Measures Used by the Bayer Group.”

[2] The weighted average number of shares (basic and diluted) was restated pursuant to IAS 33 for all periods prior to June 2018 to reflect the effect of the bonus component of the subscription rights issued as part of the June 2018 capital increase, because the subscription price of the new shares was below the market price of the existing shares.

Personnel expenses and employee numbers

The number of employees in the Bayer Group as of the closing date declined year on year by 6.9% to 115,498 (June 30, 2018: 124,055). The prior-year total included the employees of the businesses since divested to BASF. Personnel expenses rose by 18.0% to €3,029 million (Q2 2018: €2,566 million). This was mainly due to the higher average number of employees as a result of the Monsanto acquisition closing in June of the previous year. Furthermore, additions to provisions were made in connection with the announced restructuring measures.

First half of 2019

Group sales

Group sales in the first half of 2019 rose by 2.4% (Fx & portfolio adj.) to €24,500 million (reported: +31.6%). Germany accounted for €1,995 million of this figure.

Sales of Crop Science advanced by 1.1% (Fx & portfolio adj.) to €11,232 million. On a reported basis, sales increased by 91.3%, thanks mainly to the portfolio effects of 89.5% (€5,256 million). Sales of Pharmaceuticals rose by 4.6% (Fx & portfolio adj.) to €8,776 million. Sales at Consumer Health came in level with the prior-year period at €2,837 million (Fx & portfolio adj. +0.4%). Animal Health posted a 1.8% decrease (Fx & portfolio adj.) in sales to €875 million.

EBITDA before special items

EBITDA before special items of the Bayer Group advanced by 35.7% to €7,115 million (H1 2018: €5,244 million). Negative currency effects arising primarily from hedging diminished earnings by €169 million. There was a positive effect of approximately €190 million from IFRS 16, which has been applied since January 1, 2019. Under the new standard, lease expenses are no longer recognized in operating income. At Crop Science, EBITDA before special items increased by 101.5% to €3,397 million. This was mainly attributable to the earnings contribution from the acquired business. EBITDA before special items at Pharmaceuticals advanced by 8.4% to €3,012 million. Consumer Health saw EBITDA before special items decrease by 3.5% to €549 million. At Animal Health, earnings declined by 1.1% to €264 million.

Depreciation and amortization

Depreciation, amortization and impairment losses amounted to €2,748 million in the first half of 2019 (H1 2018: €1,193 million). The increase was primarily due to the acquisition of Monsanto and the related depreciation and amortization of acquired assets and to the depreciation of right-of-use assets that were recognized for the first time within property, plant and equipment in the first quarter of 2019 under IFRS 16. This figure comprised €1,781 million (H1 2018: €706 million) in amortization and impairments on intangible assets and €967 million (H1 2018: €487 million) in depreciation and impairments on property, plant and equipment.

Net impairment losses totaled €429 million (H1 2018: €75 million), including €425 million (H1 2018: €66 million) in impairment losses on intangible assets. Of this figure, €421 million pertained to the agreed divestment of our Dr. Scholl's™ foot care portfolio and partly resulted from the impairment of the proportionate goodwill to be transferred. A total of €418 million (H1 2018: €45 million) in impairment losses and impairment loss reversals constituted special items.

EBIT and special items

EBIT of the Bayer Group fell by 21.3% to €2,876 million (H1 2018: €3,656 million) after net special charges of €1,909 million (H1 2018: €440 million). The special charges mainly comprised €662 million in connection with the acquisition and integration of Monsanto, including €483 million from the remeasurement of inventories, as well as €642 million associated with the announced restructuring, and impairments related to the agreed divestment of our Dr. Scholl's™ foot care portfolio. EBIT before special items increased by 16.8% to €4,785 million (H1 2018: €4,096 million).

Net income

After a financial result of minus €793 million (H1 2018: minus €193 million), income before income taxes was €2,083 million (H1 2018: €3,463 million). The financial result comprised income from investments in affiliated companies of €30 million (H1 2018: €402 million), mainly from the interest in Covestro, along with net interest expense of €717 million (H1 2018: €362 million), an exchange loss of €8 million (H1 2018: €78 million) and interest cost of €153 million (H1 2018: €87 million) for pension and other provisions. The financial result included net special charges of €2 million (H1 2018: net special gains of €130 million). After tax expense of €442 million (H1 2018: €709 million), income after income taxes was €1,641 million (H1 2018: €2,754 million). After adjusting for income from discontinued operations after income taxes and income attributable to noncontrolling interest, net income came to €1,645 million (H1 2018: €2,748 million).

Core earnings per share

Earnings per share (total) declined by 44.9% to €1.68 (H1 2018: €3.05), while core earnings per share from continuing operations advanced by 10.9% to €4.17 (H1 2018: €3.76).

1.2 Business Development by Segment

Crop Science

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Key Data – Crop Science

€ million	Q2 2018	Q2 2019	Change %[1] Reported	Change %[1] Fx & p adj.	H1 2018	H1 2019	Change %[1] Reported	Change %[1] Fx & p adj.
Sales	**3,011**	**4,788**	**+59.0**	**–3.1**	**5,872**	**11,232**	**+91.3**	**+1.1**
Change in sales[1]								
Volume	+22.0%	–3.4%			+8.6%	+0.1%		
Price	–0.6%	+0.3%			–0.5%	+1.0%		
Currency	–7.2%	+1.1%			–7.3%	+0.7%		
Portfolio	+25.0%	+61.0%			+10.3%	+89.5%		
Sales by region								
Europe/Middle East/Africa	986	1,092	+10.8	–1.8	2,280	2,856	+25.3	0.0
North America	1,076	2,397	+122.8	–13.5	2,045	5,921	+189.5	–4.6
Asia/Pacific	508	533	+4.9	–1.7	876	921	+5.1	–1.7
Latin America	441	766	+73.7	+17.7	671	1,534	+128.6	+25.8
EBITDA[1]	**367**	**974**	**+165.4**		**1,348**	**2,678**	**+98.7**	
Special items[1]	(277)	(101)			(338)	(719)		
EBITDA before special items[1]	**644**	**1,075**	**+66.9**		**1,686**	**3,397**	**+101.5**	
EBITDA margin before special items[1]	21.4%	22.5%			28.7%	30.2%		
EBIT[1]	**149**	**304**	**+104.0**		**1,041**	**1,300**	**+24.9**	
Special items[1]	(279)	(101)			(340)	(719)		
EBIT before special items[1]	**428**	**405**	**–5.4**		**1,381**	**2,019**	**+46.2**	
Net cash provided by operating activities	**1,653**	**880**	**–46.8**		**950**	**409**	**–56.9**	
Capital expenditures	174	197	+13.2		237	420	+77.2	
Research and development expenses	396	597	+50.8		653	1,180	+80.7	

2018 figures restated; fx & p adj. = currency- and portfolio-adjusted
[1] For definition see Annual Report 2018, A 2.4 “Alternative Performance Measures Used by the Bayer Group.”

Second quarter of 2019

Sales

Crop Science posted sales of €4,788 million in the second quarter of 2019. Sales rose by 59.0% on a reported basis, thanks mainly to a positive portfolio effect of 61.0% due to the acquisition of Monsanto (€2,320 million) less the prorated contribution from the divested businesses in the prior-year period (€484 million). Overall, business at Crop Science in the second quarter was significantly impacted by extreme weather conditions. In particular, flooding and heavy rains in the Midwestern United States and drought in large parts of Europe and in Canada had a negative effect. The ongoing trade disputes involving the United States also weighed on business. Sales were down by 3.1% after adjusting for currency and portfolio effects, with the acquired business only taken into account for the period June 7 to June 30. This decline was mainly the result of a considerable drop in sales in North America. Significant gains in Latin America did not offset this effect.

- // Sales in Europe/Middle East/Africa rose by 11.0% (Fx adj.) to €1,092 million. The portfolio effect amounted to €126 million. Adjusted for currency and portfolio effects, business declined by 1.8%. SeedGrowth (Other) saw lower sales following a loss of registrations in Europe, and business at Fungicides also receded due to the exceptionally dry weather conditions in parts of Europe. Insecticides, however, posted encouraging gains.
- // Sales in North America advanced by 120.2% (Fx adj.) to €2,397 million. There was a portfolio effect of €1,438 million. The 13.5% decline after adjusting for currency and portfolio effects was primarily due to the extreme weather conditions.

- Sales in the Asia / Pacific region increased by 4.2% (Fx adj.) to €533 million. The portfolio effect here was €30 million. Adjusted for currency and portfolio effects, business declined by 1.7%. Sales of Herbicides and Insecticides in India moved back as a result of anticipated shifts in demand into the third quarter.
- Sales in Latin America advanced by 72.4% (Fx adj.) to €766 million. The portfolio effect was €241 million. Adjusted for currency and portfolio effects, sales moved ahead by 17.7%. Growth in this region came from volume increases for Herbicides, Fungicides and Insecticides in Brazil.

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Sales by Strategic Business Entity

			Change %[1]				Change %[1]	
€ million	Q2 2018	Q2 2019	Reported	Fx & p adj.	H1 2018	H1 2019	Reported	Fx & p adj.
Crop Science	**3,011**	**4,788**	**+59.0**	**−3.1**	**5,872**	**11,232**	**+91.3**	**+1.1**
Herbicides	1,028	1,337	+30.1	−1.5	1,828	2,710	+48.2	+3.5
Corn Seed & Traits	134	941	.	−25.9	172	3,315	.	−19.0
Soybean Seed & Traits	147	481	.	−31.0	206	1,085	.	−21.9
Fungicides	709	661	−6.8	−7.3	1,437	1,358	−5.5	−6.0
Insecticides	329	388	+17.9	+16.3	628	724	+15.3	+14.5
Environmental Science	183	286	+56.3	+8.9	297	538	+81.1	+3.8
Vegetable Seeds	128	178	+39.1	+17.9	272	346	+27.2	+8.4
Other	353	516	+46.2	−10.3	1,032	1,156	+12.0	+3.9

Fx & p adj. = currency- and portfolio-adjusted
[1] For definition see Annual Report 2018, A 2.4 “Alternative Performance Measures Used by the Bayer Group.”

Earnings
EBITDA before special items of Crop Science rose in the second quarter of 2019 by 66.9% to €1,075 million (Q2 2018: €644 million). The increase was largely attributable to the earnings contribution from the newly acquired business. Earnings were diminished by the decline in sales, the absence of the earnings contribution from the businesses divested to BASF, inventory write-downs and a negative currency effect of €26 million.

EBIT doubled to €304 million (Q2 2018: €149 million) after net special charges of €101 million (Q2 2018: €279 million), mainly including a total of €61 million in connection with the acquisition and integration of Monsanto and the divestments to BASF – of which €55 million comprised prorated reversals of inventory step-ups – as well as legal fees in connection with the glyphosate litigations.

First half of 2019

Sales
Crop Science posted sales of €11,232 million in the first half of 2019. Sales climbed by 91.3% on a reported basis, thanks mainly to a positive portfolio effect of 89.5% from the acquisition of Monsanto (€6,649 million) less the prorated contribution from the divested businesses in the prior-year period (€1,393 million). Adjusted for currency and portfolio effects, business expanded by 1.1%. Sales rose markedly in Latin America due to demand shifts from the fourth quarter of 2018 and lower sales in the prior-year period in connection with the normalization of inventories for crop protection products in Brazil. By contrast, business in North America was down due to the weather conditions.

Earnings
EBITDA before special items of Crop Science doubled to €3,397 million in the first half of 2019 (H1 2018: €1,686 million). The increase was largely attributable to the earnings contribution from the newly acquired business. Earnings were diminished by the decline in sales, the absence of the earnings contribution from the businesses divested to BASF, inventory write-downs and a negative currency effect of €93 million.

EBIT increased by 24.9% to €1,300 million (H1 2018: €1,041 million) after net special charges of €719 million (H1 2018: €340 million), mainly including a total of €648 million in connection with the acquisition and integration of Monsanto and the divestments to BASF – of which €483 million comprised prorated reversals of inventory step-ups – as well as legal fees in connection with the glyphosate litigations.

A 6

Special Items[1] Crop Science

€ million	EBIT Q2 2018	EBIT Q2 2019	EBIT H1 2018	EBIT H1 2019	EBITDA Q2 2018	EBITDA Q2 2019	EBITDA H1 2018	EBITDA H1 2019
Restructuring	(3)	–	(5)	–	(3)	–	(5)	–
Litigations/legal risks	(2)	(40)	(3)	(71)	(2)	(40)	(3)	(71)
Acquisition and integration costs	(275)	(104)	(333)	(590)	(273)	(104)	(331)	(590)
Divestments	1	43	1	(58)	1	43	1	(58)
Total special items	**(279)**	**(101)**	**(340)**	**(719)**	**(277)**	**(101)**	**(338)**	**(719)**

[1] For definition see Annual Report 2018, A 2.4 “Alternative Performance Measures Used by the Bayer Group.”

Pro-forma sales by strategic business entity

Due to the scope of the acquired activities and the seasonality of the business, we are presenting sales by strategic business entity on a pro-forma basis in order to more transparently reflect the underlying operational business development for the combined business of Crop Science and Monsanto, among other reasons. In this context, sales are presented as if both the acquisition of Monsanto and the associated divestments had already taken place as of January 1, 2018. Sales from the aforementioned service agreements with BASF after the divestments closed are not included.

A 7

Pro-Forma Sales by Strategic Business Entity[1]

			Change %[2]				Change %[2]	
€ million	Q2 2018	Q2 2019	Reported	Fx adj.	H1 2018	H1 2019	Reported	Fx adj.
Crop Science	**5,095**	**4,758**	**−6.6**	**−9.9**	**11,243**	**11,112**	**−1.2**	**−4.6**
Herbicides	1,454	1,319	−9.3	−11.4	2,757	2,663	−3.4	−5.1
Corn Seed & Traits	961	941	−2.1	−7.8	3,235	3,315	+2.5	−2.9
Soybean Seed & Traits	686	482	−29.7	−34.4	1,352	1,085	−19.7	−25.1
Fungicides	710	659	−7.2	−7.4	1,437	1,357	−5.6	−5.9
Insecticides	329	389	+18.2	+17.1	627	724	+15.5	+14.6
Environmental Science	283	287	+1.6	−3.2	521	535	+2.7	−2.1
Vegetable Seeds	175	178	+1.5	0.0	351	346	−1.4	−3.1
Other	497	501	+0.8	−4.7	961	1,085	+12.9	+7.6

Fx adj. = currency-adjusted
[1] The unaudited pro-forma data are presented as if both the acquisition of Monsanto and the associated divestments had taken place as of January 1, 2018. Sales of Monsanto are presented in periods as per the Bayer fiscal year. One-time effects of business operations, the accounting for discontinued operations and the recognition and measurement of sales from certain business transactions have been adjusted in line with our accounting. Due to this simplified procedure, they explicitly do not reflect sales according to IFRS or IDW RH HFA 1.004.
[2] For definition see Annual Report 2018, A 2.4 “Alternative Performance Measures Used by the Bayer Group.”

Second quarter of 2019

Sales in the second quarter of 2019 on a pro-forma basis fell by a currency-adjusted 9.9%.

// The decline for Herbicides was largely the result of high inventories at distributors as well as extreme weather conditions in the United States, where flooding and heavy rains in the Midwest delayed sowing and led to lower volumes from an overall reduction in acreages planted and fewer pre-plant applications, especially for Roundup™.
// Corn Seed & Traits sales were down, mainly because of the drop in acreages planted caused by the weather conditions mentioned and as a result of an unfavorable product mix compared with the prior-year period. In addition, business in Latin America in the prior-year quarter benefited from higher than normal license revenues in Brazil.

- // The drop in sales of Soybean Seed & Traits was due to lower volumes resulting from the effects of the weather conditions described and to trade disputes involving the United States. Increased competitive pressure also had a negative effect.
- // Business at Fungicides was adversely impacted by the above-mentioned effects in Canada, in particular, while in Latin America we benefited from volume gains and the registration of Xpro™ in Brazil.
- // Sales of Insecticides rose sharply in the Europe / Middle East / Africa and Latin America regions as a result of higher prices and volumes. They also increased in North America due to phasing from the third quarter.
- // The decline for Other primarily resulted from the loss of registrations for SeedGrowth in Europe. In the United States, however, we achieved significant sales growth for Cotton Seed as the result of higher volumes due to higher market share and an anticipated increase in acreages.

First half of 2019

Sales in the first half of 2019 on a pro-forma basis decreased by 4.6% (Fx adj.). This was mainly due to the extreme weather conditions in the United States, which led to lower sales of Soybean Seed & Traits, Corn Seed & Traits and Herbicides.

Pharmaceuticals

A 8

Key Data – Pharmaceuticals

			Change %[1]				Change %[1]	
€ million	Q2 2018	Q2 2019	Reported	Fx & p adj.	H1 2018	H1 2019	Reported	Fx & p adj.
Sales	**4,217**	**4,422**	**+4.9**	**+3.9**	**8,292**	**8,776**	**+5.8**	**+4.6**
Change in sales[1]								
Volume	+5.8%	+4.0%			+5.7%	+5.2%		
Price	−2.7%	−0.1%			−2.7%	−0.6%		
Currency	−4.9%	+1.2%			−6.0%	+1.4%		
Portfolio	−0.2%	−0.2%			−0.2%	−0.2%		
Sales by region								
Europe / Middle East / Africa	1,653	1,695	+2.5	+2.8	3,264	3,370	+3.2	+3.8
North America	992	984	−0.8	−5.4	1,915	1,909	−0.3	−5.7
Asia / Pacific	1,323	1,499	+13.3	+11.9	2,626	3,028	+15.3	+12.9
Latin America	249	244	−2.0	+5.2	487	469	−3.7	+5.1
EBITDA[1]	**1,350**	**1,513**	**+12.1**		**2,764**	**3,009**	**+8.9**	
Special items[1]	(13)	13			(14)	(3)		
EBITDA before special items[1]	**1,363**	**1,500**	**+10.1**		**2,778**	**3,012**	**+8.4**	
EBITDA margin before special items[1]	32.3%	33.9%			33.5%	34.3%		
EBIT[1]	**1,053**	**1,238**	**+17.6**		**2,216**	**2,437**	**+10.0**	
Special items[1]	(56)	14			(57)	(2)		
EBIT before special items[1]	**1,109**	**1,224**	**+10.4**		**2,273**	**2,439**	**+7.3**	
Net cash provided by operating activities	**629**	**741**	**+17.8**		**1,861**	**2,034**	**+9.3**	
Capital expenditures	121	135	+11.6		340	215	−36.8	
Research and development expenses	765	663	−13.3		1,458	1,352	−7.3	

Fx & p adj. = currency- and portfolio-adjusted

[1] For definition see Annual Report 2018, A 2.4 “Alternative Performance Measures Used by the Bayer Group.”

Second quarter of 2019

Sales

Sales of Pharmaceuticals rose by 3.9% (Fx & portfolio adj.) to €4,422 million in the second quarter of 2019 (Q2 2018: €4,217 million). Business in China remained strong, and our products Xarelto™ and Eylea™ also continued to achieve robust growth.

// Sales of our oral anticoagulant **Xarelto™** rose significantly thanks to expanded volumes in China and Europe / Middle East / Africa, particularly Russia and France. License revenues – recognized as sales – in the United States, where Xarelto™ is marketed by a subsidiary of Johnson & Johnson, were down year on year, holding back overall growth.
// Business with our eye medicine **Eylea™** continued to expand in all regions, with sales developing especially positively in Europe, primarily in the United Kingdom, and in Canada.
// We registered a decline in sales of our cancer drug **Nexavar™**, owing mainly to the competitive market environments in the United States and Japan. Growth in China and Italy partly offset this development.
// The decline in sales of our multiple sclerosis treatment **Betaferon™ / Betaseron™** was again mainly driven by strong competition in the United States.
// We reported substantial sales gains for our cancer drug **Stivarga™** that resulted primarily from expanded volumes in China and Russia.
// There was an encouraging increase in sales of our pulmonary hypertension treatment **Adempas™**, especially in the United States and Europe. As in the past, sales reflected the proportionate recognition of the upfront and milestone payments resulting from the sGC collaboration with Merck & Co., United States.

A 9

Best-Selling Pharmaceuticals Products

			Change %[1]				Change %[1]	
€ million	Q2 2018	Q2 2019	Reported	Fx & p adj.	H1 2018	H1 2019	Reported	Fx & p adj.
Xarelto™	891	1,007	+ 13.0	+ 12.5	1,705	1,944	+ 14.0	+ 13.6
Eylea™	540	604	+ 11.9	+ 11.2	1,044	1,187	+ 13.7	+ 12.8
Mirena™ / Kyleena™ / Jaydess™	276	297	+ 7.6	+ 3.6	593	619	+ 4.4	– 0.2
Kogenate™ / Kovaltry™ / Jivi™	213	221	+ 3.8	+ 0.8	427	434	+ 1.6	– 1.5
Nexavar™	193	177	– 8.3	– 9.4	355	361	+ 1.7	+ 0.1
Adalat™	165	170	+ 3.0	+ 3.7	341	345	+ 1.2	+ 0.6
Glucobay™	151	155	+ 2.6	+ 3.8	319	342	+ 7.2	+ 7.0
YAZ™ / Yasmin™ / Yasminelle™	159	167	+ 5.0	+ 4.9	311	326	+ 4.8	+ 4.9
Aspirin™ Cardio	139	142	+ 2.2	+ 4.2	287	298	+ 3.8	+ 4.5
Betaferon™ / Betaseron™	142	120	– 15.5	– 17.9	272	221	– 18.8	– 21.0
Stivarga™	82	103	+ 25.6	+ 23.9	152	200	+ 31.6	+ 28.8
Adempas™	89	101	+ 13.5	+ 11.0	170	196	+ 15.3	+ 11.9
Gadavist™ / Gadovist™	103	97	– 5.8	– 6.7	190	193	+ 1.6	+ 0.5
Avalox™ / Avelox™	77	81	+ 5.2	+ 5.8	174	185	+ 6.3	+ 5.8
Stellant™	84	95	+ 13.1	+ 9.6	163	182	+ 11.7	+ 7.0
Total best-selling products	**3,304**	**3,537**	**+ 7.1**	**+ 6.1**	**6,503**	**7,033**	**+ 8.2**	**+ 6.8**
Proportion of Pharmaceuticals sales	78%	80%			78%	80%		

Fx & p adj. = currency- and portfolio-adjusted
[1] For definition see Annual Report 2018, A 2.4 "Alternative Performance Measures Used by the Bayer Group."

Earnings
EBITDA before special items of Pharmaceuticals rose in the second quarter of 2019 by 10.1% to €1,500 million (Q2 2018: €1,363 million). Negative currency effects diminished earnings by €30 million. The robust increase in earnings was primarily attributable to higher demand and a decrease in the cost of goods sold. In addition, research and development expenses were down compared with the high level of the prior-year period and because the recognition of study costs is being phased differently across the year.

EBIT increased by 17.6% to €1,238 million after net special gains of €14 million (Q2 2018: net special charges of €56 million). The special gains mainly comprised €30 million in connection with restructuring measures, primarily from the adjustment of provisions. Earnings were diminished by €15 million in litigation-related expenses.

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Special Items[1] Pharmaceuticals

€ million	EBIT Q2 2018	EBIT Q2 2019	EBIT H1 2018	EBIT H1 2019	EBITDA Q2 2018	EBITDA Q2 2019	EBITDA H1 2018	EBITDA H1 2019
Restructuring	(13)	30	(14)	21	(13)	29	(14)	20
Litigations/legal risks	–	(15)	–	(22)	–	(15)	–	(22)
Impairment losses/loss reversals	(43)	(1)	(43)	(1)	–	(1)	–	(1)
Total special items	**(56)**	**14**	**(57)**	**(2)**	**(13)**	**13**	**(14)**	**(3)**

[1] For definition see Annual Report 2018, A 2.4 “Alternative Performance Measures Used by the Bayer Group.”

First half of 2019

Sales
Sales of Pharmaceuticals rose by 4.6% (Fx & portfolio adj.) in the first six months of 2019, to €8,776 million (H1 2018: €8,292 million). As in the second quarter, growth in the first six months was primarily driven by the positive development in China and the expansion of business with Xarelto™ and Eylea™.

Earnings
EBITDA before special items of Pharmaceuticals rose in the first half of 2019 by 8.4% to €3,012 million (H1 2018: €2,778 million). Negative currency effects diminished earnings by €74 million. The earnings growth resulted primarily from the very good development of business and a decrease in the cost of goods sold. In addition, research and development expenses were down compared with the high level of the prior-year period and because the recognition of study costs is being phased differently across the year.

EBIT climbed by 10.0% to €2,437 million.

Consumer Health

A 11

Key Data – Consumer Health

			Change %[1]				Change %[1]	
€ million	Q2 2018	Q2 2019	Reported	Fx & p adj.	H1 2018	H1 2019	Reported	Fx & p adj.
Sales	**1,413**	**1,442**	**+2.1**	**+2.1**	**2,822**	**2,837**	**+0.5**	**+0.4**
Changes in sales[1]								
Volume	−2.2%	+0.2%			−2.8%	−0.5%		
Price	+0.8%	+1.9%			+1.0%	+0.9%		
Currency	−7.0%	+1.3%			−8.4%	+1.4%		
Portfolio	0.0%	−1.3%			0.0%	−1.3%		
Sales by region								
Europe / Middle East / Africa	466	476	+2.1	+3.1	962	936	−2.7	−1.3
North America	595	600	+0.8	−1.5	1,191	1,203	+1.0	−2.4
Asia / Pacific	202	207	+2.5	+2.2	379	413	+9.0	+7.8
Latin America	150	159	+6.0	+13.5	290	285	−1.7	+7.8
EBITDA[1]	**257**	**219**	**−14.8**		**565**	**470**	**−16.8**	
Special items[1]	1	(51)			(4)	(79)		
EBITDA before special items[1]	**256**	**270**	**+5.5**		**569**	**549**	**−3.5**	
EBITDA margin before special items[1]	18.1%	18.7%			20.2%	19.4%		
EBIT[1]	**157**	**(293)**	**.**		**368**	**(132)**	**.**	
Special items[1]	1	(468)			(4)	(496)		
EBIT before special items[1]	**156**	**175**	**+12.2**		**372**	**364**	**−2.2**	
Net cash provided by operating activities	**148**	**198**	**+33.8**		**321**	**430**	**+34.0**	
Capital expenditures	45	32	−28.9		73	57	−21.9	
Research and development expenses	55	53	−3.6		110	107	−2.7	

Fx & p adj. = currency- and portfolio-adjusted
[1] For definition see Annual Report 2018, A 2.4 "Alternative Performance Measures Used by the Bayer Group."

Second quarter of 2019

Sales

Sales of Consumer Health increased by 2.1% (Fx & portfolio adj.) in the second quarter of 2019 to €1,442 million.

- Sales in the **Europe / Middle East / Africa** region rose by 3.1% (Fx & portfolio adj.) to €476 million. We registered sales gains in the Dermatology category, particularly in Russia and Turkey, and in the Nutritionals category, where we benefited from a product line extension in Italy. In addition, an improved supply situation began to have a positive impact.
- In the **North America** region, sales declined by 1.5% (Fx & portfolio adj.) to €600 million. We posted a decrease in sales particularly in the Pain & Cardio category, where lower demand for Aspirin™ was one of the factors that had a negative impact. By contrast, sales increased in the Allergy & Cold category, driven primarily by our antihistamine Claritin™. Following a weak allergy season in the prior-year period, this product benefited from increased demand and investment support.
- Sales in the **Asia / Pacific** region rose by 2.2% to €207 million, with business expanding for another consecutive quarter. The Nutritionals category saw an encouraging development, with a significant contribution by our product Elevit™. Sales were down only in the Dermatology category following a strong prior-year quarter in China.
- We recorded strong growth in **Latin America**, where sales rose by 13.5% to €159 million. We posted double-digit-percentage growth particularly in the Pain & Cardio category.

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Sales by Category[1]

€ million	Q2 2018	Q2 2019	Change %[2] Reported	Change %[2] Fx & p adj.	H1 2018	H1 2019	Change %[2] Reported	Change %[2] Fx & p adj.
Consumer Health	**1,413**	**1,442**	**+ 2.1**	**+ 2.1**	**2,822**	**2,837**	**+ 0.5**	**+ 0.4**
Nutritionals	276	288	+ 4.3	+ 4.0	547	554	+ 1.3	+ 1.4
Allergy & Cold	236	272	+ 15.3	+ 10.8	546	582	+ 6.6	+ 1.9
Dermatology	298	287	– 3.7	– 4.2	543	553	+ 1.8	+ 1.6
Pain & Cardio	215	205	– 4.7	– 3.2	405	387	– 4.4	– 2.6
Digestive Health	173	190	+ 9.8	+ 7.9	348	359	+ 3.2	+ 0.9
Other[3]	215	200	– 6.9	– 0.4	433	402	– 7.1	– 2.0

Fx & p adj. = currency- and portfolio-adjusted

[1] In line with the internal financial management system implemented on January 1, 2019, the sales commentary for Consumer Health is now based primarily on regions and categories rather than products. These categories comprise Nutritionals (e.g. Elevit™, One A Day™), Allergy & Cold (e.g. Claritin™, Alka-Seltzer™ Plus, Aspirin™ Cold), Dermatology (e.g. Bepanthen™, Canesten™), Pain & Cardio (e.g. Aleve™, Aspirin™) and Digestive Health (e.g. MiraLAX™, Alka-Seltzer™).

[2] For definition see Annual Report 2018, A 2.4 “Alternative Performance Measures Used by the Bayer Group.”

[3] Including our foot care business, the sun care business divested in May that is yet to be transferred, and the prescription dermatology business divested to LEO Pharma that was transferred on July 1, 2019. The divested U.S. prescription dermatology business is included until September 4, 2018, the date the business was transferred.

Earnings

EBITDA before special items of Consumer Health increased by 5.5% to €270 million in the second quarter of 2019 (Q2 2018: €256 million). Positive contributions to earnings came primarily from the efficiency program initiated at the end of 2018, which led to a significant decrease in selling expenses, as well as from sales growth. Earnings were diminished by the absence of the contribution from the divested U.S. prescription dermatology business.

EBIT came in at minus €293 million (Q2 2018: plus €157 million) after net special charges of €468 million (Q2 2018: net special gains of €1 million). These mainly comprised €421 million in impairment losses in connection with the agreed divestment of our Dr. Scholl’s™ foot care portfolio, as well as charges related to the aforementioned efficiency program and expenses in connection with the divestment of the remaining global prescription dermatology business.

A 13

Special Items[1] **Consumer Health**

€ million	EBIT Q2 2018	EBIT Q2 2019	EBIT H1 2018	EBIT H1 2019	EBITDA Q2 2018	EBITDA Q2 2019	EBITDA H1 2018	EBITDA H1 2019
Restructuring	1	(28)	(4)	(47)	1	(28)	(4)	(47)
Impairment losses/ loss reversals	–	(417)	–	(417)	–	–	–	–
Divestments	–	(23)	–	(32)	–	(23)	–	(32)
Total special items	**1**	**(468)**	**(4)**	**(496)**	**1**	**(51)**	**(4)**	**(79)**

[1] For definition see Annual Report 2018, A 2.4 “Alternative Performance Measures Used by the Bayer Group.”

First half of 2019

Sales

Sales of Consumer Health were level year on year in the first six months of 2019 at €2,837 million (Fx & portfolio adj. + 0.4%). We again achieved encouraging growth in Asia / Pacific and in Latin America but posted declines in North America. Sales came in below the prior-year level in Europe / Middle East / Africa, primarily due to supply disruptions in the first quarter of 2019.

Earnings

EBITDA before special items of Consumer Health declined by 3.5% in the first half of 2019 to €549 million (H1 2018: €569 million). Positive contributions to earnings came primarily from the efficiency program initiated at the end of 2018, which led to a significant decrease in selling expenses, as well as from sales growth. Earnings were held back by a higher cost of goods sold and the absence of the contribution from the divested U.S. prescription dermatology business.

EBIT amounted to minus €132 million (H1 2018: plus €368 million) after net special charges of €496 million (H1 2018: €4 million). As was the case in the second quarter, these were mainly attributable to the aforementioned divestment-related impairments and the efficiency program.

Animal Health

A 14

Key Data – Animal Health

€ million	Q2 2018	Q2 2019	Change %[1] Reported	Change %[1] Fx & p adj.	H1 2018	H1 2019	Change %[1] Reported	Change %[1] Fx & p adj.
Sales	**453**	**454**	**+ 0.2**	**– 2.7**	**867**	**875**	**+ 0.9**	**– 1.8**
Change in sales[1]								
Volume	+ 9.6%	– 6.5%			+ 6.2%	– 4.7%		
Price	– 2.0%	+ 3.8%			– 0.8%	+ 2.9%		
Currency	– 6.9%	+ 2.9%			– 8.0%	+ 2.7%		
Portfolio	0.0%	0.0%			0.0%	0.0%		
Sales by region								
Europe / Middle East / Africa	116	113	– 2.6	– 0.3	252	262	+ 4.0	+ 5.1
North America	220	215	– 2.3	– 8.4	380	368	– 3.2	– 9.7
Asia / Pacific	81	87	+ 7.4	+ 5.5	158	167	+ 5.7	+ 3.4
Latin America	36	39	+ 8.3	+ 8.8	77	78	+ 1.3	+ 3.8
EBITDA[1]	**125**	**107**	**– 14.4**		**264**	**243**	**– 8.0**	
Special items[1]	(3)	(17)			(3)	(21)		
EBITDA before special items[1]	**128**	**124**	**– 3.1**		**267**	**264**	**– 1.1**	
EBITDA margin before special items[1]	28.3%	27.3%			30.8%	30.2%		
EBIT[1]	**116**	**97**	**– 16.4**		**245**	**223**	**– 9.0**	
Special items[1]	(3)	(17)			(3)	(21)		
EBIT before special items[1]	**119**	**114**	**– 4.2**		**248**	**244**	**– 1.6**	
Net cash provided by operating activities	**88**	**71**	**– 19.3**		**101**	**53**	**– 47.5**	
Capital expenditures	9	15	+ 66.7		14	29	+ 107.1	
Research and development expenses	37	35	– 5.4		67	64	– 4.5	

Fx & p adj. = currency- and portfolio-adjusted

[1] For definition see Annual Report 2018, A 2.4 "Alternative Performance Measures Used by the Bayer Group."

Second quarter of 2019

Sales

Sales of Animal Health fell by 2.7% (Fx & portfolio adj.) to €454 million in the second quarter of 2019, due especially to substantial volume declines in the United States following a strong prior-year quarter. The positive developments in Asia / Pacific and Latin America were insufficient to fully offset this effect.

- // Sales of our **Advantage™** family of flea, tick and worm control products were down as expected, mainly as a result of the strong prior-year quarter which had benefited from shifts in demand in the United States. Expanded volumes and price increases in the United Kingdom and China only partially offset these declines.
- // Business with our **Seresto™** flea and tick collar expanded, driven by price and volume increases in the United States, improved demand in Italy and a successful product launch in China.

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Best-Selling Animal Health Products

€ million	Q2 2018	Q2 2019	Change %[1] Reported	Change %[1] Fx & p adj.	H1 2018	H1 2019	Change %[1] Reported	Change %[1] Fx & p adj.
Advantage™ product family	156	134	– 14.1	– 16.8	270	238	– 11.9	– 14.8
Seresto™	99	111	+ 12.1	+ 8.0	187	211	+ 12.8	+ 9.2
Drontal™ product family	30	32	+ 6.7	+ 0.8	61	64	+ 4.9	+ 1.6
Baytril™	24	26	+ 8.3	+ 7.5	49	53	+ 8.2	+ 6.3
Total	**309**	**303**	**– 1.9**	**– 5.3**	**567**	**566**	**– 0.2**	**– 3.3**
Proportion of Animal Health sales	68%	67%			65%	65%		

Fx & p adj. = currency- and portfolio-adjusted
[1] For definition see Annual Report 2018, A 2.4 "Alternative Performance Measures Used by the Bayer Group."

Earnings

EBITDA before special items of Animal Health declined by 3.1% to €124 million in the second quarter of 2019 (Q2 2018: €128 million). Lower demand had a negative effect that was partly offset by price increases and reduced spending, including selling expenses.

EBIT declined by 16.4% to €97 million after net special charges of €17 million (Q2 2018: €3 million) that were related to the intended separation of the segment from Bayer.

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Special Items[1] Animal Health

€ million	EBIT Q2 2018	EBIT Q2 2019	EBIT H1 2018	EBIT H1 2019	EBITDA Q2 2018	EBITDA Q2 2019	EBITDA H1 2018	EBITDA H1 2019
Restructuring	(3)	–	(3)	–	(3)	–	(3)	–
Divestments	–	(17)	–	(21)	–	(17)	–	(21)
Total special items	**(3)**	**(17)**	**(3)**	**(21)**	**(3)**	**(17)**	**(3)**	**(21)**

[1] For definition see Annual Report 2018, A 2.4 "Alternative Performance Measures Used by the Bayer Group."

First half of 2019

Sales

Sales of Animal Health fell by 1.8% (Fx & portfolio adj.) in the first six months of 2019 to €875 million. Lower demand in North America was not offset by sales gains in the other regions.

Earnings

EBITDA before special items of Animal Health decreased by 1.1% to €264 million in the first half of 2019 (H1 2018: €267 million). Lower volumes were nearly offset, in particular by price increases and a reduced cost of goods sold.

EBIT declined by 9.0% to €223 million after net special charges of €21 million (H1 2018: €3 million) in connection with the intended separation of the segment from Bayer.

1.3 Asset and Financial Position of the Bayer Group

Statement of Cash Flows

A 17

Bayer Group Summary Statements of Cash Flows

€ million	Q2 2018	Q2 2019	H1 2018	H1 2019
Net cash provided by (used in) operating activities (total)	**2,240**	**1,600**	**2,898**	**2,679**
Net cash provided by (used in) investing activities (total)	**(37,925)**	**(544)**	**(39,983)**	**(467)**
Net cash provided by (used in) financing activities (total)	**35,746**	**(1,735)**	**35,165**	**(2,903)**
Change in cash and cash equivalents due to business activities	**61**	**(679)**	**(1,920)**	**(691)**
Cash and cash equivalents at beginning of period	**5,338**	**4,062**	**7,435**	**4,052**
Change due to exchange rate movements and to changes in scope of consolidation	(388)	(2)	(504)	20
Cash and cash equivalents at end of period	**5,011**	**3,381**	**5,011**	**3,381**

Previous periods restated

Net cash provided by operating activities

// In the second quarter of 2019, the net cash provided by operating activities declined by 28.6% to €1,600 million.
// The significant decline is due to the seasonality of the newly acquired Crop Science business. Since the acquisition closed in June 2018, the high cash outflows in April and May 2018 were not taken into account, whereas the cash inflows from trade accounts receivable were included in both years.
// Cash outflows for the second quarter of 2019 also included the payment of tax on the gain arising from the divestments to BASF.

// In the first half of 2019, operating cash flow decreased by 7.6% to €2,679 million.
// The first-time application of IFRS 16 had a slightly positive effect on the operating cash flow because lease expenses were no longer recognized in operating income.

Net cash used in investing activities

// Cash outflows for property, plant and equipment and intangible assets were level year on year in the second quarter of 2019, at €458 million (Q2 2018: €459 million).
// Net cash outflows for current and noncurrent financial assets totaled €74 million (Q2 2018: inflow of €7,635 million).
// The figure for the prior-year period included cash outflows of €45,290 million for the acquisition of Monsanto.

// Cash outflows for property, plant and equipment and intangible assets were 5.6% higher in the first half of 2019, at €853 million (H1 2018: €808 million).
// Net cash inflows for current and noncurrent financial assets totaled €311 million (H1 2018: €5,700 million).

Net cash used in financing activities

// In the second quarter of 2019, there was a net cash outflow of €1,735 million for financing activities, mainly for the dividend payment of €2,611 million (Q2 2018: €2,403 million). Net borrowings resulted in an inflow of €1,325 million (Q2 2018: €29,151 million). The figure for the prior-year period included cash received as part of the financing activities for the Monsanto acquisition.

// The net cash outflow for financing activities in the first half of 2019 amounted to €2,903 million, with net borrowings resulting in an inflow of €357 million (H1 2018: €28,644 million).

// The cash outflow increased slightly as a result of the first-time application of IFRS 16 because the repayment component of lease payments and the interest expense were recognized in the financing cash flow.

Free cash flow

// Free cash flow, which is the total operating cash flow less capital expenditures plus interest and dividends received less interest paid, was €751 million in the second quarter of 2019 (Q2 2018: €1,916 million). As already indicated, this significant decline is due to the seasonality of the newly acquired Crop Science business. Since the acquisition closed in June 2018, the high cash outflows in April and May 2018 were not taken into account.

// For the first six months, free cash flow was €1,259 million (H1 2018: €2,173 million).

Liquid assets and net financial debt

A 18

Net Financial Debt[1]

€ million	Dec. 31, 2018	March 31, 2019	June 30, 2019	Change %
Bonds and notes/promissory notes	35,402	35,840	35,482	– 1.0
of which hybrid bonds[2]	4,537	4,538	4,539	0.0
Liabilities to banks[3]	4,865	4,150	4,420	+ 6.5
Lease liabilities	399	1,370	1,308	– 4.5
Liabilities from derivatives[4]	172	113	127	+ 12.4
Other financial liabilities	556	664	1,991	+ 199.8
Receivables from derivatives[4]	(137)	(181)	(89)	– 50.8
Financial debt	**41,257**	**41,956**	**43,239**	**+ 3.1**
Cash and cash equivalents	(4,052)	(4,062)	(3,343)	– 17.7
Current financial assets[5]	(930)	(478)	(567)	+ 18.6
Shares in Covestro[6]	(596)	(676)	(521)	– 22.9
Net financial debt	**35,679**	**36,740**	**38,808**	**+ 5.6**

[1] For definition see Annual Report 2018, A 2.4 “Alternative Performance Measures Used by the Bayer Group.”
[2] Classified as debt according to IFRS
[3] These include both financial and nonfinancial liabilities.
[4] These include the market values of interest-rate and currency hedges of recorded transactions.
[5] These include short-term receivables with maturities between 3 and 12 months outstanding from banks and other companies as well as financial investments in debt and equity instruments that were recorded as current on first-time recognition.
[6] Covestro shares are held for risk management purposes relating to the exchangeable bond issued in 2017 that matures in 2020.

// Net financial debt of the Bayer Group increased by €2.1 billion in the second quarter of 2019, due mainly to the dividend payment.

// The other financial liabilities as of June 30, 2019, contained €312 million related to the mandatory convertible notes issued in November 2016 and €1.2 billion in commercial paper.

// Net financial debt includes three subordinated hybrid bonds with a total volume of €4.5 billion, 50% of which is treated as equity by the rating agencies. As such, the hybrid bonds have a positive impact on the Group’s rating-specific debt indicators.

// Our credit standing with the rating agencies is outlined in the table below, with the investment-grade ratings from all three agencies demonstrating good creditworthiness.

A 19

Rating

Rating agency	Long-term rating	Short-term rating	Outlook
S&P Global Ratings	BBB	A2	stable
Moody's	Baa1	P2	negative
Fitch Ratings	BBB+	F2	negative

Asset and capital structure

A 20

Bayer Group Summary Statements of Financial Position

€ million	Dec. 31, 2018	March 31, 2019	June 30, 2019	Change %
Noncurrent assets	**95,667**	**97,811**	**95,615**	**– 2.2**
Assets held for sale	234	232	1,609	.
Other current assets	30,831	32,395	31,161	– 3.8
Current assets	**31,065**	**32,627**	**32,770**	**+ 0.4**
Total assets	**126,732**	**130,438**	**128,385**	**– 1.6**
Equity	**46,148**	**48,081**	**44,947**	**– 6.5**
Noncurrent liabilities	57,459	58,378	58,047	– 0.6
Liabilities directly related to assets held for sale	12	14	33	+ 135.7
Other current liabilities	23,113	23,965	25,358	+ 5.8
Current liabilities	23,125	23,979	25,391	+ 5.9
Liabilities	**80,584**	**82,357**	**83,438**	**+ 1.3**
Total equity and liabilities	**126,732**	**130,438**	**128,385**	**– 1.6**

Previous periods restated

// Between March 31, 2019, and June 30, 2019, total assets decreased by €2.1 billion to €128.4 billion.
// Noncurrent assets fell by €2.2 billion to €95.6 billion. This development is primarily attributable to a €1.7 billion decline in other intangible assets due to higher amortization and impairment losses and a reclassification to assets held for sale, as well as to a €0.7 billion decline in the value of goodwill.
// In connection with the divestment of Dr. Scholl's™, we recognized impairment losses of €0.4 billion that partly resulted from the impairment of the proportionate goodwill to be transferred.
// Total current assets increased by €0.1 billion to €32.8 billion. This change was mainly the result of a €1.4 billion increase in assets held for sale, which was partly offset by a €0.7 billion decline in cash and cash equivalents and a €0.3 billion decrease in other receivables.
// Equity was down by €3.1 billion compared with March 31, 2019, at €44.9 billion. The equity ratio (equity coverage of total assets) as of June 30, 2019, was 35.0% (March 31, 2019: 36.9%).
// Liabilities rose by €1.1 billion as of June 30, 2019, to €83.4 billion, with current liabilities increasing by €1.4 billion and noncurrent liabilities declining by €0.3 billion.

2. Research, Development, Innovation

Leaps by Bayer

We acquired a 28% interest in Century Therapeutics LLC., Philadelphia, United States in June through Leaps by Bayer, our innovation and collaboration model. Founded in 2018 by U.S. companies Versant Ventures, San Francisco, and Fujifilm Cellular Dynamics, Inc., Madison, Century Therapeutics develops allogeneic immune cell therapies for cancer. The foundational technology is built on induced pluripotent stem cells that have unlimited self-renewing capacity. The company secured an investment of US$250 million, with Bayer committing US$215 million as an integral partner. The proceeds will enable Century Therapeutics to advance multiple programs into the clinic for hematologic and solid malignancies.

Crop Science

Planned investment in research and development

As announced in June, we plan to invest some €5 billion in additional weed control methods over the next 10 years as part of our research and development expenses. This includes research into resistance mechanisms, the discovery and development of new modes of action, and more precise application recommendations with the aid of digital technologies.

Collaborations

In February 2019, we announced a three-year research collaboration with Netafim Ltd., Tel Aviv, and BGN Technologies, the technology company of Ben-Gurion University of the Negev, Israel. The purpose of this project is to combine soil research, digital prediction tools and drip irrigation technologies – which are also the focus of an existing collaboration with Netafim – to develop best practices for the use of drip irrigation as a delivery system for the nematicide Velum™ Prime under typical conditions in arid regions.

Also in February, Bayer and KWS SAAT SE, Germany, granted a long-term license for their joint cultivation system Conviso™ Smart to MariboHilleshög ApS, Holeby, Denmark, a business unit of Danish seed company DLF. With this agreement, another top global sugarbeet breeder can provide farmers worldwide with the innovative Conviso™ Smart technology, which is based on conventionally bred sugarbeet varieties that are tolerant to certain herbicides. In addition to the system's broad spectrum weed control, the amount of herbicide used can be significantly reduced compared with current standards.

In June, we announced a collaboration with Arvinas, Inc., a U.S. biopharmaceutical company based in New Haven, Connecticut. Concluded in July, the agreement involves both our Crop Science and our Pharmaceuticals businesses. The collaboration aims to utilize Arvinas' novel PROTAC™ technology, which harnesses the naturally occurring protein degradation system of the cell to selectively remove target proteins by proteolysis, the breakdown of proteins into amino acids. In the Crop Science segment, we will form a joint venture with Arvinas as the first company to explore the technology's potential for agriculture and crop protection. At Pharmaceuticals, meanwhile, it will be used to develop new drug products.

Also in June, Bayer and AlphaBio Control, Cambridge, United Kingdom, signed a distribution agreement to market Flipper™, an innovative biological pest control product developed by AlphaBio. Under the terms of this agreement, AlphaBio grants Bayer a worldwide exclusive right (except France) to commercialize Flipper™ for agricultural and nonagricultural uses.

Pharmaceuticals

We are conducting clinical trials with multiple drug candidates from our research and development pipeline.

Phase II clinical projects

The following table shows our most important drug candidates currently in Phase II of clinical testing:

A 21

Research and Development Projects (Phase II)[1]

Projects	Indication
BAY 1093884 (anti-TFPI antibody)	Hemophilia
Fulacimstat (BAY 1142524, chymase inhibitor)	Chronic kidney disease
BAY 1193397 (AR alpha 2c rec ant.)	Peripheral artery disease (PAD)
Osocimab (BAY 1213790, anti-FXIa antibody)	Prevention of thrombosis
BAY 1817080 / BAY 1902607 (P2X3 antagonist)	Chronic cough
BAY 2253651 (TASK channel blocker)	Obstructive sleep apnea
BAY 2306001 (IONIS-FXIRx)[2]	Prevention of thrombosis
BAY 1753011 (vasopressin receptor antagonist)	Congestive heart failure
Levonorgestrel (progestin) + indomethacin (NSAID) combi IUS	Contraception
Rogaratinib (pan-FGFR inhibitor)	Urothelial cancer
Vericiguat (sGC stimulator)	Chronic heart failure with preserved ejection fraction (HFpEF)
Vilaprisan (S-PRM)	Endometriosis

[1] As of June 26, 2019
[2] Sponsored by Ionis Pharmaceuticals, Inc.
The nature of drug discovery and development is such that not all compounds can be expected to meet the predefined project goals. It is possible that any or all of the projects listed above may have to be discontinued due to scientific and / or commercial reasons and will not result in commercialized products. It is also possible that the requisite U.S. Food and Drug Administration (FDA), European Medicines Agency (EMA) or other regulatory approvals will not be granted for these compounds. Moreover, we regularly review our research and development pipeline so that we can give priority to advancing the most promising pharmaceuticals projects.

Phase III clinical projects

The following table shows our most important drug candidates currently in Phase III of clinical testing:

A 22

Research and Development Projects (Phase III)[1]

Projects	Indication
Copanlisib (PI3K inhibitor)	Various types of non-Hodgkin lymphoma (NHL)
Regorafenib (multikinase inhibitor)	Newly diagnosed and recurrent glioblastoma
Darolutamide (ODM-201, AR antagonist)	Hormone-sensitive metastatic prostate cancer
Finerenone (MR antagonist)	Chronic kidney disease in patients with type 2 diabetes
Molidustat (HIF-PH inhibitor)	Renal anemia
Rivaroxaban (FXa inhibitor)	Peripheral artery disease (PAD)
Rivaroxaban (FXa inhibitor)	VTE treatment in children
Vericiguat (sGC stimulator)[2]	Chronic heart failure with reduced ejection fraction (HFrEF)
Vilaprisan (S-PRM)	Symptomatic uterine fibroids

[1] As of June 26, 2019
[2] Sponsored by Merck & Co., Inc., U.S.A.
The nature of drug discovery and development is such that not all compounds can be expected to meet the predefined project goals. It is possible that any or all of the projects listed above may have to be discontinued due to scientific and / or commercial reasons and will not result in commercialized products. It is also possible that the requisite U.S. Food and Drug Administration (FDA), European Medicines Agency (EMA) or other regulatory approvals will not be granted for these compounds. Moreover, we regularly review our research and development pipeline so that we can give priority to advancing the most promising pharmaceuticals projects.

In May, the U.S. Food and Drug Administration (FDA) granted Bayer Breakthrough Therapy designation for copanlisib (Aliqopa™) for the treatment of adult patients with relapsed marginal zone lymphoma (MZL) who have received at least two prior therapies. MZL is a form of indolent non-Hodgkin lymphoma (iNHL).

Also in May, Bayer presented further data from the Phase III ARAMIS trial at the ASCO Annual Meeting in Chicago showing that darolutamide, a nonsteroidal androgen receptor antagonist, in combination with androgen deprivation therapy (ADT) delays worsening of disease-related symptoms in men with nonmetastatic castration-resistant prostate cancer (nmCRPC) compared with placebo plus ADT.

At the ASCO Annual Meeting, Bayer also presented new data confirming the efficacy of the precision oncology development candidate larotrectinib (Vitrakvi™) in both adults and children with TRK fusion cancer and brain metastases or primary tumors of the central nervous system.

Also in June, Bayer initiated a Phase III trial of its anti-VEGF treatment aflibercept (Eylea™) for intravitreal injection in retinopathy of prematurity, an eye condition in premature infants.

The enrollment of patients in the GBM AGILE trial, an international platform trial sponsored by the Global Coalition for Adaptive Research (GCAR), also began in the U.S. in June. In a multi-arm cooperation trial in brain cancer patients, Bayer is providing the active substance regorafenib, which will be evaluated first. The trial will investigate several therapies for patients with newly diagnosed or recurrent glioblastoma.

In early July, Bayer presented the findings of its Phase III EINSTEIN-Jr. trial with rivaroxaban at the International Society on Thrombosis and Haemostasis (ISTH) Congress in Melbourne, Australia. The results showed the efficacy and safety profile of rivaroxaban in children with venous thromboembolism, and were similar to those seen in previous studies in adults. A timely filing and review for the use of Xarelto™ in children in the E.U. or the United States as agreed with the European Medicines Agency (EMA) and the U.S. Food and Drug Administration (FDA), respectively, would allow for an application of the extension of the compound patent protection by six months in each case.

Filings and approvals
The most important drug candidates in the approval process are shown below.

A 23

Main Products Submitted for Approval[1]

Projects	Indication
Darolutamide (ODM-201, AR antagonist)	U.S.A., Europe, Japan: castration-resistant nonmetastatic prostate cancer
Rivaroxaban (FXa inhibitor)[2]	U.S.A.: prevention of venous thromboembolism in high-risk patients after discharge from hospital
Larotrectinib (LOXO-101, TRK fusion inhibitor)	Europe: solid tumors with NTRK gene fusions

[1] As of June 26, 2019
[2] Submitted by Janssen Research & Development, LLC

In February, Bayer completed the submission of a rolling New Drug Application for the active substance darolutamide to the U.S. Food and Drug Administration (FDA). The submission was initiated in December 2018 and is based on data from the Phase III ARAMIS trial in men with nonmetastatic castration-resistant prostate cancer (nmCRPC). In April, the U.S. FDA accepted the new drug application and granted priority review status.

In March, Bayer submitted a marketing authorization application to the European Medicines Agency (EMA) for darolutamide for the treatment of patients with nmCRPC. Also in March, Bayer submitted an application for marketing authorization to the Ministry of Health, Labor and Welfare (MHLW) in Japan for darolutamide for the treatment of patients with castration-resistant prostate cancer (CRPC).

In July, Bayer received approval from the U.S. FDA for Gadavist™ as the first and only contrast agent for use in cardiac magnetic resonance (MR) imaging to assess myocardial perfusion and late gadolinium enhancement in adult patients with known or suspected coronary artery disease (CAD).

Collaborations
In May 2019, Bayer and Foundation Medicine Inc., Cambridge, Massachusetts, United States, signed a global collaboration agreement for the development and commercialization of therapy-accompanying diagnostic tests, also known as companion diagnostics (CDx), based on next-generation sequencing for new cancer drugs developed by Bayer. The agreement allows for collaboration across multiple treatment programs and covers Foundation Medicine's full portfolio of tests, including FoundationOne™ CDx. The first project will be to develop a CDx test in the United States for larotrectinib (Vitrakvi™), a precision-oncological active substance from Bayer that is already approved in the United States and has been submitted for marketing authorization in Europe.

At Pharmaceuticals, Bayer's focus as part of the aforementioned collaboration with Arvinas, Inc., is on developing next-generation drug candidates for the treatment of cardiovascular, oncological and gynecological diseases. Under the terms of the agreement, Arvinas will receive an upfront payment and pharmaceutical R&D support over the next four years, as well as a direct equity investment by Bayer.

Consumer Health
In April, we launched our product Menevit™ on the Chinese market. Menevit™ is a product line extension of our prenatal vitamin Elevit™ that was developed for men and features an improved formulation fortified with plant-based ingredients.

Animal Health
In April, we signed a global collaboration agreement with adivo GmbH, Germany, to develop therapeutic antibodies for veterinary medicine.

3. Report on Future Perspectives and on Opportunities and Risks

3.1 Future Perspectives

3.1.1 Economic Outlook

A 24

Economic Outlook[1]

	Growth 2018	Growth forecast 2019
World	+ 3.2%	+ 2.8%
European Union	+ 2.0%	+ 1.4%
of which Germany	+ 1.5%	+ 0.8%
United States	+ 2.9%	+ 2.5%
Emerging Markets[2]	+ 4.8%	+ 4.5%

[1] Real growth of gross domestic product, source: IHS Markit
[2] Including about 50 countries defined by IHS Markit as Emerging Markets in line with the World Bank
As of July 2019

We continue to expect global economic growth to slow over the course of 2019 compared with the previous year. Economic growth is being restrained by the intensifying trade disputes, particularly in the United States and China. Growth in Europe is also being held back by political uncertainties such as those related to Brexit. The economic outlook has weakened, primarily in Germany. In the Emerging Markets, too, economic expansion is likely to be slower than in the previous year. In addition to the trade disputes, political uncertainties are also having an impact, especially in a number of Latin American countries.

A 25

Economic Outlook for the Segments[1]

	Growth 2018	Growth forecast 2019
Seed and crop protection market	+ 3%	0%
Pharmaceuticals market	+ 5%	+ 6%
Consumer health market	+ 4%	+ 4%
Animal health market	+ 5%	+ 4%

2018 figures restated
[1] Bayer's estimate, except pharmaceuticals; source for pharmaceuticals market: IQVIA Market Prognosis 2019-2023 (May 2019 update); all rights reserved; currency-adjusted.
As of July 2019

We no longer anticipate any growth in the seed and crop protection market in 2019 (previously: + 3%). This is mainly due to the weather conditions in the Midwestern United States, where flooding and heavy rains led to delayed sowing and an overall reduction in acreages, as well as to the trade dispute between the United States and China, which is particularly impacting planting decisions for corn and soybeans. In addition, the outbreak of African swine fever in China is reducing demand for animal feed, particularly soybeans.

3.1.2 Corporate Outlook

Based on the business development described in this report and our internal planning, we confirm the outlook published in February in our Annual Report 2018 for the Bayer Group and its segments for fiscal 2019 with regard to currency- and portfolio-adjusted sales growth and the further key data. However, this outlook is becoming increasingly ambitious in view of the challenging environment for our Crop Science business.

3.2 Opportunities and Risks

As a global enterprise with a diversified portfolio, the Bayer Group is exposed to a wide range of internal or external developments or events that could significantly impact the achievement of our financial and nonfinancial objectives.

Opportunity and risk management at Bayer forms an integral part of the Group-wide corporate governance system. Our opportunity and risk management process and the fundamental opportunity and risk status are outlined in detail in the Annual Report 2018, A 3.2 "Opportunity and Risk Report."

Overall assessment by the Board of Management

We currently have not identified any material changes in the risk situation compared with the assessment given in the Annual Report 2018. We currently are not aware of any individual risks, risk combinations or risk interdependencies that could endanger the Bayer Group's continued existence.

Significant developments that have occurred in respect of the legal risks since publication of the Bayer Annual Report 2018 (Note [29] to the Consolidated Financial Statements) are described in the Notes to the Condensed Consolidated Interim Financial Statements under "Legal Risks."

Condensed Consolidated Interim Financial Statements as of June 30, 2019

Bayer Group Consolidated Income Statements

B 1

€ million	Q2 2018	Q2 2019	H1 2018	H1 2019
Net sales	**9,481**	**11,485**	**18,619**	**24,500**
Cost of goods sold	(3,507)	(4,399)	(6,416)	(9,655)
Gross profit	**5,974**	**7,086**	**12,203**	**14,845**
Selling expenses	(2,942)	(3,512)	(5,451)	(6,548)
Research and development expenses	(1,267)	(1,351)	(2,307)	(2,707)
General administration expenses	(576)	(935)	(1,003)	(2,104)
Other operating income	185	346	337	480
Other operating expenses	(28)	(708)	(123)	(1,090)
EBIT[1]	**1,346**	**926**	**3,656**	**2,876**
Equity-method income (loss)	27	(18)	98	(37)
Financial income	160	68	530	238
Financial expenses	(510)	(527)	(821)	(994)
Financial result	**(323)**	**(477)**	**(193)**	**(793)**
Income before income taxes	**1,023**	**449**	**3,463**	**2,083**
Income taxes	(215)	(44)	(709)	(442)
Income from continuing operations after income taxes	**808**	**405**	**2,754**	**1,641**
of which attributable to noncontrolling interest	6	1	6	(4)
of which attributable to Bayer AG stockholders	**802**	**404**	**2,748**	**1,645**
Income from discontinued operations after income taxes	**(8)**	–	–	–
of which attributable to noncontrolling interest	–	–	–	–
of which attributable to Bayer AG stockholders	**(8)**	–	–	–
Income after income taxes	**800**	**405**	**2,754**	**1,641**
of which attributable to noncontrolling interest	6	1	6	(4)
of which attributable to Bayer AG stockholders (net income)	**794**	**404**	**2,748**	**1,645**
Shares (million)				
Weighted average number of shares[2]	**915.69**	**981.73**	**900.70**	**980.95**
€				
Earnings per share				
From continuing operations				
Basic	0.88	0.41	3.05	1.68
Diluted	0.88	0.41	3.05	1.68
From discontinued operations				
Basic	(0.01)	0.00	0.00	0.00
Diluted	(0.01)	0.00	0.00	0.00
From continuing and discontinued operations				
Basic	0.87	0.41	3.05	1.68
Diluted	0.87	0.41	3.05	1.68

2018 figures restated
[1] For definition see Annual Report 2018, A 2.4 “Alternative Performance Measures Used by the Bayer Group.”
[2] Weighted average number of shares (basic and diluted) restated for all periods prior to June 2018 to reflect the effect of the bonus component of the subscription rights issued as part of the June 2018 capital increase

Bayer Group Consolidated Statements of Comprehensive Income

B 2

€ million	Q2 2018	Q2 2019	H1 2018	H1 2019
Income after income taxes	**800**	**405**	**2,754**	**1,641**
of which attributable to noncontrolling interest	6	1	6	(4)
of which attributable to Bayer AG stockholders	794	404	2,748	1,645
Remeasurements of the net defined benefit liability for post-employment benefit plans	82	(1,009)	(94)	(1,201)
Income taxes	59	345	58	421
Other comprehensive income from remeasurements of the net defined benefit liability for post-employment benefit plans	**141**	**(664)**	**(36)**	**(780)**
Changes in the fair value of own credit risk component of financial liabilities measured at fair value	–	(1)	–	(3)
Income taxes	–	–	–	1
Other comprehensive income relating to own credit risk component of financial liabilities measured at fair value	**–**	**(1)**	**–**	**(2)**
Changes in the fair value of equity instruments measured at fair value	90	56	185	105
Income taxes	(2)	(3)	(2)	(5)
Other comprehensive income from equity instruments measured at fair value	**88**	**53**	**183**	**100**
Other comprehensive income relating to associates accounted for using the equity method	**17**	**–**	**4**	**–**
Other comprehensive income that will not be reclassified subsequently to profit or loss	**246**	**(612)**	**151**	**(682)**
Changes in the fair value of cash flow hedges	292	64	352	(120)
Reclassified to profit or loss	(26)	38	(57)	108
Reclassified to goodwill	(37)	–	(37)	–
Income taxes	(75)	(24)	(83)	10
Other comprehensive income from cash flow hedges	**154**	**78**	**175**	**(2)**
Changes in exchange differences recognized on translation of operations outside the eurozone	1,021	(400)	639	449
Reclassified to profit or loss	–	–	–	–
Other comprehensive income from exchange differences	**1,021**	**(400)**	**639**	**449**
Other comprehensive income relating to associates accounted for using the equity method	**3**	**1**	**2**	**–**
Other comprehensive income that may be reclassified subsequently to profit or loss	**1,178**	**(321)**	**816**	**447**
Total other comprehensive income[1]	**1,424**	**(933)**	**967**	**(235)**
of which attributable to noncontrolling interest	(1)	(1)	(5)	4
of which attributable to Bayer AG stockholders	1,425	(932)	972	(239)
Total comprehensive income	**2,224**	**(528)**	**3,721**	**1,406**
of which attributable to noncontrolling interest	5	–	1	–
of which attributable to Bayer AG stockholders	2,219	(528)	3,720	1,406

2018 figures restated
[1] Total income and expense items (including reclassifications) that may not or must not be recognized through profit or loss according to other IFRS

Bayer Group Consolidated Statements of Financial Position

B 3

€ million	June 30, 2018	June 30, 2019	Dec. 31, 2018
Noncurrent assets			
Goodwill	39,518	38,368	38,442
Other intangible assets	38,154	34,904	36,696
Property, plant and equipment	13,098	13,689	12,943
Investments accounted for using the equity method	501	629	515
Other financial assets	2,761	2,227	2,212
Other receivables	783	572	526
Deferred taxes	5,072	5,226	4,333
	99,887	**95,615**	**95,667**
Current assets			
Inventories	10,950	10,391	11,132
Trade accounts receivable	14,281	14,243	11,714
Other financial assets	1,557	869	1,166
Other receivables	1,628	1,537	1,958
Claims for income tax refunds	617	778	809
Cash and cash equivalents	4,981	3,343	4,052
Assets held for sale	3,719	1,609	234
	37,733	**32,770**	**31,065**
Total assets	**137,620**	**128,385**	**126,732**
Equity			
Capital stock	2,387	2,387	2,387
Capital reserves	18,388	18,388	18,388
Other reserves	26,367	24,001	25,202
Equity attributable to Bayer AG stockholders	**47,142**	**44,776**	**45,977**
Equity attributable to noncontrolling interest	73	171	171
	47,215	**44,947**	**46,148**
Noncurrent liabilities			
Provisions for pensions and other post-employment benefits	8,374	9,799	8,717
Other provisions	2,442	4,012	3,418
Refund liabilities	225	164	160
Contract liabilities	889	892	986
Financial liabilities	42,593	36,723	37,712
Income tax liabilities	1,210	1,567	1,433
Other liabilities	307	323	366
Deferred taxes	7,334	4,567	4,667
	63,374	**58,047**	**57,459**
Current liabilities			
Other provisions	2,597	3,023	3,365
Refund liabilities	5,920	6,668	3,622
Contract liabilities	444	816	3,235
Financial liabilities	9,536	6,605	3,682
Trade accounts payable	4,969	5,384	6,038
Income tax liabilities	504	735	1,050
Other liabilities	2,392	2,127	2,121
Liabilities directly related to assets held for sale	669	33	12
	27,031	**25,391**	**23,125**
Total equity and liabilities	**137,620**	**128,385**	**126,732**

Previous periods restated

Bayer Group Consolidated Statements of Cash Flows

B 4

€ million	Q2 2018	Q2 2019	H1 2018	H1 2019
Income from continuing operations after income taxes	808	405	2,754	1,641
Income taxes	215	44	709	442
Financial result	323	477	193	793
Income taxes paid	(540)	(914)	(928)	(1,399)
Depreciation, amortization and impairments	685	1,560	1,193	2,748
Change in pension provisions	(73)	(115)	(171)	(223)
(Gains) losses on retirements of noncurrent assets	(40)	(59)	(60)	56
Decrease (increase) in inventories	253	132	169	588
Decrease (increase) in trade accounts receivable	1,458	(66)	109	(2,316)
(Decrease) increase in trade accounts payable	(39)	(250)	(475)	(438)
Changes in other working capital, other noncash items	(810)	386	(595)	787
Net cash provided by (used in) operating activities (total)	**2,240**	**1,600**	**2,898**	**2,679**
Cash outflows for additions to property, plant, equipment and intangible assets	(459)	(458)	(808)	(853)
Cash inflows from the sale of property, plant, equipment and other assets	23	51	82	65
Cash inflows from divestments	69	(57)	214	(8)
Cash inflows from (outflows for) noncurrent financial assets	1,211	28	2,988	(51)
Cash outflows for acquisitions less acquired cash	(45,316)	(64)	(45,316)	(64)
Interest and dividends received	123	58	145	82
Cash inflows from (outflows for) current financial assets	6,424	(102)	2,712	362
Net cash provided by (used in) investing activities (total)	**(37,925)**	**(544)**	**(39,983)**	**(467)**
Capital contributions	8,986	–	8,986	–
Dividend payments	(2,403)	(2,611)	(2,403)	(2,611)
Issuances of debt	56,307	3,678	57,328	4,171
Retirements of debt	(27,156)	(2,353)	(28,684)	(3,814)
Interest paid including interest-rate swaps	(361)	(453)	(444)	(659)
Interest received from interest-rate swaps	373	4	382	10
Net cash provided by (used in) financing activities (total)	**35,746**	**(1,735)**	**35,165**	**(2,903)**
Change in cash and cash equivalents due to business activities (total)	**61**	**(679)**	**(1,920)**	**(691)**
Cash and cash equivalents at beginning of period	**5,338**	**4,062**	**7,435**	**4,052**
Change in cash and cash equivalents due to changes in scope of consolidation	–	–	1	(1)
Change in cash and cash equivalents due to exchange rate movements	(388)	(2)	(505)	21
Cash and cash equivalents at end of period	**5,011**	**3,381**	**5,011**	**3,381**

Previous periods restated

Bayer Group Consolidated Statements of Changes in Equity

B 5

€ million	Capital stock	Capital reserves	Other reserves	Equity attributable to Bayer AG stockholders	Equity attributable to non-controlling interest	Equity
Dec. 31, 2017	**2,117**	**9,658**	**25,026**	**36,801**	**60**	**36,861**
Adjustment of retained earnings on adoption of IFRS 9 (net of tax)			(60)	(60)		(60)
Adjustment of retained earnings on adoption of IFRS 15 (net of tax)			86	86		86
Equity transactions with owners						
Capital increase / decrease	270	8,730		9,000		9,000
Dividend payments			(2,402)	(2,402)		(2,402)
Other changes			(4)	(4)	12	8
Total comprehensive income			3,721	3,721	1	3,722
June 30, 2018	**2,387**	**18,388**	**26,367**	**47,142**	**73**	**47,215**
Dec. 31, 2018	**2,387**	**18,388**	**25,202**	**45,977**	**171**	**46,148**
Equity transactions with owners						
Capital increase / decrease						
Dividend payments			(2,611)	(2,611)		(2,611)
Other changes			4	4		4
Miscellaneous other changes						
Total comprehensive income			1,406	1,406		1,406
June 30, 2019	**2,387**	**18,388**	**24,001**	**44,776**	**171**	**44,947**

Previous periods restated

Notes to the Condensed Consolidated Interim Financial Statements of the Bayer Group

Explanatory Notes

Accounting policies

The consolidated interim financial statements as of June 30, 2019, were prepared in condensed form in compliance with IAS 34 according to the International Financial Reporting Standards (IFRS) of the International Accounting Standards Board (IASB), London, which are endorsed by the European Union, and the Interpretations of the IFRS Interpretations Committee in effect at the closing date.

Reference should be made as appropriate to the Notes to the Consolidated Financial Statements for the 2018 fiscal year, particularly with regard to the main recognition and measurement principles, except where financial reporting standards have been applied for the first time in 2019 or an accounting policy has changed.

Financial reporting standards applied for the first time in 2019

Details of the new standards whose first-time application has a material impact on the Group's financial position and results of operations are given below.

In January 2016, the IASB published the new standard for lease accounting, IFRS 16 (Leases), which replaces the rules contained in IAS 17 (Leases) along with the associated interpretations. The new standard is to be applied for annual periods beginning on or after January 1, 2019. The standard introduces a single lessee accounting model, requiring lessees to recognize right-of-use assets for granted rights of use and corresponding lease liabilities. It eliminates the requirement for lessees to differentiate between operating leases – without recognizing the respective assets or liabilities – and finance leases. However, IFRS 16 contains the option of exercising exemptions for the recognition of short-term leases and those pertaining to low-value assets. As under the previous standard, IAS 17, lessors still have to differentiate between operating and finance leases. According to IFRS 16, subleases are classified with reference to the right-of-use asset arising from the sublease in relation to the head lease.

Bayer applied IFRS 16 for the first time as of January 1, 2019, retrospectively without restating the prior-year figures. In this connection, various options and practical expedients were exercised as of the transition date for lease agreements in which a Bayer company is the lessee. No additional assessment was undertaken upon the first-time application of the new standard with regard to whether a contract represents or contains a leasing relationship. For contracts previously classified as operating leases, Bayer measured the lease liabilities as of the date of first-time application of IFRS 16 at the present value of the outstanding lease payments, using as the discount rate the respective incremental borrowing rate as of that date. On the date of first-time application, right-of-use assets were generally measured at the amount of the lease liability, adjusted by the amounts of any prepaid or accrued lease payments and / or provisions for onerous leases recognized in the statement of financial position as of December 31, 2018. Initial direct costs were not taken into account in the measurement of right-of-use assets as of the date of first-time application. The current state of knowledge as of the date of first-time application was taken into account in making discretionary decisions.

Bayer exercised the option of exempting intangible assets from the scope of application of IFRS 16 and applying the exemptions for short-term leases to certain leases ending in 2019. It is also applying these exemptions for short-term leases beginning after December 31, 2018.

The first-time application of IFRS 16 as of January 1, 2019, resulted in the recognition of additional lease liabilities of €1.0 billion and a corresponding increase in net financial debt. Right-of-use assets, including those recognized as finance leases according to IAS 17 until December 31, 2018, rose in line with the lease liabilities by €1.0 billion as of January 1, 2019, after the adjustments resulting from the first-time application of IFRS 16.

The significant effects on the individual items in the statement of financial position that were recognized as of December 31, 2018, in line with previous requirements were as follows:

B 6

IFRS 16 Accounting Changes: Consolidated Statements of Financial Position as of January 1, 2019

€ million	Dec. 31, 2018	Adjustments due to IFRS 16	Jan. 1, 2019
Property, plant and equipment	12,943	1,012	13,955
Deferred tax assets	4,333	229	4,562
Financial liabilities	41,394	1,012	42,406
Deferred tax liabilities	4,667	232	4,899

The following right-of-use assets, including those recognized as finance leases according to IAS 17 until December 31, 2018, were recognized in property, plant and equipment as of the date of first-time application of IFRS 16:

B 7

Right-of-use assets

€ million	Jan. 1, 2019
Land and buildings	985
Plant installations and machinery	195
Furniture, fixtures and other equipment	344
Total	**1,524**

In the statement of comprehensive income, Bayer ceased recognizing expenses for operating leases in operating income and instead recognized the depreciation of the right-of-use assets and the interest expense for the lease liabilities under IFRS 16. An analogous effect occurred in the statement of cash flows, where IFRS 16 had a positive effect on the operating cash flow by reducing cash outflows for operating activities, while the repayment component of lease payments and the interest expense were recognized in the financing cash flow.

Material items in connection with the reconciliation of operating lease commitments as of December 31, 2018, to the lease liabilities recognized as of January 1, 2019, comprised €399 million in finance leases already recognized as liabilities, the €187 million discount on the lease liabilities initially recognized under IFRS 16 and €35 million in lease commitments not recognized under IFRS 16 that pertained to intangible assets.

The weighted average incremental borrowing rate for leases initially recognized upon the first-time application of IFRS 16 was 5.0%.

Changes in underlying parameters

Changes in the underlying parameters relate primarily to currency exchange rates and the interest rates used to calculate pension obligations. The exchange rates for major currencies against the euro varied as follows:

B 8

Exchange Rates for Major Currencies

€1		Closing rate Dec. 31, 2018	June 30, 2018	June 30, 2019	Average rate H1 2018	H1 2019
BRL	Brazil	4.44	4.48	4.35	4.13	4.34
CAD	Canada	1.56	1.54	1.49	1.55	1.51
CNY	China	7.87	7.72	7.82	7.70	7.68
GBP	United Kingdom	0.89	0.89	0.90	0.88	0.87
JPY	Japan	125.87	128.93	122.52	131.61	124.33
RUB	Russia	79.76	73.10	71.57	71.84	73.78
USD	United States	1.15	1.17	1.14	1.21	1.13

Argentina's economy has been considered hyperinflationary since July 1, 2018, and we therefore applied IAS 29 (Financial Reporting in Hyperinflationary Economies) for Bayer S.A., Argentina. The resulting effects in ongoing accounting have so far been immaterial for the Group.

The most important interest rates used to calculate the present value of pension obligations are given below:

B 9

Discount Rate for Pension Obligations

%	Dec. 31, 2018	March 31, 2019	June 30, 2019
Germany	1.90	1.60	1.20
United Kingdom	2.80	2.40	2.30
United States	4.20	3.90	3.50

Segment reporting

As of June 30, 2019, the Bayer Group comprises the four reportable segments Crop Science, Pharmaceuticals, Consumer Health and Animal Health.

B 10

Key Data by Segment

	Crop Science		Pharmaceuticals		Consumer Health		Animal Health	
€ million	Q2 2018	Q2 2019	Q2 2018	Q2 2019	Q2 2018	Q2 2019	Q2 2018	Q2 2019
Net sales (external)	3,011	4,788	4,217	4,422	1,413	1,442	453	454
Currency-adjusted change[1]	+46.4%	+57.9%	+2.9%	+3.7%	−1.4%	+0.8%	+7.6%	−2.7%
Intersegment sales	12	10	10	11	1	2	3	1
Net sales (total)	3,023	4,798	4,227	4,433	1,414	1,444	456	455
EBIT[1]	149	304	1,053	1,238	157	(293)	116	97
EBITDA before special items[1]	644	1,075	1,363	1,500	256	270	128	124
Net cash provided by operating activities	1,653	880	629	741	148	198	88	71
Depreciation, amortization, impairment losses/loss reversals	218	670	297	275	100	512	9	10

2018 figures restated
[1] For definition see Annual Report 2018, A 2.4 "Alternative Performance Measures Used by the Bayer Group."

B 10 continued

Key Data by Segment

€ million	All other segments		Reconciliation: Corporate functions and consolidation		Group	
	Q2 2018	Q2 2019	Q2 2018	Q2 2019	Q2 2018	Q2 2019
Net sales (external)	378	375	9	4	9,481	11,485
Currency-adjusted change[1]	+ 52.5%	− 1.9%	–	–	+ 14.6%	+ 19.9%
Intersegment sales	624	631	(650)	(655)	0	0
Net sales (total)	1,002	1,006	(641)	(651)	9,481	11,485
EBIT[1]	24	2	(153)	(422)	1,346	926
EBITDA before special items[1]	93	119	(136)	(161)	2,348	2,927
Net cash provided by operating activities	24	617	(302)	(907)	2,240	1,600
Depreciation, amortization, impairment losses / loss reversals	57	89	4	4	685	1,560

2018 figures restated
[1] For definition see Annual Report 2018, A 2.4 "Alternative Performance Measures Used by the Bayer Group."

B 11

Key Data by Segment

€ million	Crop Science		Pharmaceuticals		Consumer Health		Animal Health	
	H1 2018	H1 2019	H1 2018	H1 2019	H1 2018	H1 2019	H1 2018	H1 2019
Net sales (external)	5,872	11,232	8,292	8,776	2,822	2,837	867	875
Currency-adjusted change[1]	+ 18.4%	+ 90.6%	+ 2.8%	+ 4.4%	− 1.8%	− 0.9%	+ 5.4%	− 1.8%
Intersegment sales	20	24	19	21	2	3	5	2
Net sales (total)	5,892	11,256	8,311	8,797	2,824	2,840	872	877
EBIT[1]	1,041	1,300	2,216	2,437	368	(132)	245	223
EBITDA before special items[1]	1,686	3,397	2,778	3,012	569	549	267	264
Net cash provided by operating activities	950	409	1,861	2,034	321	430	101	53
Depreciation, amortization, impairment losses / loss reversals	307	1,378	548	572	197	602	19	20

2018 figures restated
[1] For definition see Annual Report 2018, A 2.4 "Alternative Performance Measures Used by the Bayer Group."

B 11 continued

Key Data by Segment

€ million	All other segments		Reconciliation: Corporate functions and consolidation		Group	
	H1 2018	H1 2019	H1 2018	H1 2019	H1 2018	H1 2019
Net sales (external)	756	774	10	6	18,619	24,500
Currency-adjusted change[1]	+ 50.3%	+ 1.9%	–	–	+ 7.9%	+ 30.4%
Intersegment sales	1,219	1,316	(1,265)	(1,366)	0	0
Net sales (total)	1,975	2,090	(1,255)	(1,360)	18,619	24,500
EBIT[1]	46	(30)	(260)	(922)	3,656	2,876
EBITDA before special items[1]	180	197	(236)	(304)	5,244	7,115
Net cash provided by operating activities	(219)	616	(116)	(863)	2,898	2,679
Depreciation, amortization, impairment losses / loss reversals	114	168	8	8	1,193	2,748

2018 figures restated
[1] For definition see Annual Report 2018, A 2.4 "Alternative Performance Measures Used by the Bayer Group."

To simplify the consolidation process, leases between fully consolidated companies continue to be recognized as operating leases under IAS 17 within the segment data in the consolidated financial statements of the Bayer Group even after the first-time application of IFRS 16 as of January 1, 2019. This does not have any relevant impact on the respective key data used in the steering of the company and internal reporting to the Board of Management as the chief operating decision-maker.

The following table shows the reconciliation of EBITDA before special items of the above-mentioned segments and the reconciliation to income before income taxes of the Group from continuing operations:

B 12

Reconciliation of Segments' EBITDA Before Special Items to Group Income Before Income Taxes

€ million	Q2 2018	Q2 2019	H1 2018	H1 2019
EBITDA before special items of segments	2,484	3,088	5,480	7,419
EBITDA before special items of corporate functions and consolidation	(136)	(161)	(236)	(304)
EBITDA before special items[1]	**2,348**	**2,927**	**5,244**	**7,115**
Depreciation, amortization and impairment losses/loss reversals before special items of segments	(636)	(1,140)	(1,140)	(2,324)
Depreciation, amortization and impairment losses/loss reversals before special items of corporate functions and consolidation	(4)	(2)	(8)	(6)
Depreciation, amortization and impairment losses/loss reversals before special items	**(640)**	**(1,142)**	**(1,148)**	**(2,330)**
EBIT before special items of segments	1,848	1,948	4,340	5,095
EBIT before special items of corporate functions and consolidation	(140)	(163)	(244)	(310)
EBIT before special items[1]	**1,708**	**1,785**	**4,096**	**4,785**
Special items of segments	(349)	(600)	(424)	(1,297)
Special items of corporate functions and consolidation	(13)	(259)	(16)	(612)
Special items[1]	**(362)**	**(859)**	**(440)**	**(1,909)**
EBIT of segments	1,499	1,348	3,916	3,798
EBIT of corporate functions and consolidation	(153)	(422)	(260)	(922)
EBIT[1]	**1,346**	**926**	**3,656**	**2,876**
Financial result	(323)	(477)	(193)	(793)
Income before income taxes	**1,023**	**449**	**3,463**	**2,083**

2018 figures restated
[1] For definition see Annual Report 2018, A 2.4 "Alternative Performance Measures Used by the Bayer Group."

Prior to April 1, 2019, special items pertaining to the integration of Monsanto's corporate functions were reported in the category "acquisition and integration costs" at Crop Science. Since April 1, 2019, we have reported these special items in the category "restructuring" as part of the Bayer 2022 platform program (Reconciliation).

Scope of consolidation

Changes in the scope of consolidation

The consolidated financial statements as of June 30, 2019, included 412 companies (December 31, 2018: 420 companies). Ten joint ventures (December 31, 2018: ten) and seven associates (December 31, 2018: five) were accounted for in the consolidated financial statements using the equity method according to IAS 28 (Investments in Associates and Joint Ventures). As the parent company of the Covestro Group, Covestro AG was accounted for in the consolidated financial statements using the equity method until May 2018. Since May 2018, Bayer has reported its interest in Covestro as an equity instrument.

Acquisitions, divestments and discontinued operations

Acquisitions in 2019

On June 21, 2019, Bayer acquired 28% of the shares of Century Therapeutics LLC, Philadelphia, Pennsylvania, United States. The purchase price was US$145 million, comprising an initial payment of US$75 million and an assumed liability of US$70 million. A further payment of US$70 million will be made upon the achievement of certain milestones, bringing Bayer's interest in Century Therapeutics LLC to 36%. In view of Bayer's significant influence, the investment is accounted for in the consolidated financial statements as an associate using the equity method. Century Therapeutics LLC, founded in 2018 by U.S. companies Versant Ventures, San Francisco, and Fujifilm Cellular Dynamics, Inc., Madison, develops allogeneic immune cell therapies for cancer. The foundational technology is built on induced pluripotent stem cells that have unlimited self-renewing capacity.

Acquisitions in 2018

On June 7, 2018, Bayer acquired 100% of the outstanding shares of Monsanto Company, St. Louis, Missouri, United States. The acquisition of Monsanto brings together two strong and highly complementary businesses: Bayer's innovative chemical and biological crop protection portfolio and Monsanto's exceptional expertise in the field of seeds and traits. Among the production sites maintained by Monsanto are facilities in Luling, Muscatine and Soda Springs (all United States), Antwerp (Belgium), Zarate (Argentina) and Camacari (Brazil). Monsanto's portfolio of established brands includes DEKALB™, Asgrow™ and Roundup™, among others. The purchase price of €48,029 million pertained mainly to intangible assets for technologies in the areas of seeds and traits (useful lives of between 9 and 30 years), herbicides (useful lives of 20 years) and digital platforms (useful lives of 15 years), as well as for R&D projects and brands (useful lives of between 10 and 30 years), property, plant and equipment, inventories and goodwill. No value was assigned to the company name "Monsanto."

The goodwill included expected synergies in administration processes and infrastructure, including cost savings in the selling, R&D and general administration functions, as well as expected sales synergies resulting from the combined offering of products. The goodwill is non-tax-deductible.

The following bonds with total nominal volumes of US$15 billion and €5 billion were issued in June 2018 to finance the acquisition:

B 13

Newly issued bonds

Issuer	Coupon (%)	Nominal volume	Issue date	Maturity date
Bayer U.S. Finance II LLC, U.S.A.				
	3.5	US$1,250 million	June 25, 2018	June 25, 2021
	3-month USD LIBOR + 0.63	US$1,250 million	June 25, 2018	June 25, 2021
	3.875	US$2,250 million	June 25, 2018	Dec. 15, 2023
	3-month USD LIBOR + 1.01	US$1,250 million	June 25, 2018	Dec. 15, 2023
	4.25	US$2,500 million	June 25, 2018	Dec. 15, 2025
	4.375	US$3,500 million	June 25, 2018	Dec. 15, 2028
	4.625	US$1,000 million	June 25, 2018	June 25, 2038
	4.875	US$2,000 million	June 25, 2018	June 25, 2048
Bayer Capital Corporation B.V., Netherlands				
	3-month EURIBOR + 0.55	€750 million	June 26, 2018	June 26, 2022
	0.625	€1,000 million	June 26, 2018	Dec. 15, 2022
	1.5	€1,750 million	June 26, 2018	June 26, 2026
	2.125	€1,500 million	June 26, 2018	Dec. 15, 2029

As part of the acquisition, bonds with a nominal volume of US$6.9 billion were taken over from Monsanto.

The purchase price allocation for Monsanto was completed on June 6, 2019. The effects of adjustments to the purchase price allocation in 2018 and through June 6, 2019, on the Group's assets, liabilities and cash outflows – net of acquired cash and cash equivalents – were as follows:

B 14

Acquired Assets, Assumed Liabilities and Adjustments (Fair Values at the Respective Acquisition Dates) (Monsanto)

€ million	Prior to adjustment of the purchase price allocation	Adjustment of the purchase price allocation	After adjustment of the purchase price allocation
Goodwill	22,998	1,746	24,744
Patents and technologies	17,350	(212)	17,138
Trademarks	4,195	(254)	3,941
Marketing and distribution rights	821	24	845
Production rights	–	11	11
R&D projects	4,300	302	4,602
Other rights	394	(34)	360
Property, plant and equipment	6,293	(639)	5,654
Investments accounted for using the equity method	52	–	52
Other financial assets	250	(52)	198
Inventories	4,882	(153)	4,729
Receivables	7,201	54	7,255
Other assets	27	(1)	26
Cash and cash equivalents	2,657	–	2,657
Deferred tax assets	1,548	302	1,850
Provisions for pensions and other post-employment benefits	(367)	(22)	(389)
Other provisions	(1,297)	(632)	(1,929)
Refund liabilities	(3,321)	8	(3,313)
Financial liabilities	(8,656)	1	(8,655)
Other liabilities	(3,102)	(566)	(3,668)
Deferred tax liabilities	(8,019)	117	(7,902)
Net assets	**48,206**	**–**	**48,206**

The effects of the adjustments to the purchase price allocation for Monsanto in the second quarter of 2018 on the income statement were immaterial.

On May 2, 2018, Bayer increased its interest in the joint venture Bayer Zydus Pharma Private Limited, Thane, India, from 50% to 75% plus one share. A purchase price of €28 million was agreed. Bayer is obligated to purchase the remaining 25% minus one share of Bayer Zydus Pharma by 2021 and has recognized a liability of €9 million in connection with this obligation. As a result, the accounting method used for this business changed from the equity method to full consolidation, with 100% of the shares of Bayer Zydus Pharma being consolidated. Remeasurement of the shares previously accounted for using the equity method resulted in an amount of €18 million. The gain of €15 million resulting from the derecognition of the shares previously accounted for using the equity method was recognized in the financial result. The purchase price pertained mainly to goodwill, which in turn is largely based on a control premium. Bayer Zydus Pharma is active in core segments of the Indian pharmaceutical market and focuses on women's health, diagnostic imaging, cardiovascular disease, diabetes treatment and oncology. This acquisition increases Bayer's presence in the Indian pharmaceutical market.

Assets held for sale

On July 27, 2018, Bayer signed the agreements to sell the prescription dermatology business to LEO Pharma A/S, Ballerup, Denmark. The global prescription dermatology business outside the United States was transferred to the acquirer on July 1, 2019. The divested portfolio, comprising prescription brands including Advantan™, Skinoren™ and Travocort™, was recognized as held for sale as of June 30, 2019. The base purchase price amounts to €0.6 billion and is subject to customary purchase price adjustments. The divestment gain is provisionally estimated at €0.3 billion.

On May 13, 2019, Bayer and Beiersdorf signed an agreement for Beiersdorf to acquire Bayer's Coppertone™ business for a purchase price of US$550 million. The business is expected to be transferred to the acquirer in the second half of 2019 subject to the fulfillment of the closing conditions. On July 19, 2019, Bayer entered into an agreement with Yellow Wood Partners, Boston, United States, regarding the sale of the Dr. Scholl's™ business of Consumer Health for a purchase price of US$585 million. The transaction is expected to close in the fourth quarter of 2019 subject to the satisfaction of customary closing conditions, including approval by antitrust authorities. Impairment losses of €421 million, including €208 million on goodwill, were recognized through profit or loss upon the reclassification of the disposal groups.

The assets and liabilities held for sale were as follows:

B 15

Assets and Liabilities Held for Sale

€ million	June 30, 2019
Goodwill	352
Other intangible assets	677
Property, plant and equipment	127
Other assets	9
Deferred taxes	307
Inventories	99
Cash and cash equivalents	38
Assets held for sale	**1,609**
Provisions for pensions and other post-employment benefits	11
Other liabilities	13
Deferred taxes	9
Liabilities directly related to assets held for sale	**33**

Divestments and discontinued operations in 2018

Bayer ceded de facto control of Covestro and deconsolidated the company at the end of September 2017. As of the loss of control, Covestro fulfills the conditions for presentation as a discontinued operation. In connection with the sale of Covestro AG shares in 2017, Bayer AG entered into derivative contracts. These resulted in a total of €8 million in losses through the second quarter of 2018.

The discontinued operation had no impact on the Bayer Group statement of cash flows in 2018.

In connection with the acquisition of Monsanto, Bayer had signed an agreement with BASF on October 13, 2017, concerning the sale of selected Crop Science businesses. All of the respective transactions closed on August 1, 2018, except for the sale of the vegetable seed business, which closed on August 16, 2018. Final agreement on the purchase price was reached in the first half of 2019. In accordance with the conditions imposed by antitrust authorities, the divestment of Crop Science businesses to BASF also comprises further significant obligations by Bayer that will be fulfilled over a number of years subsequent to the date of divestment. Another of these conditions is for deliveries under the supply agreement (finished products and active ingredients) to be made at prices based on the respective variable costs. In this connection, a contract liability of €0.2 billion was determined based on customary sales prices and recognized in the statement of financial position. It will be dissolved as the obligations are fulfilled. The final purchase price amounts to approximately €7.3 billion, and income before taxes to €4.0 billion. The divested net assets amounted to €2.8 billion and pertained mainly to property, plant and equipment, goodwill and other assets and provisions.

On September 4, 2018, the prescription dermatology business of the Consumer Health segment in the United States was transferred to the acquirer LEO Pharma A/S, Ballerup, Denmark. The base purchase price amounted to €58 million.

On June 30, 2018, the Pharmaceuticals segment sold its MK Generics business in Central America and the Caribbean to Tecnoquímicas S.A., Cali, Colombia. The divested business includes the Bonima production plant in El Salvador. The base purchase price was €44 million.

Financial instruments

The following tables show the carrying amounts and fair values of financial assets and liabilities by category of financial instrument under IFRS 9 and a reconciliation to the corresponding line items in the statements of financial position. Since the line items “Trade accounts receivable,” “Other receivables,” “Financial liabilities” and “Other liabilities” contain both financial instruments and nonfinancial assets or liabilities (such as other tax receivables or advance payments for services receivable in the future), the reconciliation is shown in the column headed “Nonfinancial assets / liabilities.”

B 16

Carrying Amounts and Fair Values of Financial Instruments

	June 30, 2019					
	Carried at amortized cost	Carried at fair value [Fair value for information[2]]			Nonfinancial assets/ liabilities	
Measurement category (IFRS 9)[1]		Based on quoted prices in active markets (Level 1)	Based on observable market data (Level 2)	Based on unobservable inputs (Level 3)		
€ million	**Carrying amount**	**Carrying amount**	**Carrying amount**	**Carrying amount**	**Carrying amount**	**Carrying amount in the statement of financial position**
Trade accounts receivable	13,870		210		163	14,243
AC	13,870					13,870
FVTPL			210			210
Nonfinancial assets					163	163
Other financial assets	175	1,378	360	1,183		3,096
AC	175		[175]			175
FVTPL		1,134	172	905		2,211
FVTOCI (no recycling)		238		213		451
Derivatives		6	188	65		259
Other receivables	318			57	1,734	2,109
AC	318		[318]			318
FVTPL				57		57
Nonfinancial assets					1,734	1,734
Cash and cash equivalents	3,343					3,343
AC	3,343		[3,343]			3,343
Total financial assets	**17,706**	**1,378**	**570**	**1,240**		**20,894**
of which AC	17,706					17,706
of which FVTPL		1,134	382	962		2,478
Financial liabilities	42,133	997	127		71	43,328
AC	42,133	[35,276]	[7,592]			42,133
FVTPL (nonderivative)		997				997
Derivatives			127			127
Nonfinancial liabilities					71	71
Trade accounts payable	5,384					5,384
AC	5,384					5,384
Other liabilities	1,104	7	355	17	967	2,450
AC	1,104		[1,104]			1,104
FVTPL (nonderivative)				14		14
Derivatives		7	355	3		365
Nonfinancial liabilities					967	967
Total financial liabilities	**48,621**	**1,004**	**482**	**17**		**50,124**
of which AC	48,621					48,621
of which FVTPL (nonderivative)		997		14		1,011
of which derivatives		7	482	3		492

[1] AC: at amortized cost
FVTOCI: at fair value through other comprehensive income
FVTPL: at fair value through profit or loss
[2] Fair value of the financial instruments at amortized cost; IFRS 7.29(a) was applied for information on specific fair values.

B 17

Carrying Amounts and Fair Values of Financial Instruments

Dec. 31, 2018

	Carried at amortized cost	Carried at fair value [fair value for information[2]]			Nonfinancial assets/ liabilities	
Measurement category (IFRS 9)[1]		Based on quoted prices in active markets (Level 1)	Based on observable market data (Level 2)	Based on unobservable inputs (Level 3)		
€ million	**Carrying amount**	**Carrying amount**	**Carrying amount**	**Carrying amount**	**Carrying amount**	**Carrying amount in the statement of financial position**
Trade accounts receivable	11,564				150	11,714
AC	11,564					11,564
Nonfinancial assets					150	150
Other financial assets	440	1,584	241	1,113		3,378
AC	440		[441]			440
FVTPL		1,432	28	895		2,355
FVTOCI (no Recycling)		144		186		330
Derivatives		8	213	32		253
Other receivables	614			42	1,828	2,484
AC	614		[614]			614
FVTPL				42		42
Nonfinancial assets					1,828	1,828
Cash and cash equivalents	4,052					4,052
AC	4,052		[4,052]			4,052
Total financial assets	**16,670**	**1,584**	**241**	**1,155**		**19,650**
of which AC	16,670					16,670
of which FVTPL		1,432	28	937		2,397
Financial liabilities	40,226	996	172			41,394
AC	40,226	[32,395]	[7,091]			40,226
FVTPL (nonderivative)		996				996
Derivatives			172			172
Trade accounts payable	6,038					6,038
AC	6,038					6,038
Other liabilities	1,136	7	320	20	1,004	2,487
AC	1,136		[1,136]			1,136
FVTPL (nonderivative)				20		20
Derivatives		7	320			327
Nonfinancial liabilities					1,004	1,004
Total financial liabilities	**47,400**	**1,003**	**492**	**20**		**48,915**
of which AC	47,400					47,400
of which FVTPL (nonderivative)		996		20		1,016
of which derivatives		7	492			499

2018 figures restated
[1] AC: at amortized cost
FVTOCI: at fair value through other comprehensive income
FVTPL: at fair value through profit or loss
[2] Fair value of the financial instruments at amortized cost under IFRS 7 paragraph 29(a)

The category "AC – measured at amortized cost" within other financial assets and in financial liabilities also includes finance lease receivables and lease liabilities in which Bayer is the lessor or lessee and which were therefore measured according to IFRS 16 (in 2019) or IAS 17 (in 2018).

Due to the short maturities of most trade accounts receivable and payable, other receivables and liabilities, and cash and cash equivalents, their carrying amounts at the closing date do not significantly differ from the fair values.

The fair values of financial assets and liabilities measured at amortized cost that are given for information are the present values of the respective future cash flows. The present values are determined by discounting the cash flows at a closing-date interest rate, taking into account the term of the assets or liabilities and the creditworthiness of the counterparty. Where a market price is available, however, this is deemed to be the fair value.

The fair values of financial assets measured at fair value correspond to quoted prices in active markets (Level 1), or are determined using valuation techniques based on observable market data as of the end of the reporting period (Level 2) or are the present values of the respective future cash flows, determined on the basis of unobservable inputs (Level 3).

The fair values of derivatives for which no publicly quoted prices exist in active markets (Level 1) are determined using valuation techniques based on observable market data as of the end of the reporting period (Level 2). In applying valuation techniques, credit value adjustments are determined to allow for the contracting party's credit risk.

Currency and commodity forward contracts are measured individually at their forward rates or forward prices on the closing date. These depend on spot rates or prices, including time spreads. The fair values of interest-rate hedging instruments and cross-currency interest-rate swaps were determined by discounting future cash flows over the remaining terms of the instruments at market rates of interest, taking into account any foreign currency translation as of the closing date.

Fair values measured using unobservable inputs are categorized within Level 3 of the fair value hierarchy. This applies to certain debt or equity instruments, in some cases to the fair values of embedded derivatives, and to obligations for contingent consideration in business combinations. Credit risk is frequently the principal unobservable input used to determine the fair values of debt instruments classified as "FVTPL – at fair value through profit or loss" by the discounted cash flow method. Here the credit spreads of comparable issuers are applied. A significant increase in credit risk could result in a lower fair value, whereas a significant decrease could result in a higher fair value. However, a relative change of 10% in the credit spread does not materially affect the fair value.

Embedded derivatives are separated from their respective host contracts, provided these are not financial instruments. Such host contracts are generally sale or purchase agreements relating to the operational business. The embedded derivatives cause the cash flows from the contracts to vary with exchange-rate or price fluctuations. The internal measurement of embedded derivatives is mainly performed using the discounted cash flow method, which is based on unobservable inputs. These include planned sales and purchase volumes, and prices derived from market data. Regular monitoring is carried out based on these fair values as part of quarterly reporting.

The financial liabilities arising from the debt instruments (exchangeable bond) issued in June 2017 that can be converted into Covestro shares are measured at fair value through profit or loss. This exchangeable bond is a hybrid financial instrument containing a debt instrument as a nonderivative host contract and multiple embedded derivatives.

The changes in the amounts of financial assets and liabilities recognized at fair value based on unobservable inputs (Level 3) for each financial instrument category (see table B 17 for definitions) were as follows:

B 18

Development of Financial Assets and Liabilities (Level 3)

€ million	Assets – FVTPL[1]	FVTOCI[1] (no recycling)	Derivatives (net)	Liabilities – FVTPL[1] (non-derivative)	Total
Carrying amounts (net), January 1, 2019	**937**	**186**	**32**	**(20)**	**1,135**
Gains (losses) recognized in profit or loss	25	–	30	–	55
of which related to assets/liabilities recognized in the statements of financial position	25	–	30	–	55
Gains (losses) recognized outside profit or loss	–	2	–	–	2
Additions of assets (liabilities)	–	25	–	–	25
Settlements of (assets) liabilities	–	–	–	6	6
Transfers (IFRS 5)	–	–	–	–	–
Disposals from divestments/changes in scope of consolidation	–	–	–	–	–
Carrying amounts (net), June 30, 2019	**962**	**213**	**62**	**(14)**	**1,223**

[1] See table B 17 for definition of measurement category.

B 19

Development of Financial Assets and Liabilities (Level 3)

€ million	Assets – FVTPL[1]	FVTOCI[1] (no recycling)	Derivatives (net)	Liabilities – FVTPL[1] (non-derivative)	Total
Carrying amounts (net), January 1, 2018	**821**	**68**	**10**	**(7)**	**892**
Gains (losses) recognized in profit or loss	8	–	(6)	–	2
of which related to assets/liabilities recognized in the statements of financial position	8	–	(6)	–	2
Gains (losses) recognized outside profit or loss	–	(1)	–	–	(1)
Additions of assets (liabilities)	65	95	17	(10)	167
Settlements of (assets) liabilities	–	(1)	–	1	–
Transfers (IFRS 5)	–	(6)	–	1	(5)
Disposals from divestments/changes in scope of consolidation	–	(4)	–	–	(4)
Carrying amounts (net), June 30, 2018	**894**	**151**	**21**	**(15)**	**1,051**

2018 figures restated
[1] See table B 17 for definition of measurement category.

The changes recognized in profit or loss were included in other operating income/expenses, as well as in the financial result in interest income, exchange gains or losses and in other financial income and expenses.

Contingent liabilities as of June 30, 2019, amounted to approximately €1.1 billion (June 30, 2018: €0.8 billion) and primarily related to tax and labor law as well as other matters in countries such as the United States, Brazil, India, Greece and Italy.

Legal Risks

To find out more about the Bayer Group's legal risks, please see Note [29] to the consolidated financial statements in the Bayer Annual Report 2018, which can be downloaded free of charge at www.bayer.com. Since the Bayer Annual Report 2018, the following significant changes have occurred in respect of the legal risks:

Mirena™: As of July 11, 2019, lawsuits from approximately 2,700 users of Mirena™, a levonorgestrel-releasing intrauterine system providing long-term contraception, had been served upon Bayer in the United States (excluding lawsuits no longer pending). Plaintiffs allege personal injuries resulting from the use of Mirena™, including perforation of the uterus, ectopic pregnancy or idiopathic intracranial hypertension, and seek compensatory and punitive damages. In June 2019, the multidistrict litigation ("MDL") court overseeing the federal court cases in which plaintiffs allege idiopathic intracranial hypertension granted summary judgment dismissing all approximately 730 cases pending before that court. Plaintiffs are appealing the decision.

Xarelto™: As of July 11, 2019, U.S. lawsuits from approximately 28,600 recipients of Xarelto™, an oral anticoagulant for the treatment and prevention of blood clots, had been served upon Bayer and Janssen Pharmaceuticals, Inc., the company distributing Xarelto™ in the United States. Plaintiffs allege that users have suffered personal injuries from the use of Xarelto™, including cerebral, gastrointestinal or other bleeding and death, and seek compensatory and punitive damages. In March 2019, Bayer and Janssen reached an agreement in principle with plaintiffs to resolve the Xarelto™ litigation in the United States, without admission of liability, for an amount of US$775 million. The settlement amount will be shared equally between the two companies. It is expected that Bayer's share will be partially offset by product liability insurance. Bayer and Janssen may withdraw from the agreement if certain participation rates are not satisfied. If the settlement proceeds, it will resolve virtually all of the currently pending Xarelto™ claims. Bayer does not expect the net financial burden to have a material adverse impact on the consolidated financial statements of the Bayer Group.

Essure™: As of July 11, 2019, U.S. lawsuits from approximately 31,600 users of Essure™, a medical device offering permanent birth control with a nonsurgical procedure, had been served upon Bayer. Plaintiffs allege personal injuries from the use of Essure™, including hysterectomy, perforation, pain, bleeding, weight gain, nickel sensitivity, depression and unwanted pregnancy, and seek compensatory and punitive damages. As of July 11, 2019, two Canadian lawsuits relating to Essure™ seeking class action certification had been served upon Bayer. In March 2019, one of the proposed class actions was certified.

Roundup™ (Glyphosate): As of July 11, 2019, lawsuits from approximately 18,400 plaintiffs claiming to have been exposed to glyphosate-based products manufactured by Bayer's subsidiary Monsanto had been served upon Monsanto in the United States. Glyphosate is the active ingredient contained in a number of Monsanto's herbicides, including Roundup™-branded products. Plaintiffs allege personal injuries resulting from exposure to those products, including non-Hodgkin lymphoma (NHL) and multiple myeloma, and seek compensatory and punitive damages. Cases pending in U.S. federal courts have been consolidated in a multi district litigation ("MDL") in the Northern District of California for common pre-trial management.

In March 2019, in the first trial conducted in the MDL, a jury awarded around US$5 million in compensatory and US$75 million in punitive damages to a plaintiff who claimed that a Monsanto product caused his NHL. We disagree with the verdict and sought trial court review in May 2019. In July 2019, the trial judge decided to reduce the punitive damages from US$ 75 million to US$ 20 million. The roughly US$ 5 million compensatory damages were not reduced. The decision to reduce the punitive damage award by US$ 55 million is a step in the right direction, but we plan to file an appeal with the United States Court of Appeals for the Ninth Circuit. In May 2019, in the third trial in this litigation, a California state court jury in Alameda County (Oakland) awarded the two plaintiffs a total of US$55 million in compensatory and US$2 billion in punitive damages. Again, we disagree with the jury's verdict and have filed post-trial motions seeking to reverse the jury verdict and enter judgment for Monsanto, or in the alternative, order a new trial. We continue to believe that we have meritorious defenses and we intend to defend ourselves vigorously in all of these lawsuits. Another three trials are currently scheduled in Missouri state court for the remainder of 2019. However, trial dates in all venues remain subject to change depending on court schedules and rulings. In parallel to the continued litigation, Bayer will constructively engage in the mediation process ordered by the judge presiding over the MDL.

As of July 11, 2019, five Canadian lawsuits relating to Roundup™ seeking class action certification had been served upon Bayer. Bayer believes it has meritorious defenses and intends to defend itself vigorously.

One A Day™ vitamins: Bayer has been named in a class action lawsuit in the United States alleging Bayer's claims on its One A Day™ vitamins regarding the support of heart health, immunity and physical energy are false and misleading. In February 2019, the jury returned a verdict for Bayer and found that Bayer's claims on its vitamins are not false or misleading. The plaintiffs did not appeal the verdict, and therefore, the verdict is final.

Notes to the Statements of Cash Flows

Dividend payments amounted to €2,611 million and net interest payments to €649 million. Net borrowings came to €357 million.

Related Parties

Related parties as defined in IAS 24 (Related Party Disclosures) are those legal entities and natural persons that are able to exert influence on Bayer AG and its subsidiaries or over which Bayer AG or its subsidiaries exercise control or joint control or have a significant influence. They include, in particular, nonconsolidated subsidiaries, joint ventures and associates included in the consolidated financial statements at cost of acquisition or using the equity method, post-employment benefit plans and the corporate officers of Bayer AG.

Sales to related parties were not material from the viewpoint of the Bayer Group.

Liabilities to joint ventures declined by €0.1 billion compared with December 31, 2018, and primarily pertained to the joint venture Casebia Therapeutics Limited Liability Partnership, Ascot, United Kingdom, which was established together with CRISPR Therapeutics AG, Basel, Switzerland. Liabilities for post-employment benefit plans increased by €0.2 billion.

Services rendered to associates declined by €0.2 billion to €0.0 billion as Covestro ceased being an associate in May 2018.

Other information

On April 26, 2019, the Annual Stockholders' Meeting approved the proposal by the Board of Management and the Supervisory Board that a dividend of €2.80 per share entitled to the dividend be paid for the 2018 fiscal year.

The actions of the members of the Board of Management serving in 2018 were not ratified. The actions of the members of the Supervisory Board serving in 2018 were ratified in accordance with the proposal by the Board of Management and the Supervisory Board.

One stockholder representative was elected to the Supervisory Board in accordance with the nomination submitted by the Supervisory Board.

In accordance with the proposal by the Board of Management and the Supervisory Board, the Annual Stockholders' Meeting once again authorized the Board of Management to acquire and use own shares, and in the course of such acquisition to employ derivatives and to disapply subscription and other tender rights.

In accordance with the proposal by the Supervisory Board, Deloitte GmbH Wirtschaftsprüfungsgesellschaft, Munich, Germany, was elected auditor of the annual and consolidated financial statements for 2019, and also to review, if applicable, the condensed financial statements and interim management report as of June 30, 2019, and if applicable, the condensed financial statements and interim management reports as of September 30, 2019, and March 31, 2020, if these are prepared.

Leverkusen, July 25, 2019
Bayer Aktiengesellschaft

The Board of Management

Werner Baumann

Liam Condon | Dr. Hartmut Klusik | Kemal Malik

Wolfgang Nickl | Stefan Oelrich | Heiko Schipper

Responsibility Statement

To the best of our knowledge, and in accordance with the applicable reporting principles for financial reporting, the consolidated financial statements give a true and fair view of the assets, liabilities, financial position and profit or loss of the Bayer Group, and the combined management report includes a fair review of the development and performance of the business and the position of the Bayer Group and Bayer AG, together with a description of the principal opportunities and risks associated with the expected development of the Bayer Group and Bayer AG.

Leverkusen, July 25, 2019
Bayer Aktiengesellschaft

The Board of Management

Werner Baumann
Chairman

Liam Condon	Dr. Hartmut Klusik	Kemal Malik
Wolfgang Nickl	Stefan Oelrich	Heiko Schipper

Review Report

To Bayer Aktiengesellschaft, Leverkusen / Germany

We have reviewed the condensed interim consolidated financial statements – comprising the income statement and the statement of comprehensive income, the statement of financial position, the statement of cash flows, the condensed statement of changes in equity as well as selected explanatory notes to the financial statements – and the interim group management report for the period from 1 January until 30 June 2019 of Bayer Aktiengesellschaft, Leverkusen, that are part of the half-year financial report under § 115 WpHG (Wertpapierhandelsgesetz: German Securities Trading Act). The preparation of the condensed interim consolidated financial statements in accordance with the International Financial Reporting Standards (IFRS) applicable to interim financial reporting as adopted by the EU and of the interim group management report in accordance with the requirements of the WpHG applicable to interim group management reports is the responsibility of the entity's Management Board. Our responsibility is to issue a report on the condensed interim consolidated financial statements and on the interim group management report based on our review.

We conducted our review of the interim consolidated financial statements and of the interim group management report in accordance with the German generally accepted standards for the review of financial statements promulgated by the Institut der Wirtschaftsprüfer (Institute of Public Auditors in Germany) as well as in supplementary compliance with the International Standard on Review Engagements *"Review of Interim Financial Information performed by the Independent Auditor of the Entity"* (ISRE 2410). Those standards require that we plan and perform the review such that we can preclude through critical evaluation, with a certain level of assurance, that the condensed interim consolidated financial statements have not been prepared, in all material respects, in accordance with the IFRS applicable to interim financial reporting as adopted by the EU, or that the interim group management report has not been prepared, in material respects, in accordance with the requirements of the WpHG applicable to interim group management reports. A review is limited primarily to inquiries of personnel of the entity and analytical assessments and therefore does not provide the assurance attainable in a financial statement audit. Since, in accordance with our engagement, we have not performed a financial statement audit, we cannot issue an auditor's report.

Based on our review, no matters have come to our attention that cause us to presume that the condensed interim consolidated financial statements of Bayer Aktiengesellschaft, Leverkusen, have not been prepared, in all material respects, in accordance with the IFRS applicable to interim financial reporting as adopted by the EU, or that the group management report has not been prepared, in material respects, in accordance with the requirements of the WpHG applicable to interim group management reports.

Munich / Germany, 26 July 2019

Deloitte GmbH
Wirtschaftsprüfungsgesellschaft

Heiner Kompenhans	Prof. Dr. Frank Beine
Wirtschaftsprüfer	Wirtschaftsprüfer
(German Public Auditor)	(German Public Auditor)

Financial Calendar

Q3 2019 Quarterly Statement	*October 30, 2019*
2019 Annual Report	*February 27, 2020*
Q1 2020 Quarterly Statement	*April 27, 2020*
Annual Stockholders' Meeting 2020	*April 28, 2020*

Reporting Principles

This Bayer AG Interim Report is a half-year financial report that satisfies the requirements of Section 115, Paragraph 2, No. 1 and No. 2, Paragraph 3 and Paragraph 4 of the German Securities Trading Act (WpHG). Bayer has prepared the condensed consolidated interim financial statements according to the International Financial Reporting Standards (IFRS) published by the International Accounting Standards Board (IASB) and endorsed by the European Union (E.U.). This report should be read in conjunction with the Annual Report for the 2018 fiscal year and the additional information about the company provided therein. The Annual Report 2018 is available on our website at www.bayer.com.

Masthead

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Half-year financial report produced in-house with firesys.

Forward-Looking Statements
This half-year financial report may contain forward-looking statements based on current assumptions and forecasts made by Bayer management. Various known and unknown risks, uncertainties and other factors could lead to material differences between the actual future results, financial situation, development or performance of the company and the estimates given here. These factors include those discussed in Bayer's public reports which are available on the Bayer website at www.bayer.com. The company assumes no liability whatsoever to update these forward-looking statements or to conform them to future events or developments.