Q2

Half-Year Financial Report 2023

Second quarter impacted by declines in glyphosate business

- // Group sales fall to €11.0 billion (Fx & p adj. – 8.2%)
- // EBITDA before special items: €2.5 billion (– 24.5%)
- // Crop Science business down significantly, mainly due to sharp decline in glyphosate volumes and prices
- // Stable sales at Pharmaceuticals (Fx & p adj.), earnings below prior year
- // Consumer Health records higher sales (Fx & p adj.), earnings up slightly
- // Core earnings per share at €1.22 (– 36.8%)
- // Net income at minus €1.9 billion, weighed down by impairment losses of €2.3 billion
- // Free cash flow at minus €0.5 billion
- // Group outlook for 2023 lowered

Science for a ***better life***

Contents

Bayer Group Key Data

€ million	Q2 2022	Q2 2023	Change (%) Reported	Change (%) Fx & p adj.	H1 2022	H1 2023	Change (%) Reported	Change (%) Fx & p adj.
Sales	**12,819**	**11,044**	**−13.8**	**−8.2**	**27,458**	**25,433**	**−7.4**	**−4.5**
Change in sales[1]								
Volume	+0.1%	−7.4%			+3.0%	−6.6%		
Price	+9.5%	−0.8%			+9.1%	+2.1%		
Currency	+8.4%	−4.3%			+6.2%	−1.7%		
Portfolio	+0.1%	−1.3%			+0.1%	−1.2%		
Sales by region								
Europe/Middle East/Africa	3,639	3,307	−9.1	−2.4	8,153	7,946	−2.5	+1.9
North America	4,817	4,038	−16.2	−12.3	10,779	9,944	−7.7	−7.2
Asia/Pacific	2,492	2,235	−10.3	−1.6	4,903	4,416	−9.9	−2.9
Latin America	1,871	1,464	−21.8	−18.0	3,623	3,127	−13.7	−12.7
EBITDA[1]	**2,651**	**2,331**	**−12.1**		**7,943**	**6,649**	**−16.3**	
Special items[1]	(698)	(196)			(657)	(349)		
EBITDA before special items[1]	**3,349**	**2,527**	**−24.5**		**8,600**	**6,998**	**−18.6**	
EBITDA margin before special items[1]	26.1%	22.9%			31.3%	27.5%		
EBIT[1]	**169**	**(956)**	**.**		**4,381**	**2,017**	**−54.0**	
Special items[1]	(2,111)	(2,490)			(2,071)	(2,921)		
EBIT before special items[1]	**2,280**	**1,534**	**−32.7**		**6,452**	**4,938**	**−23.5**	
Financial result	**(692)**	**(618)**	**−10.7**		**(1,182)**	**(985)**	**−16.7**	
Net income (from continuing and discontinued operations)	**(298)**	**(1,887)**	**.**		**2,993**	**291**	**−90.3**	
Earnings per share from continuing and discontinued operations (€)	**(0.30)**	**(1.92)**	**.**		**3.05**	**0.30**	**−90.2**	
Core earnings per share[1] from continuing operations (€)	**1.93**	**1.22**	**−36.8**		**5.46**	**4.17**	**−23.6**	
Net cash provided by (used in) operating activities (from continuing and discontinued operations)	**2,104**	**484**	**−77.0**		**1,378**	**(3,066)**	**.**	
Free cash flow[1]	**1,140**	**(473)**	**.**		**(47)**	**(4,575)**	**.**	
Net financial debt (at end of period)	**36,575**	**39,620**	**+8.3**		**36,575**	**39,620**	**+8.3**	
Cash flow-relevant capital expenditures (from continuing and discontinued operations)	**550**	**606**	**+10.2**		**899**	**1,072**	**+19.2**	
Research and development expenses[2]	**1,928**	**1,228**	**−36.3**		**3,382**	**2,799**	**−17.2**	
Depreciation, amortization and impairment losses/loss reversals	**2,482**	**3,287**	**+32.4**		**3,562**	**4,632**	**+30.0**	
Number of employees (at end of period)[3]	**101,914**	**102,048**	**+0.1**		**101,914**	**102,048**	**+0.1**	
Personnel expenses (including pension expenses)	**3,391**	**2,480**	**−26.9**		**6,562**	**5,739**	**−12.5**	

Fx & p adj. = currency- and portfolio-adjusted
[1] For definition see Annual Report 2022, A 2.3 "Alternative Performance Measures Used by the Bayer Group."
[2] The decline in research and development expenses is largely due to special items in connection with impairment charges in the prior-year period.
[3] Employees calculated as full-time equivalents (FTEs)

Interim Group Management Report as of June 30, 2023

Key Events

Financing activities
In May, we placed new senior bonds with a total volume of €3 billion. The issuance comprised three tranches and was multiple times covered. The proceeds were used for general corporate purposes.

1. Overview of Sales, Earnings and Financial Position[1]

1.1 Earnings Performance of the Bayer Group

Second quarter of 2023

Group sales

Group sales decreased by 8.2% (Fx & portfolio adj.) to €11,044 million in the second quarter of 2023 (Q2 2022: €12,819 million; reported: –13.8%). There was a negative currency effect of €553 million (Q2 2022: positive currency effect of €915 million). Sales in Germany amounted to €638 million (Q2 2022: €610 million).

Crop Science registered a significant decrease in sales that was mainly due to lower volumes and prices for our glyphosate-based products. Sales at Pharmaceuticals were level with the prior-year period. The division recorded significant gains for Nubeqa™ and Kerendia™ as well as a strong performance in the Radiology business, but registered declines particularly for Adalat™ and Aspirin™ Cardio in China. Sales at Consumer Health rose, with substantial growth in the Dermatology and Pain & Cardio categories in particular.

EBITDA before special items

Group EBITDA before special items decreased by 24.5% to €2,527 million. This figure included a negative currency effect of €120 million (Q2 2022: positive currency effect of €300 million). By contrast, there was a positive effect of around €481 million arising from out-of-period income and a business-related reduction in allocations to provisions for the quarter in connection with the Group-wide Short-Term Incentive (STI) program. Crop Science registered a decline in EBITDA before special items that was mainly due to the fall in sales of our glyphosate-based products. Earnings were additionally diminished by a mainly inflation-related increase in the cost of goods sold. EBITDA before special items at Pharmaceuticals decreased, mainly due to higher R&D investments before special items. At Consumer Health, EBITDA before special items increased thanks in part to cost and price management efforts. The Group EBITDA margin before special items came in at 22.9%.

[1] For definition of alternative performance measures see Annual Report 2022, A 2.3 “Alternative Performance Measures Used by the Bayer Group.”

Depreciation, amortization and impairments

Depreciation, amortization, impairment losses and impairment loss reversals led to net expenses of €3,287 million (Q2 2022: €2,482 million), with intangible assets accounting for €2,610 million (Q2 2022: €2,082 million) and property, plant and equipment for €677 million (Q2 2022: €400 million). Impairment losses, net of impairment loss reversals, totaled €2,301 million (Q2 2022: €1,460 million), with intangible assets accounting for €2,035 million (Q2 2022: €1,453 million). As a result of a further deterioration in business prospects and updated long-term corporate planning, it became necessary to conduct impairment testing in the Crop Science Division in the second quarter of 2023. This resulted in the recognition of impairment losses of €2,436 million on goodwill and of €277 million on property, plant and equipment, as well as a net impairment loss reversal of €416 million on other intangible assets.

A total of €2,298 million in impairment losses, net of impairment loss reversals, were included in special items (Q2 2022: €1,413 million).

EBIT and special items

EBIT of the Bayer Group came in at minus €956 million (Q2 2022: €169 million) after net special charges of €2,490 million (Q2 2022: €2,111 million) that primarily related to the unscheduled impairment testing in the Crop Science Division. EBIT before special items decreased by 32.7% to €1,534 million (Q2 2022: €2,280 million).

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

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Special Items[1] by Category

€ million	EBIT Q2 2022	EBIT Q2 2023	EBIT H1 2022	EBIT H1 2023	EBITDA Q2 2022	EBITDA Q2 2023	EBITDA H1 2022	EBITDA H1 2023
Total special items	**(2,111)**	**(2,490)**	**(2,071)**	**(2,921)**	**(698)**	**(196)**	**(657)**	**(349)**
Restructuring	(184)	(166)	(261)	(281)	(183)	(166)	(260)	(281)
of which in the Reconciliation	(25)	(27)	(55)	(54)	(24)	(27)	(54)	(54)
Acquisition/integration	(3)	(16)	(3)	(18)	(3)	(16)	(3)	(18)
Divestments	169	(2)	154	(50)	169	(2)	154	(50)
of which in the Reconciliation	(10)	–	(10)	–	(10)	–	(10)	–
Litigations/legal risks	(690)	(35)	(603)	(81)	(690)	(35)	(603)	(81)
of which in the Reconciliation	(694)	(28)	(699)	(88)	(694)	(28)	(699)	(88)
Impairment losses/loss reversals[2]	(1,416)	(2,298)	(1,417)	(2,576)	(3)	(4)	(3)	(4)
Other	13	27	59	85	12	27	58	85

[1] For definition see Annual Report 2022, A 2.3 “Alternative Performance Measures Used by the Bayer Group.”
[2] Where not already included in the other special items categories

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Special Items[1] by Functional Cost

€ million	EBIT Q2 2022	EBIT Q2 2023	EBIT H1 2022	EBIT H1 2023	EBITDA Q2 2022	EBITDA Q2 2023	EBITDA H1 2022	EBITDA H1 2023
Total special items	**(2,111)**	**(2,490)**	**(2,071)**	**(2,921)**	**(698)**	**(196)**	**(657)**	**(349)**
Cost of goods sold	(842)	(46)	(854)	(342)	(25)	(15)	(36)	(33)
Selling expenses	(282)	(91)	(300)	(129)	(125)	(106)	(143)	(144)
Research and development expenses	(452)	148	(462)	128	(14)	(10)	(24)	(30)
General administration expenses	(59)	(37)	(120)	(82)	(59)	(37)	(120)	(82)
Other operating income/(expenses)	(476)	(2,464)	(335)	(2,496)	(475)	(28)	(334)	(60)

[1] For definition see Annual Report 2022, A 2.3 “Alternative Performance Measures Used by the Bayer Group.”

Net income

After a financial result of minus €618 million (Q2 2022: minus €692 million), income before income taxes amounted to minus €1,574 million (Q2 2022: minus €523 million). The improvement in the financial result was largely due to positive changes in the fair value of financial investments. After income tax expense of €315 million (Q2 2022: income from income taxes of €234 million) and accounting for noncontrolling interest, net income amounted to minus €1,887 million (Q2 2022: minus €298 million).

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Financial Result[1]

€ million	Q2 2022	Q2 2023	H1 2022	H1 2023
Income (loss) from investments in affiliated companies	(96)	(53)	(163)	(100)
Net interest expense	(307)	(327)	(583)	(540)
Other financial income/expenses	(289)	(238)	(436)	(345)
of which interest portion of discounted provisions	(136)	(102)	(210)	(216)
of which exchange gain (loss)	(40)	(72)	(64)	(57)
of which miscellaneous financial income/expenses	(113)	(64)	(162)	(72)
Total	**(692)**	**(618)**	**(1,182)**	**(985)**
of which special items (net)	(127)	(74)	(198)	(166)

[1] Further information on the financial result is given in Note [10] of the Annual Report 2022.

Core earnings per share

Core earnings per share decreased by 36.8% to €1.22 (Q2 2022: €1.93), mainly due to the decline in earnings at the Crop Science Division.

Earnings per share (total) came in at minus €1.92 (Q2 2022: minus €0.30) and, in comparison with core earnings per share, was mainly impacted by the impairment losses mentioned above.

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Core Earnings per Share[1]

€ million	Q2 2022	Q2 2023	H1 2022	H1 2023
EBIT[1] (as per income statements)	**169**	**(956)**	**4,381**	**2,017**
Amortization and impairment losses/loss reversals on goodwill and other intangible assets	2,082	2,610	2,781	3,276
Impairment losses/loss reversals on property, plant and equipment, and accelerated depreciation included in special items	8	271	15	555
Special items (other than accelerated depreciation, amortization and impairment losses/loss reversals)	698	196	657	349
Core EBIT[1]	**2,957**	**2,121**	**7,834**	**6,197**
Financial result (as per income statements)	(692)	(618)	(1,182)	(985)
Special items in the financial result[2]	127	74	198	166
Income taxes (as per income statements)	234	(315)	(194)	(739)
Special items in income taxes	–	–	–	–
Tax effects related to amortization, impairment losses/loss reversals and special items	(724)	(57)	(1,282)	(529)
Income after income taxes attributable to noncontrolling interest (as per income statements)	(9)	2	(12)	(2)
Above-mentioned adjustments attributable to noncontrolling interest	–	(12)	–	(12)
Core net income from continuing operations	**1,893**	**1,195**	**5,362**	**4,096**
Shares (million)				
Weighted average number of shares	982.42	982.42	982.42	982.42
€				
Core earnings per share from continuing operations[1]	**1.93**	**1.22**	**5.46**	**4.17**

[1] For definition see Annual Report 2022, A 2.3 “Alternative Performance Measures Used by the Bayer Group.”

[2] Includes in particular the changes in the fair value of the interests in Century Therapeutics and Pyxis Oncology, as well as interest cost for the provisions for litigations/legal risks

Personnel expenses and employee numbers

The number of employees in the Bayer Group as of the closing date rose by 0.1% year on year to 102,048 (June 30, 2022: 101,914). Personnel expenses decreased by 26.9% to €2,480 million in the second quarter (Q2 2022: €3,391 million), mainly due to the aforementioned adjustment of provisions for the Group-wide Short-Term Incentive (STI) program as well as currency effects.

First half of 2023

Group sales

Group sales in the first half of 2023 fell by 4.5% (Fx & portfolio adj.) to €25,433 million (H1 2022: €27,458 million; reported: – 7.4%). There was a negative currency effect of €451 million (H1 2022: positive currency effect of €1,444 million). Sales in Germany amounted to €1,406 million (H1 2022: €1,345 million).

Crop Science registered a significant decrease in sales that was mainly due to lower volumes and prices for our glyphosate-based products. Sales at Pharmaceuticals declined slightly in the first half of the year. The division recorded significant gains for Nubeqa™ and Kerendia™ but posted declines due to tender procedures for Xarelto™ and Adalat™ as well as lower demand for Aspirin™ Cardio in China. Sales at Consumer Health increased, largely due to gains in the Allergy & Cold, Dermatology and Pain & Cardio categories.

EBITDA before special items

EBITDA before special items at the Bayer Group dropped by 18.6% to €6,998 million (H1 2022: €8,600 million). This figure included a negative currency effect of €124 million. By contrast, there was a positive effect of around €398 million arising from lower-than-expected allocations to provisions for the Group-wide Short-Term Incentive (STI) program due to business-related factors. The Group EBITDA margin before special items fell to 27.5%.

Crop Science registered a significant decline in EBITDA before special items, mainly due to the fall in sales of our glyphosate-based products. Earnings were also diminished by an increase in costs, particularly in the cost of goods sold, which was mainly due to high inflation. Pharmaceuticals posted a substantial decline in EBITDA before special items that was partly attributable to higher R&D investments before special items, the product mix and an inflation-related increase in procurement costs. EBITDA before special items at Consumer Health was level year on year, with higher sales offset by an increase in costs due to inflation and investments in product marketing.

Depreciation, amortization and impairments

Depreciation, amortization and impairment losses – net of impairment loss reversals – amounted to €4,632 million in the first six months of 2023 (H1 2022: €3,562 million). They comprised €3,275 million (H1 2022: €2,781 million) in amortization and impairments on intangible assets and €1,357 million (H1 2022: €781 million) in depreciation and impairments on property, plant and equipment. Impairment losses, net of impairment loss reversals, totaled €2,635 million (H1 2022: €1,515 million) and included €2,074 million in net impairment losses on intangible assets (H1 2022: €1,501 million), of which €2,436 million on goodwill. The impairment losses were primarily attributable to the impairment losses in the Crop Science Division mentioned above.

A total of €2,576 million (H1 2022: €1,414 million) in impairment losses, net of impairment loss reversals, were included in special items.

EBIT and special items

EBIT of the Bayer Group amounted to €2,017 million in the first half of the year (H1 2022: €4,381 million) after net special charges of €2,921 million (H1 2022: €2,071 million). The special charges were mainly related to the impairment losses in the Crop Science Division mentioned above. EBIT before special items decreased by 23.5% to €4,938 million (H1 2022: €6,452 million).

Net income

After a financial result of minus €985 million (H1 2022: minus €1,182 million), income before income taxes in the first half of the year came in at €1,032 million (H1 2022: €3,199 million). The improvement in the financial result was largely due to higher interest income from investments in money market funds and to positive changes in the fair value of financial investments. After income tax expense of €739 million (H1 2022: €194 million), income after income taxes was €293 million (H1 2022: €3,005 million). After adjusting for income from discontinued operations after income taxes and income attributable to noncontrolling interest, net income came to €291 million (H1 2022: €2,993 million).

Core earnings per share

Core earnings per share decreased by 23.6% to €4.17 (H1 2022: €5.46), mainly due to the decline in earnings at the Crop Science and Pharmaceuticals divisions.

Earnings per share (total) came in at €0.30 (H1 2022: €3.05) and, in comparison with core earnings per share, were mainly diminished by the impairment losses described above.

1.2 Business Development by Division

Crop Science

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Key Data – Crop Science

			Change (%)[1]				Change (%)[1]	
€ million	Q2 2022	Q2 2023	Reported	Fx & p adj.	H1 2022	H1 2023	Reported	Fx & p adj.
Sales	**6,461**	**4,924**	**–23.8**	**–18.5**	**14,908**	**13,275**	**–11.0**	**–8.6**
Change in sales[1]								
Volume	–2.4%	–15.1%			+2.2%	–11.2%		
Price	+19.6%	–3.4%			+17.5%	+2.6%		
Currency	+11.5%	–3.3%			+8.1%	–0.6%		
Portfolio	0.0%	–2.0%			0.0%	–1.8%		
Sales by region								
Europe/Middle East/Africa	1,255	973	–22.5	–13.5	3,388	3,270	–3.5	+2.4
North America	3,056	2,273	–25.6	–21.4	7,417	6,455	–13.0	–12.1
Asia/Pacific	704	651	–7.5	+4.7	1,328	1,283	–3.4	+7.4
Latin America	1,446	1,027	–29.0	–28.2	2,775	2,267	–18.3	–20.5
EBITDA[1]	**1,701**	**666**	**–60.8**		**5,416**	**3,915**	**–27.7**	
Special items[1]	(48)	(59)			(2)	(77)		
EBITDA before special items[1]	**1,749**	**725**	**–58.5**		**5,418**	**3,992**	**–26.3**	
EBITDA margin before special items[1]	27.1%	14.7%			36.3%	30.1%		
EBIT[1]	**(258)**	**(2,207)**	**.**		**2,770**	**112**	**–96.0**	
Special items[1]	(1,369)	(2,353)			(1,324)	(2,649)		
EBIT before special items[1]	**1,111**	**146**	**–86.9**		**4,094**	**2,761**	**–32.6**	
Net cash provided by (used in) operating activities	**2,551**	**338**	**–86.8**		**164**	**(3,026)**	**.**	
Cash flow-relevant capital expenditures	239	283	+18.4		389	491	+26.2	
Research and development expenses[2]	997	382	–61.7		1,575	982	–37.7	

Fx & p adj. = currency- and portfolio-adjusted
[1] For definition see Annual Report 2022, A 2.3 "Alternative Performance Measures Used by the Bayer Group."
[2] The decline in research and development expenses is largely due to special items in connection with impairment charges in the prior-year period.

Second quarter of 2023

Sales

Sales at Crop Science fell by a significant 18.5% (Fx & portfolio adj.) to €4,924 million in the second quarter of 2023, mainly driven by lower volumes and prices for our glyphosate-based products. This effect particularly impacted business in North and Latin America as well as in Europe/Middle East/Africa.

// Sales at **Corn Seed & Traits** were up, largely due to higher prices in all regions as well as increased acreages in North America. This was partly offset by perceived shifts in demand into the third quarter in Latin America and lower acreages in Europe/Middle East/Africa.
// Our **Herbicides** business saw a significant decline in sales due to lower volumes and prices for our glyphosate-based products in particular. Overall, the decrease in volumes was driven by destocking and unfavorable weather conditions.
// Sales at **Fungicides** were level with the prior-year quarter. Increased prices in all regions and higher volumes in North America were mainly offset by lower volumes due to unfavorable weather in Europe/Middle East/Africa and perceived shifts in demand into the third quarter in Latin America.
// Sales at **Soybean Seed & Traits** were down, mainly due to decreased acreages and a decline in license revenues in North America.
// Our **Insecticides** business registered a decline in sales. Lower volumes in Europe/Middle East/Africa and North America, largely due to weather-related factors, were only partly offset by higher prices.
// Sales at **Cotton Seed** decreased sharply, mainly because of lower planted acreages and a decline in license revenues in North America.
// Sales at **Vegetable Seeds** came in at the prior-year level.
// The reporting unit **“Other”** recorded a slight decrease in sales. Sales were down at Industrial Turf & Ornamental (IT&O), while our SeedGrowth business benefited from higher prices.

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Sales by Strategic Business Entity

			Change (%)[1]				Change (%)[1]	
€ million	Q2 2022	Q2 2023	Reported	Fx & p adj.	H1 2022	H1 2023	Reported	Fx & p adj.
Crop Science	**6,461**	**4,924**	**– 23.8**	**– 18.5**	**14,908**	**13,275**	**– 11.0**	**– 8.6**
Corn Seed & Traits	1,165	1,232	+ 5.8	+ 10.6	3,920	4,500	+ 14.8	+ 14.2
Herbicides	2,455	1,276	– 48.0	– 45.6	4,939	3,165	– 35.9	– 34.9
Fungicides	858	819	– 4.5	– 0.4	1,921	1,873	– 2.5	– 0.3
Soybean Seed & Traits	503	446	– 11.3	– 9.3	1,077	1,054	– 2.1	– 3.6
Insecticides	413	348	– 15.7	– 11.2	826	808	– 2.2	+ 0.7
Cotton Seed[2]	227	137	– 39.6	– 38.7	532	451	– 15.2	– 17.6
Vegetable Seeds	210	195	– 7.1	– 0.5	372	376	+ 1.1	+ 4.5
Other[3]	630	471	– 25.2	– 2.5	1,321	1,048	– 20.7	– 0.4

Fx & p adj. = currency- and portfolio-adjusted
[1] For definition see Annual Report 2022, A 2.3 “Alternative Performance Measures Used by the Bayer Group.”
[2] Starting in 2023, the cash-generating unit Cotton Seed is no longer reported under “Other” and is instead presented separately.
[3] Following the partial sale of Environmental Science, the remaining parts of that business – Industrial Turf & Ornamental (IT&O) and Lawn & Garden – are being reported under “Other” from 2023 onwards.

Earnings

EBITDA before special items at Crop Science decreased by 58.5% to €725 million in the second quarter of 2023, primarily due to the decline in sales of our glyphosate-based products. Earnings were also diminished by a mainly inflation-related increase in the cost of goods sold. By contrast, there was a positive effect of around €215 million arising from out-of-period income and a business-related reduction in allocations to provisions for the quarter in connection with the Group-wide Short-Term Incentive (STI) program. There was a negative currency effect of €96 million (Q2 2022: positive currency effect of €215 million). The EBITDA margin before special items declined by 12.4 percentage points to 14.7%.

EBIT came in at minus €2,207 million (Q2 2022: minus €258 million) after special charges of €2,353 million (Q2 2022: €1,369 million) that primarily related to impairment losses. A net impairment loss of €2,436 million was recognized on goodwill due to reduced business prospects overall, largely driven by substantially lower price expectations for glyphosate. In addition, an impairment loss of €579 million was recognized in the cash-generating unit Corn Seed & Traits, mainly due to the anticipated long-term normalization of commodity prices. Moreover, impairment losses of €392 million and €277 million, respectively, were recorded in the cash-generating units Cotton Seed and glyphosate. We also recognized impairment loss reversals. These mainly included an impairment loss reversal of €1,253 million in the cash-generating unit Soybean Seed & Traits that was largely due to a decrease in the cost of goods sold as a result of lower commodity prices.

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Special Items[1] Crop Science

€ million	EBIT Q2 2022	EBIT Q2 2023	EBIT H1 2022	EBIT H1 2023	EBITDA Q2 2022	EBITDA Q2 2023	EBITDA H1 2022	EBITDA H1 2023
Restructuring	(11)	(26)	(34)	(53)	(11)	(26)	(34)	(53)
Acquisition/integration	(2)	(16)	(1)	(18)	(2)	(16)	(1)	(18)
Divestments	(29)	(4)	(48)	(22)	(29)	(4)	(48)	(22)
Litigations/legal risks	–	(8)	91	22	–	(8)	91	22
Impairment losses/loss reversals	(1,324)	(2,298)	(1,325)	(2,576)	(3)	(4)	(3)	(4)
Other	(3)	(1)	(7)	(2)	(3)	(1)	(7)	(2)
Total special items	**(1,369)**	**(2,353)**	**(1,324)**	**(2,649)**	**(48)**	**(59)**	**(2)**	**(77)**

[1] For definition see Annual Report 2022, A 2.3 “Alternative Performance Measures Used by the Bayer Group.”

First half of 2023

Sales

Sales at Crop Science decreased by 8.6% (Fx & portfolio adj.) to €13,275 million in the first half of 2023, mainly driven by lower volumes and prices for our glyphosate-based products, especially in North and Latin America as well as in Europe/Middle East/Africa. Sales at **Corn Seed & Traits** increased substantially due to higher prices. Our **Herbicides** business saw sales of glyphosate-based products decline significantly in North and Latin America as well as in Europe/Middle East/Africa. Sales at **Fungicides** were level with the prior-year period, after higher prices in all regions were offset by lower volumes in Latin America and Europe/Middle East/Africa. **Soybean Seed & Traits** registered a decline in sales, mainly due to lower volumes in North America. Our **Insecticides** business was level with the prior-year period, with increased sales in Europe/Middle East/Africa and Latin America due primarily to higher prices, while business in North America in particular was adversely impacted by lower volumes. Our **Cotton Seed** business recorded a decline in sales, mainly due to lower volumes in North America. Sales at **Vegetable Seeds** increased, with business growing particularly in Europe/Middle East/Africa due to higher prices. Sales in the reporting unit **“Other”** came in at the prior-year level.

Earnings

EBITDA before special items at Crop Science declined by 26.3% to €3,992 million in the first half of 2023, primarily due to the decline in sales of our glyphosate-based products. Earnings were also diminished by an increase in costs, particularly in the cost of goods sold, which was mainly due to high inflation. By contrast, there was a positive effect of around €164 million arising from lower-than-expected allocations to provisions for the Group-wide Short-Term Incentive (STI) program due to business-related factors. There was a negative currency effect of €42 million (H1 2022: positive currency effect of €313 million). The EBITDA margin before special items declined to 30.1%.

EBIT came in at €112 million (H1 2022: €2,770 million) after net special charges of €2,649 million (H1 2022: €1,324 million) that primarily related to the impairment losses mentioned above.

Pharmaceuticals

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Key Data – Pharmaceuticals

€ million	Q2 2022	Q2 2023	Change (%)[1] Reported	Change (%)[1] Fx & p adj.	H1 2022	H1 2023	Change (%)[1] Reported	Change (%)[1] Fx & p adj.
Sales	**4,818**	**4,557**	**−5.4**	**+0.2**	**9,442**	**8,964**	**−5.1**	**−1.4**
Change in sales[1]								
Volume	+2.4%	+0.9%			+3.1%	−0.7%		
Price	−0.3%	−0.7%			−0.7%	−0.7%		
Currency	+5.1%	−4.8%			+4.0%	−2.8%		
Portfolio	0.0%	−0.8%			+0.2%	−0.9%		
Sales by region								
Europe/Middle East/Africa	1,878	1,789	−4.7	+0.4	3,713	3,560	−4.1	−0.9
North America	1,149	1,171	+1.9	+5.0	2,169	2,281	+5.2	+5.2
Asia/Pacific	1,550	1,356	−12.5	−5.2	3,085	2,661	−13.7	−8.0
Latin America	241	241	0.0	+9.7	475	462	−2.7	+6.7
EBITDA[1]	**1,559**	**1,304**	**−16.4**		**2,996**	**2,368**	**−21.0**	
Special items[1]	81	(75)			129	(117)		
EBITDA before special items[1]	**1,478**	**1,379**	**−6.7**		**2,867**	**2,485**	**−13.3**	
EBITDA margin before special items[1]	30.7%	30.3%			30.4%	27.7%		
EBIT[1]	**1,206**	**1,047**	**−13.2**		**2,408**	**1,853**	**−23.0**	
Special items[1]	(10)	(75)			38	(117)		
EBIT before special items[1]	**1,216**	**1,122**	**−7.7**		**2,370**	**1,970**	**−16.9**	
Net cash provided by operating activities	**35**	**442**	**.**		**1,059**	**1,149**	**+8.5**	
Cash flow-relevant capital expenditures	229	245	+7.0		360	450	+25.0	
Research and development expenses[2]	864	794	−8.1		1,656	1,674	+1.1	

Fx & p adj. = currency- and portfolio-adjusted
[1] For definition see Annual Report 2022, A 2.3 "Alternative Performance Measures Used by the Bayer Group."
[2] The decline in research and development (R&D) expenses in the second quarter of 2023 is largely due to special items in the prior-year period; R&D expenses before special items increased by 3.8% in the second quarter and 6.8% in the first half of the year.

Second quarter of 2023

Sales

Sales at Pharmaceuticals in the second quarter of 2023 were level year on year at €4,557 million (Fx & portfolio adj. +0.2%). Our new products Nubeqa™ and Kerendia™ achieved significant gains and our Radiology business continued to grow. By contrast, sales in China declined, partly due to tender procedures for Adalat™ and lower demand for Aspirin™ Cardio.

// As expected, sales of our oral anticoagulant **Xarelto™** were down. Business was impacted by competitive pressure from generic products as well as lower prices, particularly in Asia/Pacific and Latin America. License revenues – recognized as sales – in the United States, where Xarelto™ is marketed by a subsidiary of Johnson & Johnson, were up year on year on a currency-adjusted basis.

// Business with our ophthalmology drug **Eylea™** expanded, driven by higher volumes in all regions and particularly in North America and Asia/Pacific. Falling prices in Europe were largely offset by higher volumes in France and Spain in particular.

// Sales of our cancer drug **Nubeqa™** nearly doubled, with gains in all regions. The product therefore maintained its growth momentum, especially in the United States and Europe, with significant increases in volumes.

// We also achieved significant gains with **Kerendia™**, our product for the treatment of patients with chronic kidney disease associated with type 2 diabetes, mainly thanks to the successful market launch in the United States. We recorded encouraging growth in China thanks to the introduction of drug reimbursement for Kerendia™ in March.

// Our Radiology business continued to post substantial gains, especially for **CT Fluid Delivery** and **Ultravist™**, with business benefiting from increased volumes and prices in nearly all regions.

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Best-Selling Pharmaceuticals Products

€ million	Q2 2022	Q2 2023	Change (%)[1] Reported	Change (%)[1] Fx & p adj.	H1 2022	H1 2023	Change (%)[1] Reported	Change (%)[1] Fx & p adj.
Xarelto™	1,113	1,039	−6.6	−3.3	2,200	1,982	−9.9	−8.0
Eylea™	807	814	+0.9	+5.6	1,581	1,603	+1.4	+5.1
Mirena™/Kyleena™/Jaydess™	306	296	−3.3	+0.5	601	599	−0.3	+0.7
Kogenate™/Kovaltry™/Jivi™	212	192	−9.4	−7.0	420	384	−8.6	−7.6
Nubeqa™	105	201	+91.4	+95.7	181	379	+109.4	+110.2
YAZ™/Yasmin™/Yasminelle™	212	180	−15.1	−4.7	410	332	−19.0	−12.7
Adalat™	212	144	−32.1	−26.1	451	321	−28.8	−24.9
Adempas™	162	164	+1.2	+4.0	315	316	+0.3	+0.8
Aspirin™ Cardio	201	131	−34.8	−29.3	388	312	−19.6	−15.2
Stivarga™	155	145	−6.5	−0.5	299	278	−7.0	−3.9
CT Fluid Delivery[2]	120	125	+4.2	+8.0	237	249	+5.1	+5.6
Ultravist™	112	124	+10.7	+19.6	217	242	+11.5	+17.4
Gadovist™ product family	128	115	−10.2	−4.3	236	233	−1.3	+2.5
Kerendia™	20	67	+235.0	+249.9	31	119	+283.9	+289.7
Betaferon™/Betaseron™	75	60	−20.0	−17.5	158	117	−25.9	−25.5
Total best-selling products	**3,940**	**3,797**	**−3.6**	**+1.0**	**7,725**	**7,466**	**−3.4**	**−0.7**
Proportion of Pharmaceuticals sales	82%	83%			82%	83%		

Fx & p adj. = currency- and portfolio-adjusted
[1] For definition see Annual Report 2022, A 2.3 “Alternative Performance Measures Used by the Bayer Group.”
[2] 2022 figures restated; the CT Fluid Delivery product family comprises injection systems marketed primarily under the Stellant™ product family.

Earnings

EBITDA before special items at Pharmaceuticals decreased by 6.7% to €1,379 million in the second quarter of 2023. The decline was largely due to higher R&D investments in cell and gene therapy and chemoproteomics technologies, as well as in projects in advanced clinical development. In addition, the prior-year quarter had received a significant boost from the sale of noncore businesses. By contrast, there was a positive effect of around €126 million arising from out-of-period income and a business-related reduction in allocations to provisions for the quarter in connection with the Group-wide Short-Term Incentive (STI) program. There was a negative currency effect of €40 million (Q2 2022: positive currency effect of €41 million). The EBITDA margin before special items declined by 0.4 percentage points to 30.3%.

EBIT came in at €1,047 million (Q2 2022: €1,206 million) after net special charges of €75 million (Q2 2022: €10 million) that related to restructuring. By contrast, special gains arose from the measurement of contingent considerations at fair value.

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Special Items[1] Pharmaceuticals

€ million	EBIT Q2 2022	EBIT Q2 2023	EBIT H1 2022	EBIT H1 2023	EBITDA Q2 2022	EBITDA Q2 2023	EBITDA H1 2022	EBITDA H1 2023
Restructuring	(145)	(106)	(151)	(161)	(145)	(106)	(151)	(161)
Acquisition/integration	(1)	–	(2)	–	(1)	–	(2)	–
Divestments	208	2	212	(28)	208	2	212	(28)
Litigations/legal risks	4	1	5	(15)	4	1	5	(15)
Impairment losses/loss reversals	(92)	–	(92)	–	–	–	–	–
Other	16	28	66	87	15	28	65	87
Total special items	**(10)**	**(75)**	**38**	**(117)**	**81**	**(75)**	**129**	**(117)**

[1] For definition see Annual Report 2022, A 2.3 “Alternative Performance Measures Used by the Bayer Group.”

First half of 2023

Sales

Sales at Pharmaceuticals fell by 1.4% (Fx & portfolio adj.) to €8,964 million in the first half of 2023. The slight decline was mainly related to tender procedures in China, particularly for **Xarelto™** and **Adalat™**, as well as lower demand for **Aspirin™ Cardio**. **Xarelto™** sales were additionally impacted by competitive pressure from generic products as well as lower prices. Our business with **Eylea™** developed positively, with higher volumes more than offsetting lower prices. **Nubeqa™** sales more than doubled, with significant volume increases in the United States and Europe in particular. We also registered substantial gains for **Kerendia™** that were primarily attributable to the product's successful market launch in the United States. Our Radiology business continued to post gains, especially for **CT Fluid Delivery** and **Ultravist™**, with business benefiting from increased volumes and prices in all regions.

Earnings

EBITDA before special items at Pharmaceuticals declined by a substantial 13.3% to €2,485 million in the first half of 2023. We increased our R&D investments in cell and gene therapy and chemoproteomics technologies, as well as in projects in advanced clinical development. In addition, the prior-year period had received a significant boost from the sale of noncore businesses. Earnings were also diminished by the product mix and higher costs due to increased procurement prices. By contrast, there was a positive effect of around €120 million arising from lower-than-expected allocations to provisions for the Group-wide Short-Term Incentive (STI) program due to business-related factors. There was a negative currency effect of €46 million (H1 2022: positive currency effect of €7 million). The EBITDA margin before special items declined by 2.7 percentage points to 27.7%.

EBIT amounted to €1,853 million (H1 2022: €2,408 million) after net special charges of €117 million (H1 2022: net special gains of €38 million) that primarily related to restructuring. By contrast, special gains arose from the measurement of contingent considerations at fair value.

Consumer Health

A 11

Key Data – Consumer Health

€ million	Q2 2022	Q2 2023	Change (%)[1] Reported	Change (%)[1] Fx & p adj.	H1 2022	H1 2023	Change (%)[1] Reported	Change (%)[1] Fx & p adj.
Sales	**1,496**	**1,466**	**−2.0**	**+5.4**	**3,008**	**3,039**	**+1.0**	**+4.7**
Changes in sales[1]								
Volume	+2.5%	−4.4%			+6.9%	−4.2%		
Price	+4.3%	+9.8%			+5.0%	+8.9%		
Currency	+8.7%	−7.0%			+5.9%	−3.5%		
Portfolio	+0.5%	−0.4%			+0.5%	−0.2%		
Sales by region								
Europe/Middle East/Africa	462	448	−3.0	+5.2	953	964	+1.2	+5.5
North America	611	594	−2.8	+0.7	1,192	1,206	+1.2	+1.0
Asia/Pacific	238	228	−4.2	+3.0	490	472	−3.7	+0.9
Latin America	185	196	+5.9	+24.1	373	397	+6.4	+20.1
EBITDA[1]	**327**	**328**	**+0.3**		**697**	**701**	**+0.6**	
Special items[1]	(3)	(7)			(21)	(13)		
EBITDA before special items[1]	**330**	**335**	**+1.5**		**718**	**714**	**−0.6**	
EBITDA margin before special items[1]	22.1%	22.9%			23.9%	23.5%		
EBIT[1]	**239**	**239**	**0.0**		**523**	**521**	**−0.4**	
Special items[1]	(3)	(7)			(21)	(13)		
EBIT before special items[1]	**242**	**246**	**+1.7**		**544**	**534**	**−1.8**	
Net cash provided by operating activities	**116**	**52**	**−55.2**		**429**	**235**	**−45.2**	
Cash flow-relevant capital expenditures	35	35	0.0		58	55	−5.2	
Research and development expenses	51	53	+3.9		104	105	+1.0	

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

[1] For definition see Annual Report 2022, A 2.3 "Alternative Performance Measures Used by the Bayer Group."

Second quarter of 2023

Sales

Consumer Health increased sales by 5.4% (Fx & portfolio adj.) to €1,466 million in the second quarter of 2023 compared to a strong prior-year period, with contributions from all regions. We posted significant growth in the Dermatology business, thanks partly to continued high demand for Bepanthen™, as well as in the Pain & Cardio category. We also significantly increased sales of cough and cold products amid a persistently strong cold season. Our allergy business expanded slightly despite a weaker allergy season due to weather-related factors. We continued to experience supply constraints overall in the second quarter, especially in the Digestive Health category.

// Sales in **Europe/Middle East/Africa** increased, largely thanks to growth in our Dermatology business that was driven by Bepanthen™ and Canesten™. The Nutritionals category also delivered strong performance with contributions from the GloryFeel™ product family, one of our recent strategic acquisitions. The Allergy & Cold category registered double-digit percentage growth that was largely driven by the Aspirin™ product family. Business at Digestive Health declined markedly due to the aforementioned supply constraints.

// Sales in **North America** were level with the strong prior-year quarter. We registered gains in our cough and cold business, driven in part by Afrin™, and at Digestive Health, thanks partly to MiraLAX™. However, we achieved lower sales in the Pain & Cardio and Nutritionals categories. In addition, sales of allergy products were dampened by the weaker allergy season.

// We recorded a moderate expansion of business in **Asia/Pacific**. We posted significant growth in the Dermatology category that was partly driven by gains for our Kang Wang™ and Pi Kang Wang™ products, which are marketed in China. The Pain & Cardio and Digestive Health categories also registered double-digit percentage growth. Sales in the Nutritionals category fell significantly, partly due to a normalization of demand.

// We recorded strong sales growth in **Latin America**. Business expanded substantially in the Pain & Cardio, Nutritionals, Dermatology and Allergy & Cold categories, with Redoxon™ and Bepanthen™ among the growth drivers.

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Sales by Category

€ million	Q2 2022	Q2 2023	Change (%)[1] Reported	Change (%)[1] Fx & p adj.	H1 2022	H1 2023	Change (%)[1] Reported	Change (%)[1] Fx & p adj.
Consumer Health	**1,496**	**1,466**	**– 2.0**	**+ 5.4**	**3,008**	**3,039**	**+ 1.0**	**+ 4.7**
Nutritionals	378	348	– 7.9	+ 1.0	797	723	– 9.3	– 4.8
Allergy & Cold	315	323	+ 2.5	+ 5.7	659	733	+ 11.2	+ 11.0
Dermatology	329	337	+ 2.4	+ 10.9	642	682	+ 6.2	+ 10.6
Pain & Cardio	233	229	– 1.7	+ 10.0	443	445	+ 0.5	+ 9.1
Digestive Health	226	216	– 4.4	– 0.4	439	426	– 3.0	– 1.4
Other	15	13	– 13.3	+ 2.8	28	30	+ 7.1	+ 24.2

Fx & p adj. = currency- and portfolio-adjusted
[1] For definition see Annual Report 2022, A 2.3 “Alternative Performance Measures Used by the Bayer Group.”

Earnings

EBITDA before special items at Consumer Health increased by 1.5% to €335 million in the second quarter of 2023 following a very strong prior-year period, partly driven by our continuous cost and price management efforts. There was also a positive effect of around €23 million arising from out-of-period income and a business-related reduction in allocations to provisions for the quarter in connection with the Group-wide Short-Term Incentive (STI) program. In addition, we generated higher proceeds from the sale of minor, nonstrategic brands. By contrast, earnings were diminished by an inflation-driven rise in costs as well as investments in marketing our innovative products. There was a negative currency effect of €31 million (Q2 2022: positive currency effect of €49 million). The EBITDA margin before special items increased by 0.8 percentage points to 22.9%.

EBIT came in at €239 million (Q2 2022: €239 million) after special charges of €7 million (Q2 2022: €3 million) relating to restructuring.

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Special Items[1] Consumer Health

€ million	EBIT Q2 2022	EBIT Q2 2023	EBIT H1 2022	EBIT H1 2023	EBITDA Q2 2022	EBITDA Q2 2023	EBITDA H1 2022	EBITDA H1 2023
Restructuring	(3)	(7)	(21)	(13)	(3)	(7)	(21)	(13)
Total special items	**(3)**	**(7)**	**(21)**	**(13)**	**(3)**	**(7)**	**(21)**	**(13)**

[1] For definition see Annual Report 2022, A 2.3 “Alternative Performance Measures Used by the Bayer Group.”

First half of 2023

Sales

Sales at Consumer Health advanced by 4.7% (Fx & portfolio adj.) to €3,039 million in the first half of 2023, with contributions from all regions. We posted double-digit percentage growth in the Allergy & Cold category. The Dermatology and Pain & Cardio categories also performed well, mainly driven by gains for Bepanthen™ and Saridon™. We experienced supply constraints overall, and especially in the Digestive Health category. Sales at Nutritionals declined due to a normalization of demand.

Earnings

EBITDA before special items at Consumer Health came in at €714 million in the first half of 2023, and was therefore in line with the strong prior-year period (– 0.6%). Earnings benefited from the increase in sales as well as our continuous cost and price management efforts. There was also a positive effect of around €19 million arising from lower-than-expected allocations to provisions for the Group-wide Short-Term Incentive (STI) program due to business-related factors. In addition, we generated higher proceeds from the sale of minor, nonstrategic brands. By contrast, earnings were diminished by an inflation-driven rise in costs as well as investments in marketing our innovative products. Earnings were also held back by a negative currency effect of €35 million (H1 2022: positive currency effect of €55 million). The EBITDA margin before special items declined by 0.4 percentage points to 23.5%.

EBIT came in at €521 million (H1 2022: €523 million) after special charges of €13 million (H1 2022: €21 million) relating to restructuring.

1.3 Asset and Financial Position of the Bayer Group

Statement of Cash Flows

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Bayer Group Summary Statements of Cash Flows

€ million	Q2 2022	Q2 2023	H1 2022	H1 2023
Net cash provided by (used in) operating activities (total)	2,104	484	1,378	(3,066)
Net cash provided by (used in) investing activities (total)	(2,771)	(1,097)	(2,029)	505
Net cash provided by (used in) financing activities (total)	(1,814)	272	(739)	1,934
Change in cash and cash equivalents due to business activities	**(2,481)**	**(341)**	**(1,390)**	**(627)**
Cash and cash equivalents at beginning of period	**5,790**	**4,854**	**4,564**	**5,171**
Change due to exchange rate movements and to changes in scope of consolidation	106	(32)	241	(63)
Cash and cash equivalents at end of period	**3,415**	**4,481**	**3,415**	**4,481**

Net cash provided by (used in) operating activities

// Net operating cash flow in the second quarter of 2023 amounted to €484 million (Q2 2022: €2,104 million). This significant decrease against the prior-year quarter was primarily attributable to the decline in business in the Crop Science Division. Payments to resolve proceedings in the litigations surrounding glyphosate, PCBs and dicamba resulted in a net outflow of €153 million (Q2 2022: €369 million).

// In the first half of 2023, net operating cash flow came in at minus €3,066 million (H1 2022: €1,378 million). This was mainly due to the decline in business in the Crop Science Division as well as a higher net outflow for payments to resolve proceedings in the litigations surrounding glyphosate, dicamba, Essure™ and PCBs.

Net cash provided by (used in) investing activities

// Net investing cash flow in the second quarter of 2023 amounted to minus €1,097 million (Q2 2022: minus €2,771 million).

// Cash outflows for acquisitions came in at €353 million (Q2 2022: €15 million). This figure included milestone payments in connection with the acquisitions of the US companies Asklepios BioPharmaceutical, Inc. (AskBio) and Vividion Therapeutics, Inc.

// Net cash inflows for current financial assets totaled €12 million (Q2 2022: outflows of €2,261 million). The high outflows in the prior-year period were mainly attributable to investments in money market funds.

// In the first half of 2023, net investing cash flow came in at €505 million (H1 2022: minus €2,029 million). This was largely driven by inflows from current financial assets due to the sale of investments in money market funds to cover operational liquidity needs.

Net cash provided by financing activities

// There was a net cash inflow of €272 million from financing activities in the second quarter of 2023 (Q2 2022: outflow of €1,814 million).

// Net borrowings led to a cash inflow of €3,025 million that was mainly attributable to the issuance of new senior bonds for general corporate purposes (Q2 2022: €588 million).

// Net interest payments amounted to €416 million (Q2 2022: €436 million).

// The Bayer Group paid out €2,360 million (2022: €1,966 million) in dividends.

// In the first half of 2023, there was a net cash inflow of €1,934 million from financing activities (H1 2022: outflow of €739 million). This was mainly due to an increase in net borrowings that was partly attributable to the issuance of new senior bonds for general corporate purposes as well as the dividend payout for the Bayer Group.

Free cash flow

// Free cash flow (total) came in at minus €473 million in the second quarter of 2023 (Q2 2022: €1,140 million), mainly due to the significant decline in operating cash flow.

// In the first half of 2023, free cash flow (total) amounted to minus €4,575 million (H1 2022: minus €47 million). This was mainly attributable to the significant fall in operating cash flow.

Net financial debt

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Net Financial Debt[1]

€ million	Dec. 31, 2022	March 31, 2023	June 30, 2023	Change vs. March 31 (%)
Bonds and notes	36,602	36,287	39,297	+ 8.3
of which hybrid bonds[2]	4,528	4,529	4,531	0.0
Liabilities to banks[3]	3,484	3,549	3,701	+ 4.3
Lease liabilities	1,234	1,227	1,202	− 2.0
Liabilities from derivatives[4]	190	155	128	− 17.4
Other financial liabilities	142	2,081	2,189	+ 5.2
Receivables from derivatives[4]	(61)	(82)	(152)	+ 85.4
Financial debt	**41,591**	**43,217**	**46,365**	**+ 7.3**
Cash and cash equivalents	(5,171)	(4,854)	(4,481)	− 7.7
Current financial assets[5]	(4,611)	(2,286)	(2,264)	− 1.0
Net financial debt[1]	**31,809**	**36,077**	**39,620**	**+ 9.8**

[1] For definition see Annual Report 2022, A 2.3 “Alternative Performance Measures Used by the Bayer Group.”
[2] Classified as debt according to IFRS
[3] Including both financial and nonfinancial liabilities
[4] Including the market values of interest-rate and currency hedges of recorded transactions
[5] Including 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

- // Net financial debt of the Bayer Group increased by €3.5 billion to €39.6 billion in the second quarter of 2023 (March 31, 2023: €36.1 billion), mainly due to the outflow for the dividend payment.
- // In April 2023, Bayer AG exercised its option to extend, by an additional six months, the new €3 billion credit line with banks that it had agreed and drawn on in May 2022.
- // In May 2023, Bayer AG placed new senior bonds with a total volume of €3 billion under its Debt Issuance Program. The three tranches with volumes of €750 million, €750 million and €1.5 billion have maturities of 3.25 years, 6.25 years and 10 years, respectively. The coupons of the notes are 4.000%, 4.250% and 4.625%, respectively.
- // The rating agencies currently assess Bayer as follows:

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Rating

Rating agency	Long-term rating	Short-term rating	Outlook
S&P Global Ratings	BBB	A-2	positive
Moody's	Baa2	P-2	stable
Fitch Ratings	BBB+	F2	stable

Asset and capital structure

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Bayer Group Summary Statements of Financial Position

€ million	Dec. 31, 2022	March 31, 2023	June 30, 2023	Change vs. March 31 (%)
Noncurrent assets	**87,117**	**85,429**	**82,890**	**– 3.0**
Assets held for sale	3	3	14	.
Other current assets	37,757	39,620	38,763	– 2.2
Current assets	**37,760**	**39,623**	**38,777**	**– 2.1**
Total assets	**124,877**	**125,052**	**121,667**	**– 2.7**
Equity	**38,926**	**41,017**	**37,124**	**– 9.5**
Noncurrent liabilities	**50,867**	**49,644**	**52,356**	**+ 5.5**
Current liabilities	**35,084**	**34,391**	**32,187**	**– 6.4**
Liabilities	**85,951**	**84,035**	**84,543**	**+ 0.6**
Total equity and liabilities	**124,877**	**125,052**	**121,667**	**– 2.7**

- // Between the first quarter and June 30, 2023, total assets decreased by €3.4 billion to €121.7 billion.
- // Noncurrent assets fell by €2.5 billion to €82.9 billion in the second quarter, mainly due to the aforementioned impairment losses.
- // Total current assets declined by €0.8 billion to €38.8 billion. This figure primarily reflected the reduction in trade accounts receivable, which encompassed a €0.7 billion decrease in the Crop Science Division due to seasonal factors.
- // Equity declined by €3.9 billion compared with March 31, 2023, to €37.1 billion, mainly due to the negative net income and the dividend payment. The equity ratio fell to 30.5% as of June 30, 2023 (March 31, 2023: 32.8%).
- // Liabilities rose by €0.5 billion in the second quarter to €84.5 billion. The placement of new senior bonds for general corporate purposes (€3.0 billion) was a major factor in this respect. This effect was mainly offset by the reduction in personnel-related provisions (€1.3 billion) in connection with the Group-wide Short-Term Incentive (STI) program, and the decline in other liabilities (€0.5 billion) due to the disbursement of milestone payments to Vividion Therapeutics, Inc., United States, and fair value adjustments pertaining to future milestone payments for Asklepios BioPharmaceutical, Inc. (AskBio), United States, and BlueRock Therapeutics LP, United States.

2. Research, Development, Innovation

Crop Science

Collaborations

In January, we announced a partnership with the French company M2i Group to supply fruit and vegetable growers around the world with pheromone-based biological crop protection products. Through the agreement, we will become the exclusive distributor of select M2i products targeting Lepidoptera pests in crops that include stone and pome fruits, tomatoes and grapes.

In February, we announced a strategic partnership with Kimitec to accelerate the development and commercialization of biological solutions in agriculture. The collaboration focuses on crop protection products that address pests, diseases and weeds, as well as on biostimulants to promote plant growth. The partnership involves building integrated crop management solutions that can scale and develop through our company's global infrastructure backbone. This includes field testing, product support and commercialization.

Pharmaceuticals

We regularly review our research and development pipeline so that we can give priority to advancing the most promising pharmaceutical projects.

Phase II and III clinical projects

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

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Research and Development Projects (Phase II)

Project	Indication
Asundexian (FXIa inhibitor)	Prevention of major adverse cardiac events (MACE)
Regorafenib + nivolumab combination[1]	Recurrent or metastatic solid tumors
Runcaciguat (sGC activator)	Non-proliferative diabetic retinopathy
Zabedosertib (IRAK4 inhibitor)	Atopic dermatitis

As of July 24, 2023
[1] In collaboration with Bristol-Myers Squibb Company, United States, and Ono Pharmaceutical Co., Ltd., Japan

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

A 19

Research and Development Projects (Phase III)

Project	Indication
Aflibercept 8 mg (VEGF inhibitor)[1]	Macular edema secondary to retinal vein occlusion
Asundexian (FXIa inhibitor)	Prevention of stroke and systemic embolism in atrial fibrillation patients
Asundexian (FXIa inhibitor)	Secondary prevention of ischemic stroke
Copanlisib (PI3K inhibitor) + chemotherapy combination	Second-line therapy of indolent non-Hodgkin lymphoma (iNHL)
Darolutamide (ODM-201, AR antagonist)	Hormone-sensitive metastatic prostate cancer
Darolutamide (ODM-201, AR antagonist) / ADT without chemotherapy	Adjuvant treatment for localized prostate cancer with very high risk of recurrence
Darolutamide (ODM-201, AR antagonist) / ADT	Hormone-sensitive prostate cancer in patients with a high risk of biochemical recurrence (BCR)
Elinzanetant (neurokinin 1,3 receptor antagonist)	Vasomotor symptoms associated with menopause
Finerenone (MR antagonist)	Heart failure with mid-range or preserved ejection fraction
Finerenone (MR antagonist)	Non-diabetic chronic kidney disease
Gadoquatrane (MRI contrast agent)	Magnetic resonance imaging
Vericiguat (sGC stimulator)[2]	Stable heart failure with reduced ejection fraction (HFrEF)

As of July 24, 2023
[1] In collaboration with Regeneron Pharmaceuticals, Inc., United States
[2] In collaboration with Merck & Co., Inc., United States
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 US 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 pharmaceutical projects.

The following material developments occurred in the first half of 2023:

Asundexian

// In May, the US Food and Drug Administration (FDA) granted Fast Track Designation for our investigational drug asundexian as a potential treatment to prevent stroke and systemic embolism in people with atrial fibrillation. This is the second Fast Track Designation for the oral Factor XIa (FXIa) inhibitor. Fast Track Designation is intended to facilitate the development and expedite the review of drug candidates to treat serious medical conditions and fulfill unmet medical needs.

Darolutamide

// In March, we further expanded the global clinical development program for darolutamide in prostate cancer with the new Phase III clinical study ARASTEP. This study is investigating the efficacy of darolutamide plus androgen deprivation therapy (ADT) versus ADT alone in hormone-sensitive prostate cancer in patients with high-risk biochemical recurrence (BCR) who have no evidence of metastatic disease by conventional imaging and a positive PSMA PET/CT at baseline.

Aflibercept

// In May, we initiated the Phase III QUASAR study, designed to evaluate the efficacy and safety of aflibercept 8 mg dosed at extended treatment intervals compared to the standard of care, Eylea™ (aflibercept 2 mg), in macular edema secondary to retinal vein occlusion (RVO).

Gadoquatrane

// In June, we announced the start of the Phase III clinical development program QUANTI with gadoquatrane, a next-generation gadolinium-based contrast agent for magnetic resonance imaging (MRI) which has the potential to enable a substantially lower clinical gadolinium dose for patients. The program aims to evaluate the efficacy and safety of the development candidate in contrast-enhanced MRI in two multinational Phase III studies and one pediatric study across all body regions and all ages.

Adrenomedullin Pegol

// In May, we decided not to pursue further development activities for the Phase II program Adrenomedullin Pegol (PEG-ADM), developed for the treatment of acute respiratory distress syndrome, for scientific reasons.

BDKRB1 receptor antagonist

// In March, we decided not to further pursue the development of our BDKRB1 receptor antagonist based on the Phase IIa results in the indication neuropathic pain.

Runcaciguat

// In April, we decided to discontinue further development of runcaciguat, a soluble guanylate cyclase (sGC) activator in Phase II clinical development, in the indication chronic kidney disease (CKD). We will continue the sGC activator/CKD development program with the oral sGC activator BAY3283142, a follow-up compound to runcaciguat which shows an improved PK/PD profile (pharmacokinetic/pharmacodynamic) and is currently completing Phase I clinical development.

Filings and approvals

The most important drug candidates currently in the approval process are:

A 20

Main Products Submitted for Approval

Project	Region	Indication
Aflibercept 8mg (VEGF inhibitor)[1]	USA[2], EU, Japan	Diabetic macular edema (DME)
Aflibercept 8mg (VEGF inhibitor)[1]	USA[2], EU, Japan, China	Neovascular age-related macular degeneration (nAMD)

As of June 29, 2023
[1] In collaboration with Regeneron Pharmaceuticals, Inc., United States
[2] Submitted by Regeneron Pharmaceuticals, Inc., United States

Finerenone

// In May, the Chinese National Medical Products Administration granted approval for a label update to extend the indication of Kerendia™ to early stages of chronic kidney disease associated with type 2 diabetes based on findings from the Phase III FIGARO-DKD cardiovascular outcomes study.

Aflibercept

// In March, we submitted an application to the Japanese Ministry of Health, Labor, and Welfare (MHLW) seeking approval of aflibercept 8 mg for the treatment of two major retinal diseases: neovascular (wet) age-related macular degeneration (nAMD) and diabetic macular edema (DME).

// In May, we submitted an application to the Center for Drug Evaluation (CDE) of the Chinese National Medical Products Administration seeking approval of aflibercept 8 mg for the treatment of neovascular (wet) age-related macular degeneration (nAMD).

Darolutamide

// In February, we received approval in Japan for an additional indication for our cancer drug Nubeqa™ in patients with metastatic hormone-sensitive prostate cancer (mHSPC). Approval for this label extension was then also granted by the European Commission and the Chinese regulatory authorities in March.

Calantic™ Digital Solutions

- // In February, we received approval in Japan for Calantic Viewer, which is the regulatory-relevant part of the Calantic™ Digital Solutions digital platform. The platform offers access to AI-enabled and digital applications for radiological imaging.

Ultravist™

- // In May, our Ultravist™-300 and -370 contrast agent was approved in the United States for use in contrast-enhanced mammography, an imaging procedure with growing potential that combines digital mammography with the administration of an iodinated contrast agent.

Cell and gene therapy

Our development portfolio comprises seven projects in various stages of clinical development that cover a number of therapeutic areas with a high unmet medical need, with innovative programs in Parkinson's disease, rare diseases and congestive heart failure.

The following material developments occurred in the first half of 2023:

- // In June, together with our subsidiary BlueRock Therapeutics LP, United States, we announced first positive results from the Phase I study of bemdaneprocel, BlueRock's investigational neuronal stem cell therapy in Parkinson's disease. A Phase II study is planned to begin enrolling patients in the first half of 2024.
- // Our subsidiary Asklepios Biopharmaceutical Inc., (AskBio), United States, has initiated a Phase I study with a gene therapy that is being developed for the treatment of Huntington's disease.
- // AskBio has also initiated a Phase I/II study with a gene therapy that is being developed for the treatment of limb-girdle muscular dystrophy 2I/R9 (LGMD2I/R9).

External innovation

In the area of external innovation, progress was made as follows in the first half of 2023.

- // In March, BlueRock announced a collaboration with US companies Rune Labs, Inc. and Emerald Innovations, Inc., focused on integrating wearable and invisible contactless digital health technologies in a clinical trial in Parkinson's disease.
- // In May, we entered into a collaboration with BicycleTx Limited, United Kingdom, in the field of novel targeted radionuclide therapies in oncology.
- // Likewise in May, we inaugurated an incubator in Cambridge, Massachusetts, United States, that specializes in cell and gene therapy. The aim is to offer startup entrepreneurs access to our enterprise-wide expertise and state-of-the art laboratory and office space.
- // In June, we announced the acquisition of an exclusive license from Cedilla Therapeutics, Inc., United States, in the field of precision oncology.
- // Likewise in June, we announced a collaboration with Acuitas Therapeutics, Inc., Canada, in the area of lipid nanoparticle technology, to strengthen our gene editing programs.

Consumer Health

In the first half of the year, we partnered with UK digital health company Huma Therapeutics Limited to launch the Bayer Aspirin Heart Risk Assessment on the US market. This online tool quickly assesses an individual's risk factors for developing cardiovascular disease over the next 10 years, and the results can be shared with a healthcare professional as part of ongoing health management. The digital tool was developed using UK Biobank data with over 450,000 participants. It only takes five minutes and does not require invasive measurements which are a barrier for patients to understand their heart health risk.

In the Asia/Pacific region, we expanded the Elevit™ brand in China from prenatal to infant with the launch of two new supplements: DHA for healthy brain and eye development, and a probiotic powder to support gut health. These additions are critical to Elevit™'s mission of delivering nutrition for the healthiest start in the first 1,000 days of life. We also expanded our range of Talcid™ products in China to address gut wellbeing and overall wellness needs with the launch of probiotics for women and seniors. These science-backed products are aimed at consumers who actively seek non-medicated solutions in the Digestive Health category.

Leaps by Bayer

Our impact investment arm Leaps by Bayer invested in four new companies in the first half of 2023. At the beginning of the year, Leaps co-led a financing round for NextPoint Therapeutics, Inc., United States, a biotechnology company working on the development of novel monotherapies in immuno-oncology. Leaps also invested in Boundless Bio, Inc., United States, a next-generation precision oncology company. Furthermore, Leaps also co-led a financing round for Paratus Sciences Corporation, United States, a company which is seeking to develop new therapies for some of the most challenging health issues facing humanity on the basis of its studies of bat biology. Unlike humans, bats have a natural ability to control inflammation, tolerate viral infection and resist cancer.

In the area of agriculture, Leaps has invested in ChrysaLabs Inc., Canada, a startup which combines artificial intelligence with a sampling probe in order to provide real-time measurements of soil nutrients, delivering findings faster and more cost-effectively than is possible with conventional methods. In addition, at the beginning of the year the Crop Science Division announced a new collaboration with Oerth Bio LLC, United States, a company already listed in the Leaps portfolio, aimed at developing environmentally friendly crop protection products using Oerth's PROTAC™ protein degradation technology.

3. Report on Future Perspectives and on Opportunities and Risks

3.1 Future Perspectives

3.1.1 Economic Outlook

A 21

Economic Outlook

	Growth[1] 2022	Growth forecast[1] 2023
World	+ 3.1%	+ 2.4%
European Union	+ 3.6%	+ 0.7%
of which Germany	+ 1.9%	– 0.3%
United States	+ 2.1%	+ 1.5%
Emerging Markets[2]	+ 3.7%	+ 4.0%

[1] Real GDP growth, source: S&P Global Market Intelligence
[2] Including about 50 countries defined by S&P Global Market Intelligence as Emerging Markets in line with the World Bank
As of June 2023

As before, global economic growth is expected to decline year on year in 2023. However, the slowdown is likely to be less pronounced overall than initially anticipated. Persisting inflation and further rises in interest rates are expected to dampen economic development in many parts of the world. While growth in the United States is forecast to decline substantially against the prior year, a recession is no longer expected there. Only modest growth is predicted in Europe, with Germany's economic output in particular now expected to decline. The pace of growth in the Emerging Markets will likely accelerate overall compared with the previous year.

A 22

Economic Outlook for Division-Specific Markets

	Growth 2022	Growth forecast 2023
Seed and crop protection market[1]	+12%	−2%
Pharmaceuticals market[2]	+8%	+7%
Consumer health market[3]	+9%	+5%

[1] Source: Bayer's estimate (as of June 2023)
[2] Source: IQVIA Market Prognosis (as of May 2023), all rights reserved; currency-adjusted
[3] Source: Bayer's estimate (as of June 2023), taking into account external sources; currency-adjusted

We now expect the **seed and crop protection market** to contract by 2% (previously: grow by 3%) in 2023 due to a fall in glyphosate prices. The seed and crop protection market excluding glyphosate is projected to grow by a low single-digit percentage, mainly driven by seeds and in particular corn, with commodity prices remaining above historical levels.

We now expect the **pharmaceuticals market** to expand by 7% (previously: +6%) in 2023. Innovative products will continue to drive growth and more than offset losses due to the expiration of patents.

We now expect growth of 5% (previously: +4%) in the **consumer health market** for 2023, mainly due to economic conditions resulting in price increases and consumers' continued focus on health and wellness.

3.1.2 Corporate Outlook

Based on the current development of business and our internal planning, we have lowered our outlook for full-year 2023. This is mainly due to a further significant decline in sales of glyphosate-based products.

For full-year 2023, we now anticipate sales of between €48.5 billion and €49.5 billion on a currency-adjusted basis (previous forecast: €51 billion to €52 billion). This now corresponds to a decline of 2% to 3% on a currency- and portfolio-adjusted basis (previous forecast: increase of 2% to 3%). EBITDA before special items is now expected to come in at €11.3 billion to €11.8 billion on a currency-adjusted basis (previous forecast: €12.5 billion to €13.0 billion). In addition, we now anticipate core earnings per share of €6.20 to €6.40 on a currency-adjusted basis (previous forecast: €7.20 to €7.40).

Compared with the currency-adjusted forecast above, our guidance based on the closing rates as of June 30, 2023, only projects a significant impact from currency effects with respect to sales. Based on these exchange rates, we now expect to generate sales of €46.8 billion to €47.8 billion in 2023 (previous forecast: €50 billion to €51 billion), which now corresponds to a decline of 2% to 3% on a currency- and portfolio-adjusted basis (previous forecast: increase of 2% to 3%). Overall, it should be noted that a 1% appreciation (depreciation) of the euro against all other currencies would decrease (increase) sales by some €400 million on an annual basis.

A 23

Forecast for 2023

	Initial currency-adjusted forecast for 2023		Revised currency-adjusted forecast for 2023		Initial forecast for 2023 at closing rates on Dec. 31, 2022		Revised forecast for 2023 at closing rates on June 30, 2023	
	€ billion	Fx & p adj. change (%)	€ billion	Fx & p adj. change (%)	€ billion	Fx & p adj. change (%)	€ billion	Fx & p adj. change (%)
Sales	51 to 52	+ 2 to + 3	48.5 to 49.5	− 2 to − 3	50 to 51	+ 2 to + 3	46.8 to 47.8	− 2 to − 3
Crop Science		~ + 3		~ − 5		~ + 3		~ − 5
Pharmaceuticals		~ + 1		~ 0		~ + 1		~ 0
Consumer Health		~ + 5		~ + 5		~ + 5		~ + 5
		Margin (%)		Margin (%)		Margin (%)		Margin (%)
EBITDA before special items[1]	12.5 to 13.0		11.3 to 11.8		12.5 to 13.0		11.3 to 11.8	
Crop Science		25 to 26		~ 21		25 to 26		~ 21
Pharmaceuticals		slightly above 29		~ 28		~ 30		~ 29
Consumer Health		~ 23		~ 23		~ 23		~ 23
Financial result (core)[2]	~ − 1.9		~ − 1.9		~ − 1.9		~ − 1.9	
Tax rate (core)[3]	~ 23%		~ 23%		~ 23%		~ 23%	
Free cash flow[1]	~ 3.0		~ 0		~ 3.0		~ 0	
Net financial debt[1]	32 to 33		~ 36		32 to 33		~ 36	
Special items in EBIT[1]	~ − 1.0		~ − 3.5		~ − 1.0		~ − 3.5	
	€		€		€		€	
Core earnings per share[1]	7.20 to 7.40		6.20 to 6.40		7.20 to 7.40		6.20 to 6.40	

Fx & p adj. = currency- and portfolio-adjusted
[1] For definition see A 2.3 “Alternative Performance Measures Used by the Bayer Group.”
[2] Financial result before special items
[3] (Income taxes + special items in income taxes + tax effects on adjustments) / (core EBIT + financial result + special items in financial result)

As before, we plan to take total special charges of about €1.0 billion (currency-adjusted) in EBITDA in 2023 in connection with restructuring measures.

3.2 Opportunities and Risks

As a global enterprise with a diversified portfolio, the Bayer Group is exposed to a wide range of internal and external developments and 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 opportunity and risk status are outlined in detail in the Annual Report 2022, A 3.2 “Opportunity and Risk Report.”

Overall assessment by the Board of Management

We currently have not identified any material changes in our risk status compared with the assessment given in the Annual Report 2022. In the opinion of the Board of Management, the Bayer Group’s continued existence remains unendangered.

Significant developments that have occurred in respect of the legal risks since publication of the Bayer Annual Report 2022 (Note [30] 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, 2023

Bayer Group Consolidated Income Statements

B 1

€ million	Q2 2022	Q2 2023	H1 2022	H1 2023
Net sales	**12,819**	**11,044**	**27,458**	**25,433**
Cost of goods sold	(5,680)	(4,718)	(10,856)	(10,451)
Gross profit	**7,139**	**6,326**	**16,602**	**14,982**
Selling expenses	(3,736)	(3,196)	(7,020)	(6,590)
Research and development expenses	(1,928)	(1,228)	(3,382)	(2,799)
General administration expenses	(736)	(489)	(1,397)	(1,147)
Other operating income	780	614	1,289	998
Other operating expenses	(1,350)	(2,983)	(1,711)	(3,427)
EBIT[1]	**169**	**(956)**	**4,381**	**2,017**
Equity-method income (loss)	(39)	(45)	(59)	(82)
Financial income	50	63	117	212
Financial expenses	(703)	(636)	(1,240)	(1,115)
Financial result	**(692)**	**(618)**	**(1,182)**	**(985)**
Income before income taxes	**(523)**	**(1,574)**	**3,199**	**1,032**
Income taxes	234	(315)	(194)	(739)
Income after income taxes	**(289)**	**(1,889)**	**3,005**	**293**
of which attributable to noncontrolling interest	9	(2)	12	2
of which attributable to Bayer AG stockholders (net income)	**(298)**	**(1,887)**	**2,993**	**291**
€				
Earnings per share				
Basic	(0.30)	(1.92)	3.05	0.30
Diluted	(0.30)	(1.92)	3.05	0.30

[1] For definition see Annual Report 2022, A 2.3 “Alternative Performance Measures Used by the Bayer Group.”

Bayer Group Consolidated Statements of Comprehensive Income

B 2

€ million	Q2 2022	Q2 2023	H1 2022	H1 2023
Income after income taxes	**(289)**	**(1,889)**	**3,005**	**293**
of which attributable to noncontrolling interest	9	(2)	12	2
of which attributable to Bayer AG stockholders	(298)	(1,887)	2,993	291
Remeasurements of the net defined benefit liability for post-employment benefit plans	1,100	234	1,286	744
Income taxes	(406)	(64)	(511)	(196)
Other comprehensive income from remeasurements of the net defined benefit liability for post-employment benefit plans	**694**	**170**	**775**	**548**
Changes in the fair value of equity instruments measured at fair value	(47)	1	(104)	(13)
Income taxes	14	(4)	15	(3)
Other comprehensive income from equity instruments measured at fair value	**(33)**	**(3)**	**(89)**	**(16)**
Other comprehensive income relating to associates accounted for using the equity method	**–**	**–**	**–**	**–**
Other comprehensive income that will not be reclassified subsequently to profit or loss	**661**	**167**	**686**	**532**
Changes in the fair value of cash flow hedges	(185)	(49)	(182)	(66)
Reclassified to profit or loss	139	(20)	147	(1)
Income taxes	6	16	13	14
Other comprehensive income from cash flow hedges	**(40)**	**(53)**	**(22)**	**(53)**
Changes in time value of options used as hedging instrument	(1)	(1)	(8)	(7)
Income taxes	3	–	3	2
Other comprehensive income from time value of options	**2**	**(1)**	**(5)**	**(5)**
Other comprehensive income from available-for-sale financial assets	**–**	**–**	**1**	**–**
Other comprehensive income from exchange differences	**2,226**	**243**	**3,333**	**(199)**
Other comprehensive income relating to associates accounted for using the equity method	**1**	**–**	**2**	**(2)**
Other comprehensive income that may be reclassified subsequently to profit or loss	**2,189**	**189**	**3,309**	**(259)**
Total other comprehensive income[1]	**2,850**	**356**	**3,995**	**273**
of which attributable to noncontrolling interest	6	3	7	1
of which attributable to Bayer AG stockholders	2,844	353	3,988	272
Total comprehensive income	**2,561**	**(1,533)**	**7,000**	**566**
of which attributable to noncontrolling interest	15	1	19	3
of which attributable to Bayer AG stockholders	2,546	(1,534)	6,981	563

[1] Other comprehensive income is recognized outside profit or loss in equity.

Bayer Group Consolidated Statements of Financial Position

B 3

€ million	June 30, 2022	Dec. 31, 2022	June 30, 2023
Noncurrent assets			
Goodwill	41,583	39,648	36,922
Other intangible assets	25,367	24,183	23,438
Property, plant and equipment	13,275	13,674	13,177
Investments accounted for using the equity method	762	893	930
Other financial assets	2,030	2,049	1,867
Other receivables	1,155	1,065	1,212
Deferred taxes	5,072	5,605	5,344
	89,244	**87,117**	**82,890**
Current assets			
Inventories	11,371	13,636	13,768
Trade accounts receivable	14,785	10,312	13,717
Other financial assets	4,782	5,208	3,149
Other receivables	1,815	1,923	2,079
Claims for income tax refunds	1,785	1,507	1,569
Cash and cash equivalents	3,412	5,171	4,481
Assets held for sale	1,600	3	14
	39,550	**37,760**	**38,777**
Total assets	**128,794**	**124,877**	**121,667**
Equity			
Capital stock	2,515	2,515	2,515
Capital reserves	18,261	18,261	18,261
Other reserves	17,243	17,997	16,172
Equity attributable to Bayer AG stockholders	**38,019**	**38,773**	**36,948**
Equity attributable to noncontrolling interest	185	153	176
	38,204	**38,926**	**37,124**
Noncurrent liabilities			
Provisions for pensions and other post-employment benefits	5,665	4,388	3,596
Other provisions	8,294	8,591	8,296
Refund liabilities	166	10	194
Contract liabilities	635	561	517
Financial liabilities	38,061	33,791	36,557
Income tax liabilities	1,672	1,672	1,451
Other liabilities	1,618	1,127	1,028
Deferred taxes	836	727	717
	56,947	**50,867**	**52,356**
Current liabilities			
Other provisions	7,152	5,092	3,618
Refund liabilities	7,985	5,583	8,014
Contract liabilities	2,174	4,163	1,657
Financial liabilities	6,573	7,861	9,960
Trade accounts payable	6,097	7,545	5,970
Income tax liabilities	1,036	1,056	799
Other liabilities	2,513	3,784	2,169
Liabilities directly related to assets held for sale	113	–	–
	33,643	**35,084**	**32,187**
Total equity and liabilities	**128,794**	**124,877**	**121,667**

Bayer Group Consolidated Statements of Cash Flows

B 4

€ million	Q2 2022	Q2 2023	H1 2022	H1 2023
Income after income taxes	(289)	(1,889)	3,005	293
Income taxes	(234)	315	194	739
Financial result	692	618	1,182	985
Income taxes paid	(526)	(406)	(968)	(872)
Depreciation, amortization and impairment losses (loss reversals)	2,482	3,287	3,562	4,632
Change in pension provisions	(76)	(139)	(147)	(247)
(Gains) losses on retirements of noncurrent assets	(296)	(20)	(339)	(42)
Decrease (increase) in inventories	(225)	(163)	219	(194)
Decrease (increase) in trade accounts receivable	353	856	(3,833)	(3,532)
(Decrease) increase in trade accounts payable	68	(300)	(990)	(1,458)
Changes in other working capital, other noncash items	155	(1,675)	(507)	(3,370)
Net cash provided by (used in) operating activities	**2,104**	**484**	**1,378**	**(3,066)**
Cash outflows for additions to property, plant, equipment and intangible assets	(550)	(606)	(899)	(1,072)
Cash inflows from the sale of property, plant, equipment and other assets	261	60	457	102
Cash outflows for divestments less divested cash	–	(20)	–	(14)
Income tax payments related to divestments and asset sales	–	(290)	–	(355)
Cash inflows from noncurrent financial assets	3	130	3	130
Cash outflows for noncurrent financial assets	(231)	(95)	(314)	(246)
Cash outflows for acquisitions less acquired cash	(15)	(353)	(15)	(482)
Interest and dividends received	22	65	47	162
Cash inflows from (outflows for) current financial assets	(2,261)	12	(1,308)	2,280
Net cash provided by (used in) investing activities	**(2,771)**	**(1,097)**	**(2,029)**	**505**
Capital contributions	–	23	15	23
Dividend payments	(1,966)	(2,360)	(1,966)	(2,360)
Issuances of debt	4,192	3,750	6,471	5,936
Retirements of debt	(3,604)	(725)	(4,686)	(1,066)
Interest paid including interest-rate swaps	(441)	(422)	(614)	(605)
Interest received from interest-rate swaps	5	6	41	6
Net cash provided by (used in) financing activities	**(1,814)**	**272**	**(739)**	**1,934**
Change in cash and cash equivalents due to business activities	**(2,481)**	**(341)**	**(1,390)**	**(627)**
Cash and cash equivalents at beginning of period	**5,790**	**4,854**	**4,564**	**5,171**
Change in cash and cash equivalents due to changes in scope of consolidation	–	(1)	3	(1)
Change in cash and cash equivalents due to exchange rate movements	106	(31)	238	(62)
Cash and cash equivalents at end of period	**3,415**	**4,481**	**3,415**	**4,481**

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
Jan. 1, 2022	**2,515**	**18,261**	**12,244**	**33,020**	**148**	**33,168**
Total comprehensive income						
Income after income taxes			2,993	2,993	12	3,005
Other comprehensive income			3,988	3,988	7	3,995
Miscellaneous other changes						
Equity transactions with owners						
Dividend payments			(1,965)	(1,965)	(1)	(1,966)
Other changes			(17)	(17)	19	2
June 30, 2022	**2,515**	**18,261**	**17,243**	**38,019**	**185**	**38,204**
Jan. 1, 2023	**2,515**	**18,261**	**17,997**	**38,773**	**153**	**38,926**
Total comprehensive income						
Income after income taxes			291	291	2	293
Other comprehensive income			272	272	1	273
Miscellaneous other changes						
Equity transactions with owners						
Dividend payments			(2,358)	(2,358)	(2)	(2,360)
Other changes			(30)	(30)	22	(8)
June 30, 2023	**2,515**	**18,261**	**16,172**	**36,948**	**176**	**37,124**

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, 2023, 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 2022 fiscal year, particularly with regard to the main recognition and valuation principles. As regards those Notes' listed standards, amendments and interpretations to be applied for the first time in fiscal 2023, none have had any material impact on the Bayer Group this fiscal year.

Impact of Russia's invasion of Ukraine

We do not currently see any material impact of Russia's invasion of Ukraine on our business operations and thus the Group's financial position or results of operations.

We are continually analyzing the future direct and indirect effects of economic developments and sanctions on the valuation of assets and liabilities, such as possible impacts on supply chains and energy supplies.

Impact of climate risks

We are still looking at the impact of transitional and physical climate-related risks from various perspectives to better evaluate them in relation to our company and the Group's financial position or results of operations.

We do not currently see any fundamentally changed expectations with regard to the Group's financial position or results of operations.

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 6

Exchange Rates for Major Currencies

				Closing rate		Average rate
€1 /		**Dec. 31, 2022**	**June 30, 2022**	**June 30, 2023**	**H1 2022**	**H1 2023**
BRL	Brazil	5.64	5.42	5.30	5.53	5.48
CAD	Canada	1.44	1.34	1.44	1.39	1.46
CNY	China	7.37	6.97	7.90	7.09	7.49
GBP	United Kingdom	0.89	0.86	0.86	0.84	0.88
JPY	Japan	140.72	141.63	157.08	134.08	145.51
RUB	Russia	77.92	56.38	96.47	81.00	83.07
USD	United States	1.07	1.04	1.09	1.09	1.08

B 7

Application of IAS 29 (Financial Reporting in Hyperinflationary Economies)

Company name	Place of business	Applied since
Bayer S. A.	Buenos Aires, Argentina	July 1, 2018
Bayer Türk Kimya Sanayii Limited Sirketi	Istanbul, Turkey	April 1, 2022
Monsanto Gida Ve Tarim Ticaret Ltd Sirketi	Istanbul, Turkey	April 1, 2022
Bayer Tohumculuk ve Tarim Limited Sirketi	Istanbul, Turkey	March 7, 2023

The effects in initial and 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. Provisions for pensions and other post-employment benefits declined by €792 million to €3,596 million compared with December 31, 2022. This was mainly the result of changes in discount rates and the development of the fair value of plan assets.

B 8

Discount Rate for Pension Obligations

%	Dec. 31, 2022	June 30, 2022	June 30, 2023
Germany	3.90	3.30	4.20
United Kingdom	4.50	3.60	5.00
United States	5.30	4.60	5.10

Segment reporting

As of June 30, 2023, the Bayer Group comprised the three reportable segments Crop Science, Pharmaceuticals and Consumer Health.

B 9

Key Data by Segment

	Crop Science		Pharmaceuticals		Consumer Health	
€ million	Q2 2022	Q2 2023	Q2 2022	Q2 2023	Q2 2022	Q2 2023
Net sales (external)	6,461	4,924	4,818	4,557	1,496	1,466
Currency- and portfolio-adjusted change[1]	+ 17.2%	− 18.5%	+ 2.1%	+ 0.2%	+ 6.8%	+ 5.4%
Intersegment sales[2]	2	0	3	8	0	2
Net sales (total)[2]	6,463	4,924	4,821	4,565	1,496	1,468
EBIT[1]	(258)	(2,207)	1,206	1,047	239	239
EBITDA before special items[1]	1,749	725	1,478	1,379	330	335
Net cash provided by operating activities	2,551	338	35	442	116	52
Depreciation, amortization, impairment losses/loss reversals	1,959	2,873	353	257	88	89

[1] For definition see Annual Report 2022, A 2.3 “Alternative Performance Measures Used by the Bayer Group.”
[2] 2022 figures restated

B 9 (continued)

Key Data by Segment

	All other segments		Enabling functions and consolidation		Group	
€ million	Q2 2022	Q2 2023	Q2 2022	Q2 2023	Q2 2022	Q2 2023
Net sales (external)	42	94	2	3	12,819	11,044
Currency- and portfolio-adjusted change[1]	–10.8%	+120.5%	–	–	+9.6%	–8.2%
Intersegment sales[2]	1	0	(6)	(10)	–	–
Net sales (total)[2]	43	94	(4)	(7)	12,819	11,045
EBIT[1]	(30)	4	(988)	(39)	169	(956)
EBITDA before special items[1]	(11)	20	(197)	68	3,349	2,527
Net cash provided by operating activities	–	–	–	–	2,104	484
Depreciation, amortization, impairment losses/loss reversals	19	16	63	52	2,482	3,287

[1] For definition see Annual Report 2022, A 2.3 "Alternative Performance Measures Used by the Bayer Group."
[2] 2022 figures restated

B 10

Key Data by Segment

	Crop Science		Pharmaceuticals		Consumer Health	
€ million	H1 2022	H1 2023	H1 2022	H1 2023	H1 2022	H1 2023
Net sales (external)	14,908	13,275	9,442	8,964	3,008	3,039
Currency- and portfolio-adjusted change[1]	+19.7%	–8.6%	+2.4%	–1.4%	+11.9%	+4.7%
Intersegment sales[2]	4	1	3	9	0	4
Net sales (total)[2]	14,912	13,276	9,445	8,973	3,008	3,043
EBIT[1]	2,770	112	2,408	1,853	523	521
EBITDA before special items[1]	5,418	3,992	2,867	2,485	718	714
Net cash provided by (used in) operating activities	164	(3,026)	1,059	1,149	429	235
Depreciation, amortization, impairment losses/loss reversals	2,646	3,803	588	515	174	180

[1] For definition see Annual Report 2022, A 2.3 "Alternative Performance Measures Used by the Bayer Group."

B 10 (continued)

Key Data by Segment

	All other segments		Enabling functions and consolidation		Group	
€ million	H1 2022	H1 2023	H1 2022	H1 2023	H1 2022	H1 2023
Net sales (external)	88	145	12	10	27,458	25,433
Currency- and portfolio-adjusted change[1]	–13.0%	+55.5%	–	–	+12.1%	–4.5%
Intersegment sales[2]	1	1	(8)	(14)	–	–
Net sales (total)[2]	89	146	4	(4)	27,458	25,433
EBIT[1]	(29)	18	(1,291)	(487)	4,381	2,017
EBITDA before special items[1]	7	51	(410)	(244)	8,600	6,998
Net cash provided by (used in) operating activities	–	–	–	–	1,378	(3,066)
Depreciation, amortization, impairment losses/loss reversals	36	33	118	101	3,562	4,632

[1] For definition see Annual Report 2022, A 2.3 "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 11

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

€ million	Q2 2022	Q2 2023	H1 2022	H1 2023
EBITDA before special items of segments	3,546	2,459	9,010	7,242
EBITDA before special items of enabling functions and consolidation	(197)	68	(410)	(244)
EBITDA before special items[1]	**3,349**	**2,527**	8,600	6,998
Depreciation, amortization and impairment losses/loss reversals before special items of segments	(1,007)	(941)	(2,031)	(1,959)
Depreciation, amortization and impairment losses/loss reversals before special items of corporate functions and consolidation	(62)	(52)	(117)	(101)
Depreciation, amortization and impairment losses/loss reversals before special items	**(1,069)**	**(993)**	(2,148)	(2,060)
EBIT before special items of segments	2,539	1,518	6,979	5,283
EBIT before special items of enabling functions and consolidation	(259)	16	(527)	(345)
EBIT before special items[1]	**2,280**	**1,534**	6,452	4,938
Special items of segments	(1,382)	(2,435)	(1,307)	(2,779)
Special items of enabling functions and consolidation	(729)	(55)	(764)	(142)
Special items[1]	**(2,111)**	**(2,490)**	(2,071)	(2,921)
EBIT of segments	1,157	(917)	5,672	2,504
EBIT of enabling functions and consolidation	(988)	(39)	(1,291)	(487)
EBIT[1]	**169**	**(956)**	4,381	2,017
Financial result	(692)	(618)	(1,182)	(985)
Income before income taxes	**(523)**	**(1,574)**	3,199	1,032

[1] For definition see Annual Report 2022, A 2.3 "Alternative Performance Measures Used by the Bayer Group."

The balance of other operating expenses and other operating income of minus €2,369 million in the second quarter of 2023 (Q2 2022: minus €570 million) included expenses of €2,436 million arising from an impairment loss on goodwill in the Crop Science Division. These expenses are reported as special items in segment reporting. The special items in the second quarter of 2022 were mainly in connection with litigations.

Scope of consolidation

Changes in the scope of consolidation

The consolidated financial statements as of June 30, 2023, included 351 companies (December 31, 2022: 354 companies). Five joint ventures (December 31, 2022: five) and 42 associates (December 31, 2022: 43) were accounted for in the consolidated financial statements using the equity method according to IAS 28 (Investments in Associates and Joint Ventures).

Acquisitions, divestments and discontinued operations

Acquisitions in 2023

On February 13, 2023, we completed the acquisition of 100% of the shares in Blackford Analysis Ltd., United Kingdom, a global provider of radiology AI platform technology, for a purchase price of approximately €75 million. The purchase price allocation has not yet been concluded. Blackford provides platform infrastructure and access to a rich clinical application (ClinApp) ecosystem focused on medical imaging and analytics. The acquisition follows a development and license agreement between the two companies in 2020 that laid the foundation for Bayer's recently launched medical imaging platform, Calantic™ Digital Solutions. The acquired companies are assigned to the Pharmaceuticals segment.

Acquisitions in 2022

On June 28, 2022, Bayer acquired 30% of the shares in Natsana GmbH, Germany, for a purchase price of around €96 million. The acquired shares are accounted for using the equity method. Natsana is an online-only provider focused on the sale and development of natural supplements such as vitamins, minerals, nutrients and probiotics. Its portfolio comprises over 100 products under its three main brands: Feel Natural, Nature Love and Natural Elements. Bayer will acquire the other 70% of shares in 2025 based on a buyout mechanism agreed to when closing the transaction. The company is assigned to the Consumer Health segment.

Assets held for sale and discontinued operations

There were no discontinued operations to report in 2023 or 2022.

The assets held for sale, net of directly related liabilities, totaled around €14 million as of June 30, 2023. They primarily related to the planned sale of a production facility in Spain.

The prior-year figure mainly related to the sale of the Environmental Science Professional business to the private equity firm Cinven, United Kingdom. Environmental Science Professional is a global leader offering solutions to control pests, disease and weeds in nonagricultural areas such as vector control, professional pest management, vegetation management, forestry, and turf and ornamentals. The transaction was completed on October 4, 2022. The purchase price paid for the business amounted to approximately €2,299 million before customary purchase price adjustments. The divestment gain of €785 million was recognized in other operating income.

Assets held for sale in the previous year also included an amount of around €51 million from the sale of office and administrative space in St. Louis, United States. These were attributable entirely to property, plant and equipment. In addition, assets held for sale contained intangible assets amounting to some €38 million in total. These included around €16 million due to the divestment of the product Nebido™ to Grünenthal GmbH, Germany, as well as around €22 million for the divestment of the Marvelon™ and Mercilon™ trademarks in China, Hong Kong, Macau and Vietnam within the Pharmaceuticals segment.

The assets and liabilities held for sale as of June 30, 2023, were as follows:

B 12

Assets and Liabilities Held for Sale

€ million	June 30, 2022	June 30, 2023
Goodwill	1,337	–
Other intangible assets	75	–
Property, plant and equipment	80	14
Deferred taxes	5	–
Inventories	92	–
Trade accounts receivable	4	–
Other receivables	2	–
Claims for income tax refunds	2	–
Cash and cash equivalents	3	–
Assets held for sale	**1,600**	**14**
Provisions for pensions and other post-employment benefits	5	–
Other provisions	2	–
Refund liabilities	84	–
Financial liabilities	8	–
Deferred taxes	13	–
Trade accounts payable	1	–
Liabilities directly related to assets held for sale	**113**	**–**

Goodwill, other intangible assets and property, plant and equipment

Unscheduled impairment testing was conducted in the first quarter of 2023 for the Crop Science segment’s cash-generating unit glyphosate after a weak start to 2023 led to revised full-year expectations, mainly due to significantly reduced market price expectations for glyphosate. In addition, lower expectations for volumes also had an impact. Impairment testing gave rise to impairment losses of approximately €278 million, attributable entirely to property, plant and equipment. The impairment losses were allocated to the cost of goods sold, with the respective figures determined on the basis of fair value less costs of disposal while applying an after-tax cost of capital rate of 11.5%.

Impairment testing was conducted in the second quarter of 2023 in the Crop Science segment due to a further deterioration in business prospects and updated long-term corporate planning.

In the Pharmaceuticals and Consumer Health segments, updated long-term corporate planning did not necessitate impairment testing.

The unscheduled impairment testing in the Crop Science segment resulted in net impairment losses on intangible assets totaling €2,020 million. An impairment loss of €2,436 million was recognized on goodwill. There were additional impairment losses on property, plant and equipment in the cash-generating unit glyphosate amounting to €277 million. The impairment losses on goodwill were due to reduced business prospects overall, largely driven by significantly lower price expectations for glyphosate.

The impairment testing resulted in the recognition of impairment loss reversals in the cash-generating units Soybean Seed & Traits (€1,253 million, comprising €140 million on research and development projects, €971 million on patents and technologies, €114 million on trademarks and €28 million on marketing and distribution rights) and Vegetable Seeds (€134 million, comprising €37 million on research and development projects, €81 million on patents and technologies, €13 million on trademarks and €3 million on marketing and distribution rights). The impairment loss reversal for Soybean Seed & Traits was largely due to a decrease in the cost of goods sold as a result of lower commodity prices. The impairment loss reversal for Vegetable Seeds was due to improved market penetration and growing market share in Asia.

In contrast, impairment losses were recognized in the cash-generating units Corn Seed & Traits (€579 million, comprising €99 million on research and development projects, €376 million on patents and technologies, €89 million on trademarks and €15 million on marketing and distribution rights), Cotton Seed (€392 million, comprising €22 million on research and development projects, €330 million on patents and technologies, and €40 million on trademarks), and glyphosate (€277 million, comprising €277 million on property, plant and equipment). The impairment loss at Corn Seed & Traits was mainly driven by the anticipated long-term normalization of commodity prices. The impairment loss for Cotton Seed was primarily attributable to persistent competitive pressure. The impairment loss for glyphosate was mainly due to significant further declines in market price expectations. In addition, further reductions in expectations with regard to volumes also had an impact.

The impairment losses and impairment loss reversals reflected the difference between the respective carrying amounts and their fair value less costs of disposal.

The table below indicates the capital cost factors used in the impairment testing on the cash-generating units in the fourth quarter of 2022 and second quarter of 2023. A long-term growth rate of 2% (Q4 2022: 2%) and an after-tax cost of capital of 10.1% (Q4 2022: 10.0%) were applied in the testing of goodwill for impairment in the Crop Science segment in the second quarter of 2023.

B 13

Impairment Testing Parameters

	After-tax cost of capital	
%	Q4 2022	Q2 2023
Corn Seed & Traits	10.5	10.6
Soybean Seed & Traits	9.9	10.0
Glyphosate	11.5	11.3
Dicamba	7.7	7.7
Cotton Seed	7.6	7.8
Canola	8.3	8.2
Vegetable Seeds	9.9	10.2

Financial instruments

The following tables show the carrying amounts and fair values of the individual 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), the reconciliation is shown in the column headed “Nonfinancial assets/liabilities.”

B 14

Carrying Amounts and Fair Values of Financial Instruments

						June 30, 2023
		Measured at fair value [fair value for information[4]]				
Measurement category (IFRS 9)[1]	Measured at amortized cost	Based on quoted prices in active markets (Level 1)	Based on observable market data (Level 2)	Based on unobservable inputs (Level 3)	Nonfinancial assets/ liabilities	
€ million	**Carrying amount**	**Carrying amount**	**Carrying amount**	**Carrying amount**	**Carrying amount**	**Total**
Trade accounts receivable	12,791	129	501		296	13,717
AC	12,791					12,791
FVTPL, mandatory[2]		129				129
FVTOCI (recycling)			501			501
Nonfinancial assets					296	296
Other financial assets	223	2,562	494	1,737		5,016
AC	193		[182]			193
FVTPL, mandatory[2]		2,491	59	1,432		3,982
FVTOCI (no recycling), designated[3]		55		284		339
Derivatives		16	435	21		472
Lease receivables	30		[30]			30
Other receivables	384			64	2,843	3,291
AC	384		[384]			384
FVTPL, mandatory[2]				64		64
Nonfinancial assets					2,843	2,843
Cash and cash equivalents	4,481					4,481
AC	4,481		[4,481]			4,481
Total financial assets	**17,879**	**2,691**	**995**	**1,801**		**23,366**
of which AC	17,849					17,849
of which FVTPL		2,620	59	1,496		4,175
Financial liabilities	46,303		128		86	46,517
AC	45,101	[33,140]	[8,981]			45,101
Derivatives			128			128
Lease liabilities	1,202					1,202
Nonfinancial liabilities					86	86
Trade accounts payable	5,970					5,970
AC	5,970					5,970
Other liabilities	873	14	212	1,199	899	3,197
AC	873		[873]			873
FVTPL (nonderivative), mandatory[2]				1,197		1,197
Derivatives		14	212	2		228
Nonfinancial liabilities					899	899
Total financial liabilities	**53,146**	**14**	**340**	**1,199**		**54,699**
of which AC	51,944					51,944
of which derivatives		14	340	2		356

[1] AC: at amortized cost
FVTOCI: at fair value through other comprehensive income
FVTPL: at fair value through profit or loss
[2] Measured at fair value through profit or loss as required by IFRS 9
[3] Measured at fair value through other comprehensive income under IFRS 9.5.7.5
[4] Fair value of the financial instruments at amortized cost under IFRS 7.29 (a)

B 15

Carrying Amounts and Fair Values of Financial Instruments

Dec. 31, 2022

Measurement category (IFRS 9)[1]	Measured at amortized cost	Measured at fair value [fair value for information[4]]			Nonfinancial assets/ liabilities	
		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**	**Total**
Trade accounts receivable	9,881	177			254	10,312
AC	9,881					9,881
FVTPL, mandatory[2]		177				177
Nonfinancial assets					254	254
Other financial assets	259	1,459	3,746	1,793		7,257
AC	230		[219]			230
FVTPL, mandatory[2]		1,395	3,524	1,440		6,359
FVTOCI (no recycling), designated[3]		55		340		395
Derivatives		9	222	13		244
Lease receivables	29		[29]			29
Other receivables	406			33	2,549	2,988
AC	406		[406]			406
FVTPL, mandatory[2]				33		33
Nonfinancial assets					2,549	2,549
Cash and cash equivalents	5,171					5,171
AC	5,171		[5,171]			5,171
Total financial assets	**15,717**	**1,636**	**3,746**	**1,826**		**22,925**
of which AC	15,688					15,688
of which FVTPL		1,572	3,524	1,473		6,569
Financial liabilities	41,377		190		85	41,652
AC	40,143	[28,340]	[8,298]			40,143
Derivatives			190			190
Lease liabilities	1,234					1,234
Nonfinancial liabilities					85	85
Trade accounts payable	7,545					7,545
AC	7,545					7,545
Other liabilities	2,124	9	143	1,734	901	4,911
AC	2,124		[2,124]			2,124
FVTPL (nonderivative), mandatory[2]				1,729		1,729
Derivatives		9	143	5		157
Nonfinancial liabilities					901	901
Total financial liabilities	**51,046**	**9**	**333**	**1,734**		**53,122**
of which AC	49,812					49,812
of which derivatives		9	333	5		347

[1] AC: at amortized cost
FVTOCI: at fair value through other comprehensive income
FVTPL: at fair value through profit or loss
[2] Measured at fair value through profit or loss as required by IFRS 9
[3] Measured at fair value through other comprehensive income under IFRS 9.5.7.5
[4] Fair value of the financial instruments at amortized cost under IFRS 7.29 (a)

Due to the short maturities of most trade accounts receivable and payable, other financial receivables and liabilities, and cash and cash equivalents, their carrying amounts at the closing date do not significantly differ from the fair values. Trade accounts receivable are measured at fair value through other comprehensive income if they can potentially be transferred as part of factoring agreements.

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 also the creditworthiness of the counterparty in certain cases. 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 or debt value adjustments are determined to account for the credit risk of the contractual party or Bayer.

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 in certain cases.

Fair values measured using unobservable inputs are categorized within Level 3 of the fair value hierarchy. This essentially 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.

When determining the fair values of contingent consideration within the “FVTPL (nonderivative) – at fair value through profit or loss” category, the principal unobservable input is the estimation of the probability that, for example, pre-defined milestones for research and development projects will be achieved or that sales targets will be attained, as well as the timing of the payments. Changes in these estimates may lead to significant increases or decreases in fair value.

Embedded derivatives are separated from their respective host contracts if the contracts do not represent financial assets and are not closely related to them. 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, for example. The internal measurement of embedded derivatives is performed using appropriate valuation models, such as discounted cash flow models, which are based on unobservable inputs. The relevant models 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.

In May 2023, Bayer announced the signing of a long-term structured renewable energy credit (REC) purchase agreement. The agreement contains a contract for difference, which meets the definition of an embedded derivative measured at fair value through profit and loss. At inception, the fair value of the embedded derivative equaled the transaction price of zero. Fair value changes over the contract term are mostly influenced by future energy prices and are recognized in other operating income or expenses. As of June 30, 2023, the positive fair value was €9 million.

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

B 16

Development of Financial Assets and Liabilities (Level 3)

€ million	Assets – FVTPL[1]	FVTOCI (no recycling)[1]	Derivatives (net)	Liabilities – FVTPL (nonderivative)[1]	Total
Carrying amount, January 1, 2023	**1,473**	**340**	**8**	**(1,729)**	**92**
Gains (losses) recognized in profit or loss	15	–	11	74	100
of which related to assets/liabilities recognized in the statements of financial position	15	–	11	74	100
Gains (losses) recognized outside profit or loss	–	(10)	–	–	(10)
Additions of assets (liabilities)	136	20	–	(31)	125
Settlements of (assets) liabilities	(126)	–	–	463	337
Changes in scope of consolidation	–	(61)	–	–	(61)
Exchange differences	(2)	(5)	–	26	19
Carrying amount, June 30, 2023	**1,496**	**284**	**19**	**(1,197)**	**602**

[1] See table B 14 for definitions of measurement categories.

B 17

Development of Financial Assets and Liabilities (Level 3)

€ million	Assets – FVTPL[1]	FVTOCI (no recycling)[1]	Derivatives (net)	Liabilities – FVTPL (nonderivative)[1]	Total
Carrying amount, January 1, 2022	**1,009**	**406**	**11**	**(1,769)**	**(343)**
Gains (losses) recognized in profit or loss	(72)	–	(5)	68	(9)
of which related to assets/liabilities recognized in the statements of financial position	(72)	–	(5)	68	(9)
Gains (losses) recognized outside profit or loss	–	(33)	–	–	(33)
Additions of assets (liabilities)	13	74	–	–	87
Settlements of (assets) liabilities	–	(13)	–	29	16
Changes in scope of consolidation	(18)	–	–	–	(18)
Exchange differences	12	27	2	(152)	(111)
Carrying amount, June 30, 2022	**944**	**461**	**8**	**(1,824)**	**(411)**

[1] See table B 15 for definitions of measurement categories.

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 other financial income and expenses.

Financial liabilities

In April 2023, Bayer AG exercised its option to extend, by an additional six months, the new €3 billion credit line with banks that it had agreed and drawn on in May 2022.

In May 2023, Bayer AG placed new senior bonds with a total volume of €3 billion under its Debt Issuance Program. The three tranches with volumes of €750 million, €750 million and €1.5 billion have maturities of 3.25 years, 6.25 years and 10 years, respectively. The coupons of the notes are 4.000%, 4.250% and 4.625%, respectively.

To find out more about the maturities of financial liabilities, please see the table on maturities in Note [24] to the consolidated financial statements in the Bayer Annual Report 2022.

Legal Risks

To find out more about the Bayer Group's legal risks, please see Note 30 to the consolidated financial statements in the Bayer Annual Report 2022, which can be downloaded free of charge at www.bayer.com. Since the Bayer Annual Report 2022, the following significant changes have occurred in respect of the legal risks:

Dicamba: Since 2016, a number of lawsuits have been filed against Bayer's subsidiary Monsanto in the United States. The general claims are that off-target movement from the dicamba herbicide and/or the Xtend™ system has damaged non-dicamba tolerant soybean and other crops. We continue to receive new dicamba-related claims that could be potential future lawsuits. The most significant of those was a claim by Frey Farms, which is a producer of watermelons, pumpkins and other vegetables. In April 2023, the parties entered into an agreement to resolve all of the claims of Frey Farms.

BASF arbitration: In 2019, Bayer was served with a request for arbitration by BASF SE. BASF alleged indemnification claims under asset purchase agreements related to the divestment of certain Crop Science businesses to BASF. In August 2022, the arbitral tribunal dismissed BASF's claims in their entirety and awarded Bayer approximately two-thirds of its arbitration fees and costs. In April 2023, the Higher Regional Court of Frankfurt (Main) issued a decision rejecting BASF's motion to set aside the award. However, the court found that the arbitral award technically was invalid because it did not comply with a German procedural rule regarding the signatures of the tribunal members. According to the court decision the original arbitration proceedings have not yet come to an end and still have to be concluded by a valid arbitration award that fully complies with the procedural rules. Bayer disagrees with the court decision. Both parties have appealed the decision.

Mine permit Idaho: In 2019, the United States Bureau of Land Management (BLM) granted a permit to Bayer's subsidiary P4 Production, LLC, for a new phosphate mine in Idaho. Phosphorus is needed for glyphosate, which is contained in a number of Bayer's herbicides, including Roundup™ agricultural herbicides. In 2021, three non-governmental organizations (NGOs) challenged the permit in the United States District Court for the District of Idaho. P4 Production joined the proceeding as an intervenor. In June 2023, the court vacated the permit. We are preparing a new mine permit application, and we are evaluating other options, including appeal and other phosphate ore supplies that are not impacted by the court's decision.

PCBs: Bayer's subsidiary Monsanto has been named in lawsuits brought by various governmental entities in the United States claiming that Monsanto, Pharmacia and Solutia, collectively as a manufacturer of PCBs, should be responsible for a variety of damages due to PCBs in the environment, including bodies of water, regardless of how PCBs came to be located there. PCBs are chemicals that were widely used for various purposes until the manufacture of PCBs was prohibited by the EPA in the United States in 1979. In June 2023, the Vermont Attorney General filed suit in state court alleging claims for damages related to PCB contamination of the state's environment and its school buildings. The same month, a second and similar complaint (Addison Central School District) was filed in federal court (District of Vermont) by private lawyers representing 93 Vermont school districts alleging PCB contamination in school buildings. Also in June 2023, the Delaware Supreme Court affirmed, in part, and reversed, in part, the Delaware Superior Court's prior complete dismissal of the Delaware State Attorney General's lawsuit alleging environmental damages from PCBs. The Delaware AG's suit will now proceed again in Superior Court consistent with the

Delaware Supreme Court's opinion. Monsanto also faces numerous lawsuits claiming personal injury and/or property damage due to use of and exposure to PCB products. There is one group of cases with approximately 200 plaintiffs claiming a wide variety of personal injuries allegedly due to PCBs in the building products of a school (Sky Valley Education Center "SVEC") in King County, Washington. In July 2023, the jury in the Clinger SVEC trial returned a verdict awarding both compensatory and punitive damages to two plaintiffs in the total amount of US$72 million, but a mistrial was declared for the five remaining plaintiffs after the jury was unable to reach a decision on their claims. Bayer disagrees with each of the adverse verdicts and plans to pursue post-trial motions and an appeal based on multiple legal errors.

Shareholder litigation concerning Monsanto acquisition: In Germany and the United States, investors have filed lawsuits claiming damages suffered due to the drop in the company's share price. Plaintiffs allege that the company's capital market communication in connection with the acquisition of Monsanto Company was flawed. In the proceeding in the United States, the United States District Court for the Northern District of California certified a class in May 2023.

Notes to the Statements of Cash Flows

Net operating cash flow in the first half of 2023 amounted to minus €3,066 million (H1 2022: €1,378 million). The decrease compared with the prior-year period was due in part to a decline in business in our Crop Science Division and to higher payments overall to resolve proceedings in the litigations surrounding glyphosate, PCBs, Essure™ and dicamba, which resulted in a net outflow of €1,689 million (H1 2022: €897million). Net operating cash flow included payments from banks of €318 million from the transfer of trade receivables that were not yet due or settled by customers as of June 30, 2023.

The net cash inflow for investing activities in the first half of the year amounted to €505 million (H1 2022: net cash outflow of €2,029 million). The net cash inflow for current financial assets came to €2,280 million (H1 2022: net cash outflow of €1,308 million). These cash inflows were largely attributable to the sale of investments in money market funds.

There was a net cash inflow of €1,934 million for financing activities (H1 2022: net cash outflow of €739 million). This included net borrowings of €4,870 million (H1 2022: €1,785 million). Net interest payments came to €599 million (H1 2022: €573 million). We paid out €2,360 million in dividends (H1 2022: €1,966 million).

Related Parties

Related parties as defined in IAS 24 (Related Party Disclosures) are those legal entities, natural persons and close members of their family 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.

Business transactions involving related parties were not material from the viewpoint of the Bayer Group.

Other information

On April 28, 2023, the Annual Stockholders' Meeting approved the proposal by the Board of Management and the Supervisory Board that a dividend of €2.40 per share carrying dividend rights be paid for the 2022 fiscal year and that the remaining amount of €24,488,742.85 be allocated to other retained earnings.

The actions of the members of the Board of Management and the Supervisory Board serving in 2022 were ratified in accordance with the proposals by the Board of Management and the Supervisory Board.

Two stockholder representatives were elected to the Supervisory Board in accordance with the nominations submitted by the Supervisory Board.

The proposal by the Board of Management and the Supervisory Board to approve the Compensation Report for the 2022 fiscal year prepared and audited in accordance with Section 162 of the German Stock Corporation Act (AktG) was approved.

In accordance with the proposals by the Board of Management and the Supervisory Board, the Annual Stockholders' Meeting authorized the Board of Management to allow for the conduct of virtual annual stockholders' meetings (amendment of Section 13 of the Articles of Incorporation) and permitted the members of the Supervisory Board to participate in virtual annual stockholders' meetings by way of video and audio transmission (amendment of Section 15 of the Articles of Incorporation).

In accordance with the proposal by the Supervisory Board, Deloitte GmbH Wirtschaftsprüfungs-gesellschaft, Munich, Germany, was elected by the Annual Stockholders' Meeting as auditor of the annual and consolidated financial statements for 2023, and also to review, if applicable, the condensed financial statements and interim management report as of June 30, 2023, and if applicable, the condensed financial statements and interim management reports as of September 30, 2023, and March 31, 2024, if these are prepared.

Leverkusen, August 4, 2023
Bayer Aktiengesellschaft

The Board of Management

Bill Anderson	Sarena Lin	Wolfgang Nickl
Stefan Oelrich	Rodrigo Santos	Heiko Schipper

Responsibility Statement

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

Leverkusen, August 4, 2023
Bayer Aktiengesellschaft

The Board of Management

Bill Anderson	Sarena Lin	Wolfgang Nickl
Stefan Oelrich	Rodrigo Santos	Heiko Schipper

Review Report

To Bayer Aktiengesellschaft, Leverkusen

We have reviewed the condensed interim consolidated financial statements of Bayer Aktiengesellschaft, Leverkusen, which comprise the consolidated income statement and the consolidated statement of comprehensive income, the consolidated statement of financial position, the consolidated statement of cash flows, the consolidated statement of changes in equity as well as selected explanatory notes to the consolidated financial statements, and the interim group management report for the period from 1 January to 30 June 2023, that are part of the semi-annual financial information under Section 115 German Securities Trading Act (WpHG). The preparation of the 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 executive directors of the Company. Our responsibility is to issue a review report on the 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 compliance with the German Generally Accepted Standards for Reviews of Financial Statements promulgated by the Institut der Wirtschaftsprüfer (IDW) and in supplementary compliance with the International Standard on Review Engagements 2410 “Review of Interim Financial Information Performed by the Independent Auditor of the Entity”. Those standards require that we plan and perform the review to obtain a certain level of assurance to preclude through critical evaluation that the condensed interim consolidated financial statements have not been prepared, in 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 company personnel and to analytical procedures applied to financial data and thus provides less assurance than an audit. Since, in accordance with our engagement, we have not performed an audit, we do not express an audit opinion.

Based on our review, nothing has come to our attention that causes us to believe that the interim consolidated financial statements of Bayer AG, Leverkusen, have not been prepared, in 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.

Munich, 4 August 2023

Deloitte GmbH

Wirtschaftsprüfungsgesellschaft

(Andreas Wermelt)	(Michael Mehren)
Wirtschaftsprüfer	Wirtschaftsprüfer
(German Public Auditor)	(German Public Auditor)

Financial Calendar

Q3 2023 Quarterly Statement ______ *November 8, 2023*
2023 Annual Report ______ *March 5, 2024*
Annual Stockholders' Meeting 2024 ______ *April 26, 2024*
Q1 2024 Quarterly Statement ______ *May 14, 2024*

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 (EU). This report should be read in conjunction with the Annual Report for the 2022 fiscal year and the additional information about the company provided therein. The Annual Report 2022 is available on our website at www.bayer.com.

Masthead

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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.