Bayer AG Financial Statements

2018

Science for a **better life**

The management report of Bayer AG is combined with the management report of the Bayer Group. The Combined Management Report is published in Bayer's Annual Report for 2018. The financial statements and the Combined Management Report of the Bayer Group and Bayer AG for fiscal 2018 have been submitted to the operator of the Federal Gazette and are accessible via the Company Register website.

Contents

Income Statements

€ million	Note	2017	2018
Net sales	[1]	14,730	14,647
Cost of goods sold		(7,914)	(8,219)
Gross profit		**6,816**	**6,428**
Selling expenses		(3,898)	(4,509)
Research and development expenses		(2,186)	(2,331)
General administration expenses		(908)	(1,056)
Other operating income	[2]	85	268
Other operating expenses	[3]	(102)	(115)
Operating income		**(193)**	**(1,315)**
Income from investments in affiliated companies – net	[4]	5,794	4,739
Interest income / expense – net	[5]	(369)	(562)
Other financial income / expense – net	[6]	(354)	(511)
Nonoperating income		**5,071**	**3,666**
Income taxes	[7]	(335)	(234)
Income after taxes / net income		**4,543**	**2,117**
Profit carried forward from previous year		–	498
Allocation to other retained earnings		(1,643)	(4)
Distributable profit		**2,900**	**2,611**

Statements of Financial Position

€ million	Note	Dec. 31, 2017	Dec. 31, 2018
ASSETS			
Noncurrent assets			
Intangible assets	[13]	123	134
Property, plant and equipment	[14]	29	29
Investments	[15]	47,071	73,530
		47,223	**73,693**
Current assets			
Inventories	[16]	2,109	2,197
Receivables and other assets			
Trade accounts receivable	[17]	2,002	2,113
Receivables from subsidiaries	[18]	2,585	1,829
Other assets	[19]	571	298
	[20]	5,158	4,240
Marketable securities	[21]	25	–
Cash and cash equivalents	[22]	4,247	3,178
		11,539	**9,615**
Deferred charges	**[23]**	**178**	**101**
Surplus from offsetting	**[24]**	**152**	**93**
		59,092	**83,502**
EQUITY AND LIABILITIES			
Equity	**[25]**		
Capital stock		2,117	2,387
Capital reserves		6,176	14,975
Other retained earnings		7,682	7,686
Distributable profit		2,900	2,611
		18,875	**27,659**
Provisions			
Provisions for pensions	[26]	735	1,167
Other provisions	[27]	1,466	1,992
		2,201	**3,159**
Other liabilities			
Bonds and promissory notes	[28]	6,862	6,345
Liabilities to banks		756	4,151
Down payments received on orders		2	18
Trade accounts payable	[29]	1,750	1,913
Payables to subsidiaries	[30]	28,078	39,680
Miscellaneous liabilities	[31]	458	482
	[32]	**37,906**	**52,589**
Deferred income	**[33]**	**110**	**95**
		59,092	**83,502**

Notes

Change in Corporate Structure

As the final step in Bayer's reorganization, the operational business of the Pharmaceuticals and Crop Science divisions was transferred to Bayer AG effective January 1, 2017. For this purpose, business lease agreements were concluded with Bayer Pharma AG, Germany, and Bayer CropScience AG, Germany, which had previously managed the divisions' business. Under these agreements, these companies leased their entire business operations to Bayer AG and also transferred operational management to Bayer AG. The agreements were initially concluded for a term of one calendar year, and will each be extended by successive periods of one year unless written notice of termination effective as of the end of the preceding year is given six months in advance by either party. None of the parties terminated the agreements in either 2017 or 2018.

Having obtained the approval of all relevant authorities, with conditions in some cases, the Bayer Group acquired the Monsanto Group, U.S.A., effective June 7, 2018. This acquisition had no direct impact on the corporate structure of Bayer AG.

As a condition for the acquisition of Monsanto, the antitrust authorities required Bayer to divest parts of its crop protection, pest control and seeds businesses. Effective August 1, 2018, the Crop Science Division of Bayer AG therefore sold its glufosinate-ammonium business and its digital farming business to BASF. This included the sale of inventories totaling €29 million and the transfer of around 370 employment contracts pursuant to Section 613a of the German Civil Code (BGB).

Accounting Policies

The financial statements of Bayer AG, Leverkusen, Germany (which is entered in the commercial register of the Local Court of Cologne, Germany, HRB 48248), are prepared in accordance with the German Commercial Code (HGB), the Stock Corporation Act (AktG) and the German Energy Industry Act (EnWG).

At its site in Berlin, Germany, Bayer AG supplies electricity and gas to companies outside the Bayer Group. Under Section 3, No. 18 of the EnWG, it is therefore classified as an energy utility as defined therein. Furthermore, as an energy utility Bayer AG is connected to the vertically integrated energy utility Currenta GmbH & Co. OHG, Germany. Consequently, Bayer AG is also classified as a vertically integrated energy utility pursuant to Section 3, No. 38 EnWG.

Certain items in the income statement and statement of financial position are combined for the sake of clarity; they are explained in the Notes. Likewise for reasons of clarity, “of which” information required for certain items in the financial statements is presented in the Notes only. Research and development expenses are shown separately in view of their special importance in the chemical and pharmaceutical industry. Financial income and expenses whose disclosure is not covered by a mandatory item are reported under other financial income or expenses.

The income statement has been drawn up using the cost-of-sales method.

A declaration of compliance with the German Corporate Governance Code has been issued pursuant to Section 161 of the German Stock Corporation Act (AktG) and made permanently available to stockholders on the internet as part of the Declaration on Corporate Governance pursuant to Section 289f of the German Commercial Code (HGB). It can be downloaded from http://www.bayer.com/en/corporate-governance.aspx.

As the parent company, Bayer AG prepares the consolidated financial statements for both the largest and the smallest scope of consolidation. As in the previous year, the management report of Bayer AG has been combined with the management report of the Bayer Group pursuant to Section 315, Paragraph 3 of the German Commercial Code (HGB) in conjunction with Section 298, Paragraph 2 HGB.

Recognition and Valuation Principles

Intangible assets that have been acquired are recognized at cost and amortized on a straight-line basis (pro rata temporis) over their estimated useful lives on an individual basis. Self-generated intangible assets are not capitalized.

Property, plant and equipment is carried at the cost of acquisition or construction less depreciation of assets that are subject to wear and tear in line with their individual useful lives. The straight-line method of depreciation is normally used. Movable assets that were already recognized as of December 31, 2007, are depreciated by the declining balance method at the maximum depreciation rates permitted for tax purposes, switching to the straight-line method as soon as this leads to higher annual depreciation.

Depreciation of the individual categories of property, plant and equipment, and amortization of the individual categories of intangible assets are based on the following useful lives:

Useful Life of Intangible Assets and Property, Plant and Equipment

Software	3 to 4 years
Product registrations	max. 10 years
Other concessions, industrial property rights, similar rights and assets, and licenses thereunder	max. 20 years
Commercial buildings	25 to 40 years
Infrastructure facilities	12 to 20 years
Plant facilities	12 to 20 years
Plant and equipment	8 to 20 years
Laboratory and research equipment	3 to 5 years
Factory and office equipment	6 to 12 years
Communication technology	3 to 10 years
Vehicles (purchased until June 30, 2014)	5 years
Vehicles (purchased from July 1, 2014)	6 years
Computer equipment	3 to 4 years

Assets that can be utilized separately and are subject to depletion are depreciated in full in the year of acquisition if their cost of acquisition or construction does not exceed €800 (until 2017: €410).

Write-downs are made for any declines in value that go beyond the depletion reflected in depreciation or amortization and are expected to be permanent. If the reasons for a write-down no longer apply, a write-up is made, provided that this does not cause the carrying amount to exceed the cost of acquisition or construction less depreciation or amortization.

The cost of construction of self-constructed property, plant and equipment comprises the direct cost of materials, direct manufacturing expenses, appropriate allocations of material and manufacturing overheads, and an appropriate share of the depreciation of assets used in construction.

Investments in subsidiaries and affiliated companies as well as securities recognized in noncurrent assets are carried at cost, less write-downs for any decline in value that is expected to be permanent. Where the reasons for write-downs made in previous years no longer apply or only partially apply, the respective items are written back accordingly, provided that the write-back does not cause the carrying amount to exceed the cost of acquisition. Interests in subsidiaries and affiliated companies that were acquired through exchange deals are measured at the carrying amount of the shares submitted. The predecessor accounting approach is applied for mergers of interests in subsidiaries or affiliates.

Loans receivable that are interest-free or bear low rates of interest are carried at present value; other loans receivable are carried at nominal value. The loans also include jouissance right capital (Genussrechtskapital) granted to Bayer Pensionskasse VVaG, Leverkusen, Germany, and the latter's drawings on a retroactive contribution to its effective initial fund made available by Bayer AG.

Inventories are valued as follows: raw materials, supplies and goods purchased for resale at the average cost of acquisition less write-downs, and finished goods at the average cost of production. This comprises the direct cost of materials, direct manufacturing expenses, and appropriate allocations of material and manufacturing overheads, including manufacturing-related depletion of noncurrent assets. Write-downs are recognized if the fair value is below the carrying amount.

Receivables and other assets are stated at nominal value, less any necessary write-downs. The amounts of such write-downs reflect the probability of default. Non-interest-bearing or low-interest receivables that are due in more than one year are recognized at their discounted value.

Marketable securities are shown at the lower of cost or market rates as of the closing date.

Cash, bank deposits and checks held in euros are recognized at their nominal value; such assets held in foreign currencies are translated at the spot rate on the closing date of the financial statements.

The deferred charges on the statement of financial position contain expenditures prior to the closing date that will give rise to expense in a defined subsequent period. Also included are the differences between the issue and settlement amount for bonds issued by Bayer AG that will be amortized over the maturity of the bonds.

The amounts required to meet credit balances on employees' long-term worktime accounts and certain pension obligations are invested indirectly via intermediate investment vehicles through a Belgian investment company operating as a SICAV (Société d'investissement à capital variable). They are invested in basically liquid international fixed-income bonds, shares, real estate and alternative investments. The assets are administered on behalf of Bayer AG by Bayer Pension Trust e. V. (BPT), Germany. All investments are protected from other creditors in the event that the employer files for insolvency. They are measured at fair value, which is derived from stock market prices and market interest rates. The trust assets held by BPT are offset against the underlying obligations. If the obligations exceed the assets, a provision is recorded. If the value of the securities exceeds the obligations, it is recorded in the statement of financial position as a surplus from offsetting. Accordingly, in the income statements, income from the trust assets is offset against the interest portion of the corresponding obligations and changes in the discount rate.

Deferred taxes are assessed for temporary differences between the amounts of assets, liabilities, deferred income and deferred charges in the accounting statements and those in the tax statements. As well as items reflected in its own statement of financial position, Bayer AG also includes those relating to subsidiaries with which it forms a fiscal entity for tax purposes and in which it holds an equity interest. In addition to temporary differences, tax loss carryforwards are taken into account. Deferred taxes are calculated on the basis of the combined income tax rate for the fiscal entity headed by Bayer AG, which is currently 31.22 %. The combined income tax rate comprises corporate income tax, trade tax and the solidarity surcharge. In the case of partnerships, however, deferred taxes relating to temporary differences in the statement of financial position are calculated using a combined income tax rate that includes only corporate income tax and the solidarity surcharge; this combined rate is currently 15.83 %. Any resulting tax liability would be recognized as a deferred tax liability in the statement of financial position. In the event of a tax receivable, the corresponding option to recognize the deferred tax asset would not be used. In 2018 there was a deferred tax asset, which was accordingly not recognized in the statement of financial position.

The capital stock of Bayer AG is divided into 932,551,964 no-par registered shares, each of which has a theoretical proportionate interest in the total capital stock of €2,387,333,027.84.

Provisions for pensions are computed using the projected unit credit method on the basis of biometric probability using the Heubeck 2018 G reference tables (2017: Heubeck 2005 G reference tables). Expected future salary and pension increases are taken into account. We assume annual salary increases of 2.75 % (2017: 2.75 %) and annual pension increases of 1.60 % (2017: 1.70 %). For pension entitlements granted since January 1, 2000, an annual pension increase of 1.00 % is generally accounted for as this has been promised to the employees. The discount rate used for pension provisions as at December 31, 2018, was 3.21 % (December 31, 2017: 3.68 %), which is the average market interest rate for the past ten years for instruments with an assumed remaining maturity of 15 years, as published by the Deutsche Bundesbank for December 2018.

Other provisions are established to cover all foreseeable risks and uncertain liabilities based on reasonable estimates of the future settlement amounts of such commitments. Future price and cost increases are taken into account where there are sufficient objective indications that such increases will most probably occur. Provisions maturing in more than one year are discounted to present value using the average market interest rate for the past seven years, based on their remaining maturities. For longer-term personnel-related provisions, such as provisions for long-service anniversaries, a discount rate of 2.32 % (2017: 2.80 %) is used for an assumed period of 15 years until utilization. Shorter-term personnel-related provisions, such as those for obligations under early retirement arrangements, are discounted using a rate that corresponds to their maturity, which in 2018 was three years. The discount rate was 0.97 % (2017: 1.43 %). These are the rates published or expected by the Deutsche Bundesbank for December 2018.

Liabilities are recognized at the settlement amount as of the closing date. Noncurrent liabilities containing an interest component are discounted using the average market interest rate in the past seven years applicable to their maturity.

Foreign currency receivables and liabilities, forward exchange contracts and other currency derivatives are recognized using the mark-to-market method. For this purpose, foreign currency receivables and payables are measured at spot rates, while the corresponding currency derivatives entered into for hedging purposes are valued at the market forward rates on the closing date. Unrealized gains and losses are then offset in each currency using the net hedge presentation method. Provisions are set up for any net unrealizable losses; net unrealizable gains are only recognized if they relate to receivables and liabilities with a remaining maturity of up to one year.

The deferred income on the statement of financial position contains payments received prior to the closing date that will give rise to income in a specific future period. This includes license payments, the majority of which will be amortized over the estimated useful life of the asset, starting when marketing approval is obtained for the respective product.

Contingent liabilities arising from sureties and debt guarantees are shown at the amounts equivalent to the loans or commitments actually outstanding on the closing date.

Notes to the Income Statements

1. Sales

Sales decreased by €83 million compared with 2017. The sales split by business unit and region is as follows:

Sales by business unit

€ million	2017	2018
Pharmaceuticals	8,478	8,550
Crop Science	6,111	5,997
Corporate Center	141	100
	14,730	**14,647**

Sales by region

€ million	2017	2018
Germany	1,146	1,749
Other Europe	5,067	4,472
North America	3,425	3,351
Asia / Pacific	2,929	2,775
Latin America / Middle East / Africa	2,163	2,300
	14,730	**14,647**

2. Other operating income

Other operating income comprised:

Other Operating Income

€ million	2017	2018
Gains from the disposal of noncurrent assets	18	34
Reversals of unutilized provisions	16	51
Government grants for research and development services	11	13
Amortization of deferred income due to early termination of a supply contract	7	–
Intra-Group compensation payment for cancellation of Factor VIII production	–	129
Miscellaneous operating income	33	41
	85	**268**

Gains from the disposal of noncurrent assets included €26 million from the intra-Group sale of information technology to Bayer Business Services GmbH and €8 million from the disposal of other assets. In the previous year, gains from the disposal of noncurrent assets included €10 million relating to a patent swap with FMC Corporation, U.S.A., €5 million relating to a patent swap with Sumitomo Chemicals Co. Ltd., Japan, and €3 million from the disposal of other noncurrent assets.

The miscellaneous operating income included compensation of €12 million (2017: €1 million) from insurers and an upfront payment of €13 million received in connection with the sale of licenses / rights. In the previous year, this item included €9 million from the reimbursement of maternity benefits and €2 million from the repayment of lapsed dividend claims.

3. Other operating expenses

Other operating expenses comprised:

Other Operating Expenses

€ million	2017	2018
Expenses relating to divestments to BASF[1]	–	55
Write-downs of receivables	37	16
Donations	11	18
Miscellaneous operating expenses	54	26
	102	**115**

[1] Expenses in connection with transitional agreements concluded with BASF, among other things

The miscellaneous operating expenses included property taxes, compensation payments, bank charges and accrued expenses. In 2017, this item also included a prepayment penalty.

4. Income from investments in affiliated companies – net

Income from Investments in Affiliated Companies – Net

€ million	2017	2018
Dividends and similar income from subsidiaries	819	152
Income from profit and loss transfer agreements with subsidiaries	2,485	1,499
Expenses from profit and loss transfer agreements with subsidiaries	(240)	(162)
Write-downs of investments in affiliated companies	–	(77)
Gains from the sale of investments in affiliated companies	2,730	3,327
	5,794	**4,739**

Details of the income and expenses from investments in affiliated companies are given in the Combined Management Report of Bayer AG and the Bayer Group.

The write-downs of investments in affiliated companies in 2018 included €31 million for Bayer Türk Kimya Sanayii Ltd. Sti., Turkey, and €46 million for Bayer New UK M3939 LLC, United States.

The gain of €3,327 million from the sale of investments in affiliated companies comprised €3,314 million from the sale of around 60.3 million shares in Covestro AG. A further €13 million came from the intra-Group sale of four Monsanto companies as part of the restructuring following the acquisition of the Monsanto Group. The gains reported in the previous year comprised €2,720 million from the sale of 61.7 million shares in Covestro AG and the transfer of a further 8 million shares to Bayer Pension Trust e. V., Germany, €6 million from the repurchase of shares in Bayer CropScience Ltd., India, and €4 million from the sale of the shares in Ehrfeld Mikrotechnik BTS GmbH, Germany.

5. Interest income / expense – net

Interest Income / Expense – Net

€ million	2017	2018
Income from other securities and loans included in investments	17	15
Other interest and similar income	172	1,084
• *of which from subsidiaries*	*90*	*567*
Interest and similar expenses	(728)	(984)
• *of which to subsidiaries*	*(336)*	*(363)*
Interest income / expense portion of pension and other noncurrent personnel-related provisions (net)	170	(667)
Interest expense portion of other noncurrent provision	–	(10)
	(369)	**(562)**

Details of the net interest position are given in the Combined Management Report of Bayer AG and the Bayer Group.

Income relating to the interest portion of pension and other noncurrent personnel-related provisions comprised the net amount from the unwinding of discount on the present value of the defined benefit obligation after offsetting income from and changes in the value of the assets held by Bayer Pension Trust e. V. (BPT), Germany, and the impact of the change in the discount rate. The assets held by BPT serve the sole purpose of meeting pension obligations and the obligations arising from credit balances on employees' long-term worktime accounts. The Trust's assets are protected from other creditors.

The loss from investment of these assets in 2018 and the interest portion of the corresponding provisions were as follows:

Netting of the Interest Portion of Pension and Personnel-Related Provisions with Income from Plan Assets

€ million	2017	2018
Interest portion of pension and other noncurrent personnel-related provisions and from changes in the discount rate (gross)	(342)	(437)
Income / expense from assets held by Bayer Pension Trust e. V.	512	(230)
	170	**(667)**

6. Other financial income / expense – net

Other Financial Income / Expense – Net

€ million	2017	2018
Changes in provisions for pensions and other noncurrent personnel-related provisions (excluding interest portion)	(41)	35
Allocation to pension provisions assigned to subsidiaries	115	96
Expenses from currency translation		
– Realized exchange losses	(2,001)	(2,894)
– Unrealized expenses from valuation	(430)	(77)
Income from currency translation		
– Realized exchange gains	2,182	2,981
– Unrealized income from valuation	37	67
Commitment fees for credit facilities	(215)	(136)
Fees for capital increase	–	(97)
Write-downs on securities recognized in noncurrent assets	–	(459)
Miscellaneous financial expenses	(13)	(60)
Miscellaneous financial income	12	33
	(354)	**(511)**

The interest portion of allocations to pension and other noncurrent personnel-related provisions is included in interest expense. Other financial income and expense contains further changes in pension provisions, not related to the interest portion, pertaining to former employees of Bayer AG who retired before the hive-down of the business areas and service areas (effective date: July 1, 2002) or who left the company before then and have vested pension rights. Changes of this kind occur in the event of changes in actuarial valuation parameters.

The expenses for allocations to the above provisions for employees who retired or left the company before July 1, 2002, are generally reimbursed by the subsidiaries on a prorated basis under the respective carve-out agreements.

The write-downs on securities recognized in noncurrent assets pertained to the interest in Covestro AG, Germany.

The miscellaneous financial expenses included bank charges of €3 million (2017: €2 million), a compensation payment to Monsanto of €4 million (2017: €5 million) and €50 million in connection with the derecognition of Monsanto shares held by Bayer AG due to the retirement of shares in connection with the acquisition. The miscellaneous financial expenses reported in the previous year included €5 million in fees for the placement of a bond and €1 million for the derecognition of a receivable relating to guarantee fees for Bayer (China) Ltd., China. The miscellaneous financial income included €30 million (2017: €10 million) from fees for guarantees.

7. Income taxes

The tax expense reflected here comprises amounts paid or owed for corporate income tax, trade tax and the solidarity surcharge, and income taxes paid outside Germany.

As permitted by the option in Section 274, Paragraph 1, Sentence 2 of the German Commercial Code (HGB), the €1,379 million excess of deferred tax assets over deferred tax liabilities at year end was not recognized.

Deferred tax assets mainly resulted from the valuation of pension obligations being higher in the accounting statements than in the tax statements. Other deferred tax assets resulted from provisions that are not taxdeductible, such as those for impending losses and pre-retirement leave, and from differences in the measurement of, for example, provisions for early retirement and service anniversaries, as well as interests in partnerships. There was also a deferred tax asset relating to an as yet unused tax loss carryforward.

Deferred tax liabilities principally arose from differences between the valuations of noncurrent assets and assets invested with Bayer Pension Trust e. V., Germany, which cover pension commitments, in the accounting statements and the valuations in the tax statements.

8. Other taxes

Where other taxes can be allocated to the cost of goods sold, selling expenses, research and development expenses or general administration expenses, they are assigned to the respective expense items. In other cases they are assigned to other operating expenses. Other taxes totaled €9 million (2017: €12 million).

9. Cost of materials

Cost of Materials

€ million	2017	2018
Expenses for raw materials, supplies and purchased goods	4,677	4,726
Expenses for purchased serivces	558	593
	5,235	**5,319**

10. Personnel expenses / employees

Personnel Expenses

€ million	2017	2018
Wages and salaries	1,708	2,196
Social expenses	215	235
Pension expenses	122	140
	2,045	**2,571**

The personnel-related additions to miscellaneous provisions in connection with the published restructuring measures are reflected in wages and salaries.

The personnel expenses shown here do not contain the interest portion of personnel-related provisions, especially pension provisions, which is included in net interest expense.

The average number of employees at Bayer AG in 2018 was 17,472, subdivided as follows:

Employees

	2018	
	Female	**Male**
Senior executives and senior managers	1,104	2,597
Junior managers and non-managerial employees	5,213	8,558
	6,317	**11,155**

Part-time employees are included in this figure on a prorated basis.

11. Stock-based compensation

Bayer AG offers its employees long-term stock-based compensation programs as an additional compensation component. Different collective programs are offered to different groups of employees.

The “Aspire” program for members of the Board of Management, other senior executives and middle managers, which until 2015 comprised two variants (“Aspire I” and “Aspire II”) for different management levels, was redesigned effective 2016. All eligible employees are now offered a uniform version called “Aspire 2.0”. All “Aspire” programs lead to performance-related payments to employees. Each program runs for four years.

In addition, all employees of Bayer AG, regardless of position and level, are offered the BayShare program, which is set annually by the Board of Management and enables them to purchase Bayer stock at a discount.

Provisions are recorded for all obligations existing under the stock-based compensation programs at the closing date. The amount of such provisions is based on the fair value of the obligations and the proportion of the total duration of the respective program that has elapsed since its introduction. Allocations to provisions are expensed.

Aspire I

Until 2015, members of the Board of Management and other senior executives were able to participate in “Aspire I”. They were required to purchase a certain number of Bayer shares that was predetermined according to specific guidelines and to retain them for the full term of the program. A percentage of the executive’s annual base salary – based on his or her position – was defined as a target for variable payments (“Aspire” target opportunity). At the end of each tranche of this program, participants receive a certain percentage of their target opportunity as a cash payment. The amount depends on the development of the Bayer share price in absolute terms and the performance of the stock relative to the Dow Jones EURO STOXX 50. This payment is capped at 300 %.

The fair value of obligations under the stock-based compensation programs that are still active was calculated by the Monte Carlo simulation method using the following key parameters:

Parameters Used to Determine Fair Value

	2017	2018
Dividend yield	2.46 %	3.60 %
Risk-free interest rate	(0.35) %	(0.46) %
Volatility of Bayer shares	15.49 %	33.26 %
Volatility of the Dow Jones EURO STOXX 50	9.27 %	16.94 %
Correlation between the Bayer share price and the Dow Jones EURO STOXX 50	0.71	0.76

The last “Aspire I” tranche issued in 2015 expired at the end of 2018. No payment was made as performance was below the threshold. Consequently, no provision was recognized. The “Aspire” tranche issued in 2014 expired at the start of 2018 and a payout of 20 % of the target opportunity was made at the start of 2018.

Aspire II

Until 2015, other senior managers were offered “Aspire II”, a variant of “Aspire I” that did not require a personal investment in Bayer shares. The amount of the award is based entirely on the absolute performance of Bayer stock. The maximum payout is 250 % of each manager’s “Aspire” target opportunity.

The last “Aspire II” tranche issued in 2015, which expired at the end of 2018, did not result in a payout as performance was below the threshold. Therefore, no provision was recognized. The tranche issued in 2014 achieved a payout of 40 %, which was made at the start of 2018.

Aspire 2.0

Since 2016, “Aspire” has been offered to all eligible employees in a new, standardized format named “Aspire 2.0”. For the members of the Board of Management there is the additional hurdle of the performance of Bayer shares against the EURO STOXX. “Aspire 2.0” is also based on a percentage of each employee’s annual base salary, the percentage varying according to his or her position. This is now multiplied by the employee’s STI payout factor from the global short-term incentive (STI) program to give the “Aspire” grant value. The STI payout factor reflects the employee’s individual performance and the business performance used for the STI program. The “Aspire” grant value is converted into virtual Bayer shares by dividing it by the share price at the start of the program. The program’s performance is based on these virtual shares. The fair value of the obligations is determined from the price of Bayer stock at year end and the dividends paid up to that time. The payment made at the end of each tranche is determined by multiplying the number of virtual shares by the relevant Bayer share price at that time and adding an amount equivalent to the dividends paid during the period of the tranche. The maximum payout for “Aspire 2.0” is 250 % of the target amount.

BayShare

Under the “BayShare” program, Bayer subsidizes eligible employees’ personal investments in Bayer stock. The discount under this program is set separately each year. In both 2018 and 2017, it was 20 % of the subscription amount. As in 2017, the maximum subscription amount was set at €2,500 or €5,000, depending on the employee’s position. The maximum subscription amount for apprentices was €1,800. The shares acquired under this program are held in a special share deposit account and have to be retained under December 31 of the year following the year of purchase.

Bayer AG’s expenses for stock-based compensation programs in 2018 totaled €12 million (2017: €36 million). This amount is reflected in personnel expenses. Provisions for these programs amounted to €61 million as of December 31, 2018 (December 31, 2017: €63 million).

12. Valuation write-downs

Alongside amortization, write-downs of €77 million and €459 million were made on investments in subsidiaries and on securities recognized in noncurrent assets, respectively, to reflect declines in the value of intangible assets that were expected to be permanent. There were no write-downs in 2017.

Notes to the Statements of Financial Position

13. Intangible assets

Intangible Assets

€ million	Acquired concessions, industrial property rights, similar rights and assets, and licenses thereunder	Advance payments	Total
Gross carrying amounts, Dec. 31, 2017	177	4	181
Additions	22	1	23
Retirements	1	–	1
Gross carrying amounts, Dec. 31, 2018	**198**	**5**	**203**
Accumulated amortization and write-downs, Dec. 31, 2017	58	–	58
Amortization and write-downs 2018	12	–	12
Retirements	1	–	1
Accumulated amortization and write-downs, Dec. 31, 2018	**69**	**–**	**69**
Net carrying amounts, Dec. 31, 2018	**129**	**5**	**134**
Net carrying amounts, Dec. 31, 2017	119	4	123

14. Property, plant and equipment

Property, Plant and Equipment

€ million	Land and buildings	Plant and equipment	Furniture, fixtures and other equipment	Advance payments and assets under con-struction	Total
Gross carrying amounts, Dec. 31, 2017	62	18	23	3	106
Additions	–	4	1	2	7
Retirements	–	–	2	–	2
Transfers	–	1	1	(2)	–
Gross carrying amounts, Dec. 31, 2018	**62**	**23**	**23**	**3**	**111**
Accumulated depreciation and write-downs, Dec. 31, 2017	59	7	11	–	77
Depreciation and write-downs 2018	–	4	2	–	6
Retirements	–	–	1	–	1
Accumulated depreciation and write-downs, Dec. 31, 2018	**59**	**11**	**12**	**–**	**82**
Net carrying amounts, Dec. 31, 2018	**3**	**12**	**11**	**3**	**29**
Net carrying amounts, Dec. 31, 2017	3	11	12	3	29

15. Investments

Investments

€ million	Investments in subsidiaries	Loans to subsidiaries	Investments in other affiliated companies	Loans to other affiliated companies	Securities included in investments	Other loans	Total
Gross carrying amounts, Dec. 31, 2017	44,962	104	1,289	3	52	753	47,163
Additions	18,957	22,410	13	–	1,055	41	42,476
Retirements	14,140	4	1,287	1	52	1	15,485
Gross carrying amounts, Dec. 31, 2018	**49,779**	**22,510**	**15**	**2**	**1,055**	**793**	**74,154**
Accumulated write-downs, Dec. 31, 2017	**82**	**9**	**–**	**–**	**–**	**1**	**92**
Write-downs in 2018	77	–	–	–	459	–	536
Write-ups	–	2	–	–	–	–	2
Retirements	2	–	–	–	–	–	2
Accumulated write-downs, Dec. 31, 2018	157	7	–	–	459	1	624
Net carrying amounts, Dec. 31, 2018	**49,622**	**22,503**	**15**	**2**	**596**	**792**	**73,530**
Net carrying amounts, Dec. 31, 2017	**44,880**	**95**	**1,289**	**3**	**52**	**752**	**47,071**

The additions to, and retirements of, investments in subsidiaries each included €13,100 million in connection with the transfer of Bayer World Investments B. V., Netherlands, and Bayer HealthCare US Funding LLC, United States, to Bayer Pharma AG, comprising €846 million each for six Monsanto companies that were acquired by Bayer AG as part of the integration of Monsanto and subsequently sold within the Group, and €47 million each in connection with the transfer of Bayer's 60 % interest in Currenta GmbH & Co. OHG to Bayer Beteiligungsgesellschaft mbH & Co. OHG. Further additions comprised €4,867 million from capital contributions to subsidiaries, including €2,440 million at Bayer World Investments B. V., Netherlands (prior to its transfer to Bayer Pharma AG), €2,402 million at Bayer Hispania, S. L., Spain, and €25 million at Bayer Capital Corporation B. V., Netherlands. The remaining additions of €97 million resulted from the intragroup acquisition of three Monsanto companies that were still held by Bayer AG on the reporting date.
Further retirements comprised capital repayments of €144 million to Bayer (China) Ltd., China, and €3 million to Bayer (Malaysia) Sdn. Bhd., Malaysia. The latter related to the ongoing liquidation of the company, which also resulted in write-downs of €2 million. Of the write-downs made in 2018, €31 million related to the investment in Bayer Türk Kimya Sanayii Ltd. Sti., Turkey, and €46 million pertained to Bayer New UK M3939 LLC, United States.

The additions to loans to subsidiaries of €22,410 million resulted from intra-Group loans in connection with the financing of the acquisition of Monsanto.

The additions to investments in other affiliated companies of €13 million pertained to the acquisition of shares in Medopad Ltd., United Kingdom. The retirements of €1,287 million resulted from the sale of 49.81 million shares of Covestro AG.

The acquisition of around 13.79 million shares in Covestro AG that had previously been held by Bayer Pension Trust e. V., Leverkusen, Germany, resulted in additions to securities included in investments of €1,055 million. Due to the decline in that company's share price at the end of the year, a write-down of €459 million was made on the cost of acquisition. The shares are to be used to service the exchangeable bond presented under bonds that can be converted into Covestro AG shares. €50 million of the €52 million in retirements pertained to the derecognition of Monsanto shares due to the retirement of shares.

In 2008, Bayer AG established a repayable "effective initial fund" of €800 million for Bayer-Pensionskasse VVaG, Germany, which was increased to €1,600 million in 2012. €635 million of this has so far been accessed by the pension fund, including €40 million in 2018. The capital provided for the effective initial fund is interest-bearing, but interest is only payable under certain contractually agreed conditions. Interest must be deferred if it would result in the pension fund reporting a net loss. Loans granted by the effective initial fund are contained in other loans.

Details of the subsidiary and affiliated companies of Bayer AG pursuant to Section 285, Numbers 11, 11a and 11b of the German Commercial Code are included in the annual financial statements that have been certified and submitted for publication in the German Federal Gazette (Bundesanzeiger). They are also available at www.bayer.com/shareownership2018.

16. Inventories

Inventories

€ million	Dec. 31, 2017	Dec. 31, 2018
Raw materials and supplies	541	584
Work in process	882	956
Finished goods	574	549
Goods purchased for resale	107	101
Advance payments	5	7
	2,109	**2,197**

17. Trade accounts receivable

Trade Accounts Receivable

€ million	Dec. 31, 2017	Dec. 31, 2018
Accounts receivable from subsidiaries	1,646	1,758
Accounts receivable from other customers	356	355
	2,002	**2,113**

18. Accounts receivable from subsidiaries

Accounts receivable from subsidiaries mainly comprised financial receivables, for example, in connection with loans or overnight funds, accrued interest, and receivables relating to profit transfers from subsidiaries that form a fiscal entity with Bayer AG.

19. Other assets

The other assets comprised:

Other Assets

€ million	2017	2018
Payroll receivables	14	15
Accrued interest	34	33
Covestro AG shares transferred for sale	284	–
Claims for tax refunds	105	131
Premiums paid to conclude options transactions	45	1
Other	89	118
	571	**298**

The other assets included €33 million (2017: €34 million) for assets that did not legally come into being until after year end. With some insignificant exceptions, these consisted entirely of accrued interest.

20. Receivables and other assets maturing in more than one year

All receivables and other assets were due in under a year. In 2017, total receivables and other assets amounted to €5,138 million, of which €81 million were due in more than a year. Of this figure, €5 million related to trade accounts receivable, €3 million to receivables from subsidiaries, and €73 million to other assets.

21. Securities

In 2017, the securities comprised investments in commercial paper with maturities of less than one year.

22. Cash and cash equivalents

In 2017, cash and cash equivalents included €1 million to settle civil law compensation claims relating to antitrust violations in the fields of rubber, polyester polyols and urethanes in Canada. Bayer held this amount in an escrow account administered in Canada pending acceptance or judicial confirmation of the settlements offered. The account was closed following conclusion of this process.

23. Deferred charges

The deferred charges as of December 31, 2018, included unamortized discounts totaling €6 million pertaining to bonds issued by Bayer AG. The amount of €9 million recognized at the start of the year diminished by €3 million due to amortization. Also reflected here are unamortized discounts totaling €13 million (2017: €28 million) pertaining to the mandatory convertible bond issued by Bayer Capital Corporation B. V., Netherlands, which was passed on to Bayer AG with the same conditions. Likewise reported here are accrued charges of €25 million (2017: €75 million) for U. S. dollar credit facilities that Bayer had arranged for the acquisition of Monsanto.

The remaining deferred charges comprised advance payments of charges for other credit facilities, prepaid premiums for business insurance and other accrued charges.

24. Surplus from offsetting

Obligations arising from credit balances on employees’ long-term worktime accounts are secured, and obligations from pension commitments are partially secured, by assets invested with Bayer Pension Trust e. V. (BPT), Germany, under multiple contractual trust arrangements (CTAs). These assets may only be used for the purpose of meeting the respective obligations and are protected from other creditors in the event that the employer becomes insolvent. They are offset against the underlying obligations. Any positive difference is capitalized as a surplus from offsetting, otherwise it is reflected in provisions. As of December 31, 2018, the offset resulted in a positive difference of €93 million (2017: €152 million), of which €31 million (2017: €32 million) comprised obligations from long-term worktime accounts and €62 million (2017: €120 million) comprised pension commitments.

Surplus from Offsetting

€ million	Dec. 31, 2017	Dec. 31, 2018
Settlement value of obligations relating to credit balances on employees' long-term worktime accounts	102	129
Fair value of assets invested with Bayer Pension Trust	134	160
Differences between assets and obligations relating to long-term worktime accounts (surplus from offsetting)	**32**	**31**
Acquisition cost of assets invested with Bayer Pension Trust	129	162

€ million	Dec. 31, 2017	Dec. 31, 2018
Settlement value of pension commitments	451	493
Fair value of assets invested with Bayer Pension Trust	571	555
Differences between assets and obligations relating to pension commitments (surplus from offsetting)	**120**	**62**
Acquisition cost of assets invested with Bayer Pension Trust	524	523

In 2018, the collateral assets principally comprised liquid international fixed-income bonds, shares, real estate and alternative investments made by a Belgian investment company operating as a SICAV (Société d’investissement à capital variable) through intermediate investment vehicles. Shares in the SICAV can be sold on any stock-exchange trading day. In 2017, the collateral assets still included 18 million shares in Covestro AG, the majority of which were sold to Bayer AG in 2018.

The collateral assets held by the SICAV are measured at fair value. As of December 31, 2018, this was €3,569 million. Offsetting these assets totaling €715 million against the underlying obligations resulted in a positive difference, which was recorded as a surplus from offsetting; offsetting of the remaining €2,854 million against obligations was reported under provisions for pensions. Dividend payments in 2018 resulted in BPT receiving an inflow of €38 million from Covestro AG’s dividend payments.

25. Equity

Changes in equity in 2018 were as follows:

Equity

€ million	Dec. 31, 2017	Capital increase	Dividend for 2017	Net income	Profit brought forward	Dec. 31, 2018
Capital stock	2,117	270	–	–	–	2,387
Capital reserve	6,176	8,799	–	–	–	14,975
Other retained earnings	7,682	–	–	4	–	7,686
Profit carried forward			498	–	(498)	–
Distributable profit	2,900	–	(2,900)	2,113	498	2,611
	18,875	**9,069**	**(2,402)**	**2,117**	**–**	**27,659**

The capital stock of Bayer AG increased by €270,346,639.36 to €2,387,333,027.84 (2017: €2,116,986,388.48). It is divided into 932,551,964 (2017: 826,947,808) no-par registered shares and is fully paid up. Each share confers one voting right.

On April 16, 2018, the Republic of Singapore subscribed to 31 million new shares through a subsidiary. This capital increase against cash contributions was executed with the exclusion of subscription rights for existing stockholders. The total proceeds were €3,007 million. The issue price of the new shares, which were fully entitled to the dividend for 2017, was €97 per share. This approximately 3.7 percent cash increase in the capital stock was approved by the Supervisory Board and was based on the authorization granted by the Annual Stockholders' Meeting on April 29, 2014 (Authorized Capital II). On June 3, 2018, the Board of Management resolved to execute a further capital increase comprising 74.6 million new shares with subscription rights for existing stockholders. One subscription right for each share held was granted to all Bayer stockholders who held shares on June 6, 2018. Investors could acquire two new shares at a price of €81 per share for every 23 subscription rights granted. Around 98.3 percent of stockholders exercised their subscription rights. The remaining shares were placed on the market at an average price of €96.6437. The total proceeds of this issue were €6,062 million. This 8,7 percent cash increase in the capital stock was approved by the Supervisory Board and was based on the authorization granted by the Annual Stockholders' Meeting on April 29, 2014 (Authorized Capital I).

Authorized capital and conditional capital

The authorized capital and conditional capital comprised:

Authorized and Conditional Capital

Capital	Resolution	Amount / shares	Expires	Purpose
Authorized capital I	April 29, 2014	€530 million	April 28, 2019	Increase the capital stock by issuing new no-par shares against cash contributions and / or contributions in kind, the latter not to exceed €423 million
Authorized capital II	April 29, 2014	€212 million	April 28, 2019	Increase the capital stock by issuing new no-par shares against cash contributions
Conditional capital	April 29, 2014	€212 million / up to 82,694,750 shares	April 28, 2019	Increase the capital stock by granting no-par shares to the holders of bonds with warrants or convertible bonds, profit participation certificates or income bonds. The authorizations to issue such instruments are limited to a total nominal amount of €6 billion

Capital increases are effected by issuing new registered no-par shares. Stockholders must normally be granted subscription rights. However, subscription rights may be excluded under certain conditions stated in the authorization resolutions. Absent a further resolution of the Annual Stockholders' Meeting on the exclusion of stockholders' subscription rights, the Board of Management will only use the existing authorizations to increase the capital stock out of the authorized or conditional capital – while excluding stockholders' subscription rights – up to a total amount of 20 % of the capital stock that existed when the respective resolutions were adopted by the Annual Stockholders' Meeting on April 29, 2014. All issuances or sales of no-par shares or of bonds with warrants or conversion rights or obligations that are effected while excluding stockholders' subscription rights also count toward this 20 % limit. Details of the authorized and conditional capital are provided in the Notice of the Annual Stockholders' Meeting of April 29, 2014, and on the Bayer website.

As a result of the capital increase resolved on June 3, 2018, and subsequently executed, €190.99 million of the Authorized Capital I was utilized. As of December 31, 2018, the Authorized Capital I still available therefore amounted to €339.01 million.

The capital increase executed on April 16, 2018, utilized €79.36 million of the Authorized Capital II. As of December 31, 2018, the Authorized Capital II still available therefore amounted to €132.34 million.

On November 22, 2016, Bayer placed €4.0 billion in mandatory convertible notes without granting subscription rights to existing stockholders of the company. The notes, denominated in units of €100,000, were issued by Bayer Capital Corporation B. V., Netherlands, under the subordinated guarantee of Bayer AG. At maturity, the outstanding amount of the notes will be mandatorily converted into registered no-par shares of Bayer AG. The proceeds were the subject of an intra-Group transfer to Bayer AG. The mandatory convertible notes will be reported under payables to subsidiaries until they mature. The issuance of the mandatory convertible notes constituted a utilization of conditional capital.

Information on amounts barred from distribution pursuant to Section 253, Paragraph 6 and Section 268, Paragraph 8 of the German Commercial Code (HGB)

The provisions for pensions recognized in the statement of financial position (before deduction of the cor-responding assets) were calculated on the basis of the relevant average market interest rate for the past ten years. If the average for the past seven years had been used, the obligations would have been €619 million higher.

To secure pension obligations and credit balances on employees' long-term worktime accounts, funds have been transferred to Bayer Pension Trust e. V. (BPT), Germany, under several contractual trust arrangements (CTAs). They may only be used for the specified purpose and are protected from other creditors in the event that the employer becomes insolvent. They are measured at fair value. The fair value of the fund assets of two of the CTAs was €33 million above the acquisition costs of €652 million, while the acquisition costs of the other CTAs were higher than their respective fair values.

The difference between the pension obligations based on the average interest rate for ten and seven years and the difference between the higher fair value and acquisition cost of the assets held by BPT totaled €468 million. Since Bayer has freely available retained earnings of €7,686 million, there is no restriction on the use of the distributable profit of €2,611 million.

Notifications of direct and indirect stockholdings pursuant to Section 33, Paragraph 1 of the Securities Trading Act (WpHG)

Between the start of the fiscal year and the closing date, we received the following notifications of stockholdings in Bayer AG pursuant to Section 33, Paragraph 1 of the German Securities Trading Act (WpHG). In cases where stockholdings reached, exceeded or fell below the thresholds set out in this legislation on several occasions, only the most recent notification is mentioned:

- BlackRock, Inc., Wilmington, U.S.A., notified us that its voting rights amounted to 7.44 % on March 26, 2018. 7.17 % of these voting rights (59,256,963 voting rights) were attributable to this company pursuant to Section 34 WpHG. 0.26 % of these voting rights (2,119,910 voting rights) were attributable to this company as an instrument within the meaning of Section 38, Paragraph 1, No. 1 WpHG (securities loan). 0.02 % of these voting rights (174,418 voting rights) were attributable to this company as an instrument within the meaning of Section 38, Paragraph 1, No. 2 WpHG (call option or contract of difference).

- The Republic of Singapore, represented by the Minister for Finance, notified us that its voting rights exceeded the 3 % threshold on April 18, 2018, and amounted on that date to 4.17 % (35,763,529 voting rights). 3.97 % of these voting rights (34,078,853 voting rights) were attributable to it pursuant to Section 34 WpHG. 0.20 % of these voting rights (1,684,676 voting rights) were attributable to it as an instrument within the meaning of Section 38, Paragraph 1, No. 2 WpHG (put option).
- The Kingdom of Norway, represented by the Minister of Finance, notified us that its voting rights exceeded the 3 % threshold on December 21, 2018, and amounted on that date to 3.17 % (29,597,585 voting rights). 3.02 % of these voting rights (28,137,724 voting rights) were attributable to it pursuant to Section 34 WpHG. 0.11 % of these voting rights (1,068,659 voting rights) were attributable to it as an instrument within the meaning of Section 38, Paragraph 1, No. 1 WpHG (securities loan). 0.04 % of these voting rights (391,202 voting rights) were attributable to it as an instrument within the meaning of Section 38, Paragraph 1, No. 2 WpHG (contract of difference).

For further details, please see the individual voting rights notifications, which are published on our website at www.bayer.com.

26. Provisions for pensions

This item includes provisions for current and future pension entitlements.

It also includes commitments to former employees of the business areas and service areas hived down into separate legal entities in 2002 and 2003 who retired before July 1, 2002, or who left the company before this date and have vested pension rights. The respective companies reimburse Bayer AG for these expenses as a matter of course.

The use of new biometric probabilities (Heubeck 2005 G mortality tables / 2005 G in 2017) led to a €70 million increase in the obligations.

Obligations arising from pension commitments are partially secured by assets invested with Bayer Pension Trust e. V., Germany, under multiple contractual trust arrangements (CTAs). These assets may only be used for the purpose of meeting the respective obligations and are protected from other creditors in the event that the employer becomes insolvent. They are offset against the underlying obligations. Any positive difference is capitalized as a surplus from offsetting, otherwise it is reflected in provisions.

Further information on the CTA is given in Note 24. The investments are measured at fair value.

Provisions for Pensions

€ million	Dec. 31, 2017	Dec. 31, 2018
Settlement value of pension commitments	3,800	4,021
Fair value of assets invested with Bayer Pension Trust	3,065	2,854
Net value of pension commitments (provisions)	**(735)**	**(1,167)**
Acquisition cost of assets invested with Bayer Pension Trust	1,948	2,905

27. Other provisions

Other Provisions

€ million	Dec. 31, 2017	Dec. 31, 2018
Provisions for taxes	391	451
Miscellaneous provisions	1,075	1,541
	1,466	**1,992**

Miscellaneous provisions include amounts for incentive payments, long-service awards to employees, early retirement arrangements, vacations, compensation of the Supervisory Board, environmental protection measures, the costs of preparing and auditing the annual financial statements, and other uncertain liabilities. They also included provisions for impending losses, for example on, foreign exchange derivatives, out-licensing and sales agreements.

€606 million was assigned to miscellaneous provisions in connection with the announced restructuring measures.

28. Bonds and promissory notes

In addition to promissory notes totaling €45 million (2017: €45 million), bonds with a nominal value of €6,300 million were in issue as of December 31, 2018 (December 31, 2017: €6,817 million). They comprised:

Bonds

	Nominal value	Stated rate	Effective rate	Dec. 31, 2017	Dec. 31, 2018
		%	%	€ million	€ million
DIP bond 2006 / 2018	GBP 250 million	5.625	5.774	369	–
DIP bond 2006 / 2018 (increase)	GBP 100 million	5.625	5.541	148	–
DIP bond 2014 / 2021	EUR 750 million	1.875	2.086	750	750
Hybrid bond 2014 / 2074[1]	EUR 1,500 million	3.750[4]	3.811	1,500	1,500
Hybrid bond 2014 / 2075[2]	EUR 1,750 million	3.000[5]	3.093	1,750	1,750
Hybrid bond 2015/2075[3]	EUR 1,300 million	2.375[5]	2.517	1,300	1,300
Exchangeable bond 2017 / 2020 (convertible)	EUR 1,000 million	0.050	-1.640	1,000	1,000
				6,817	**6,300**

[1] Redeemable at 12 months, notice from 2024
[2] Redeemable at 12 months, notice from 2020
[3] Redeemable at 12 months, notice from 2022
[4] Fixed interest rate until 2024, thereafter floating rate based on 5-year swap rate
[5] Fixed interest rate until 2020, thereafter floating rate based on 5-year swap rate
[6] Fixed interest rate until 2022, thereafter floating rate based on 5-year swap rate plus 200.7 basis points

29. Trade accounts payable

Trade Accounts Payable

€ million	Dec. 31, 2017	Dec. 31, 2018
Payables to subsidiaries	648	832
Payables to other suppliers	1,102	1,081
	1,750	**1,913**

30. Payables to subsidiaries

The payables to subsidiaries mainly comprised financial liabilities such as loans and overnight funds made available to Bayer AG by subsidiaries, plus the respective accrued interest. They include €4 billion from the mandatory convertible notes issued by Bayer Capital Corporation B. V., Netherlands, which was the subject of an intra-Group transfer to Bayer AG.

31. Miscellaneous liabilities

The miscellaneous liabilities comprised:

Miscellaneous Liabilities

€ million	2017	2018
Accrued interest	134	108
Short-term investments with Bayer AG	141	150
Premiums received on options	4	1
Social insurance liabilities	2	1
Employees' income and church taxes	76	77
Liabilities relating to income and sales taxes	31	23
Payment obligation to Bayer-Pensionskasse VVaG due to effective initial fund being accessed	–	40
Other	70	82
	458	**482**

The other miscellaneous liabilities included payroll liabilities and premiums received from the issuance of a convertible bond. In the previous year, this item also included fees for the provision of credit facilities.

32. Further information on liabilities

The residual maturities of liabilities were as follows:

Maturity Structure of Other Liabilities

	Dec. 31, 2017		Dec. 31, 2018	
€ million	**Maturing in 2018**	**Maturing after 2018**	**Maturing in 2019**	**Maturing after 2019**
Bonds and promissory notes	517	6,345	45	6,300
Liabilities to banks	756	–	14	4,137
Down payments received on orders	2	–	18	–
Trade accounts payable	1,750	–	1,900	13
Payables to subsidiaries	23,333	4,745	35,149	4,531
Miscellaneous liabilities	404	54	427	55
	26,762	**11,144**	**37,553**	**15,036**

€6,471 million (2017: €5,050 million) of the total liabilities had a residual maturity of more than five years. Of this amount, €4,550 million (2017: €4,550 million) comprised bonds and €1,921 million (2017: €500 million) comprised payables to subsidaries.

The total liabilities as of December 31, 2018, included €108 million (2017: €134 million) in liabilities that did not legally come into being until after year end. These consisted almost entirely of accrued interest amounting to €108 million (2017: €134 million).

33. Deferred income

The deferred income comprised advance payments under licenses and settlement agreements as well as payments for services to be delivered in the future.

Other Information

34. Contingent liabilities

Liabilities arising from debt guarantees and sureties totaled €33,016 million (2017: €9,874 million). They were issued in favor of subsidiaries. Based on our knowledge of their respective economic situations, all of these companies are able to meet the underlying liabilities, so the contingent liabilities are not expected to materialize.

Debt Guarantees and Sureties

	Dec. 31, 2017	Dec. 31, 2017	Dec. 31, 2018	Dec. 31, 2018
	Nominal amount	**€ million**	**Nominal amount**	**€ million**
Guarantees for Group companies				
Bayer Capital Corporation B. V., Netherlands				
– 1.250 % DIP notes, maturing in 2023	EUR 500 million	500	EUR 500 million	500
– 5.625 % mandatory convertible bond, maturing in 2019 at the latest	EUR 4,000 million	4,000	EUR 4,000 million	4,000
– 0.227 % DIP notes, maturing in 2022	–	–	EUR 750 million	750
– 0.625 % DIP notes, maturing in 2022	–	–	EUR 1,000 million	1,000
– 1.500 % DIP notes, maturing in 2026	–	–	EUR 1,750 million	1,750
– 2.125 % DIP notes, maturing in 2029	–	–	EUR 1,500 million	1,500
– Liabilities to banks	EUR 47 million	47	EUR 20 million	20
Bayer Corporation, U. S. A.				
– 6.650 % notes, maturing in 2028	USD 350 million	292	USD 350 million	306
– Commercial paper	USD 50 million	42	USD 65 million	57
– Liabilities to banks	USD 60 million	50	USD 81 million	70
Bayer US Finance LLC, U. S. A.				
– 2.375 % notes, maturing in 2019	USD 2,000 million	1,667	USD 2,000 million	1,746
– 3.000 % notes, maturing in 2021	USD 1,500 million	1,251	USD 1,500 million	1,309
– 3.375 % notes, maturing in 2024	USD 1,750 million	1,459	USD 1,750 million	1,528

Debt Guarantees and Sureties

	Dec. 31, 2017 Nominal amount	Dec. 31, 2017 € million	Dec. 31, 2018 Nominal amount	Dec. 31, 2018 € million
Guarantees for Group companies				
Bayer US Finance II LLC, USA				
– 2.125 % notes, maturing in 2019	–	–	USD 311 million	272
– 3.500 % notes, maturing in 2021	–	–	USD 1,250 million	1,091
– 2.965 % notes, maturing in 2021	–	–	USD 1,250 million	1,091
– 2.750 % notes, maturing in 2021	–	–	USD 318 million	278
– 2.200 % notes, maturing in 2022	–	–	USD 189 million	165
– 3.345 % notes, maturing in 2023	–	–	USD 1,250 million	1,091
– 3.875 % notes, maturing in 2023	–	–	USD 2,250 million	1,964
– 3.375 % notes, maturing in 2024	–	–	USD 609 million	532
– 2.850 % notes, maturing in 2025	–	–	USD 250 million	218
– 5.500 % notes, maturing in 2025	–	–	USD 276 million	241
– 4.250 % notes, maturing in 2025	–	–	USD 2,500 million	2,182
– 4.375 % notes, maturing in 2028	–	–	USD 3,500 million	3,055
– 4.200 % notes, maturing in 2034	–	–	USD 427 million	373
– 5.500 % notes, maturing in 2035	–	–	USD 318 million	278
– 5.875 % notes, maturing in 2038	–	–	USD 212 million	185
– 4.625 % notes, maturing in 2038	–	–	USD 1,000 million	873
– 3.600 % notes, maturing in 2042	–	–	USD 241 million	210
– 4.650 % notes, maturing in 2043	–	–	USD 292 million	255
– 4.400 % notes, maturing in 2044	–	–	USD 916 million	800
– 3.950 % notes, maturing in 2045	–	–	USD 449 million	392
– 4.875 % notes, maturing in 2048	–	–	USD 2,000 million	1,746
– 4.700 % notes, maturing in 2064	–	–	USD 727 million	634
Bayer Holding Ltd., Japan				
– 3.575 % DIP bond, maturing in 2018	JPY 15 billion	111	-	-
– 0.594 % DIP bond, maturing in 2019	JPY 10 billion	74	JPY 10 billion	79
– 0.230 % DIP bond, maturing in 2021	JPY 10 billion	74	JPY 10 billion	79
– 0.260 % DIP bond, maturing in 2022	JPY 10 billion	74	JPY 10 billion	79
Monsanto Company, USA				
– Lease contracts	-	-	USD 120 million	105
Silver Birch Trustees Ltd., U. K.				
– Pension obligations	GBP 89 million	100	GBP 74 million	82
Bayer Real Estate GmbH, Germany				
– Contractual obligations to Bayer-Pensionskasse VVaG	EUR 75 million	75	EUR 71 million	71
Currenta GmbH & Co. OHG, Germany				
– Liabilities to the Federal State of North Rhine-Westphalia	EUR 53 million	53	EUR 53 million	53
Guarantees for other Group companies		5		6
		9,874		**33,016**

Bayer AG has issued commitments for its two subsidiaries, Bayer CropScience Deutschland GmbH and Bayer CropScience Biologics GmbH, with which it has assumed responsibility until the end of 2019 for the obligations of these companies that arose in 2018. Based on our knowledge of their respective economic situation, the companies are able to meet the underlying obligations. The contingent liabilities are therefore not expected to materialize.

In connection with the Contribution, Indemnification and Post-Formation Agreement between Bayer AG and Covestro AG, Germany, arrangements were made to settle possible claims for taxes. These may result in corresponding liabilities.

35. Other financial commitments

In addition to provisions, other liabilities and contingent liabilities, there were also other financial commitments.

A total commitment of €3,360 million (2017: €3,460 million) related to future leasing and rental payments. €3,308 million (2017: €3,391 million) of this amount related to rental and lease agreements with subsidiaries. The total rental and lease commitments are due as follows:

Leasing and Rental Commitments

	€ million
2019	1,656
2020	179
2021	179
2022	177
2023	176
after 2023	993
	3,360

In 2008, the establishment of an "effective initial fund" totaling €800 million was agreed with Bayer-Pensionskasse in view of the increase in the present and future life expectancy of those insured with this pension fund. The effective initial fund entails the granting of a repayable, interest-bearing loan to Bayer-Pensionskasse as required. In 2012, it was increased by €800 million to €1,600 million. Following payment of a total of €635 million, a loan commitment of €965 million remained.

Financial commitments resulting from orders already placed under purchase agreements related to planned or ongoing capital expenditure projects totaled €350 million (2017: €360 million). The respective payments are to be made through 2022, with €262 million due in 2019. Additional commitments to subsidiaries amounted to €7 million. All of the corresponding payments are due in 2019.

Furthermore, based on current estimates, payments of €3,313 million (2017: €2,630 million) will have to be made for license agreements and research collaborations in the coming years. The maturity spread of the total commitments comprised:

Cooperation Agreements

	€ million
2019	1,028
2020	64
2021	66
2022	44
2023	58
after 2023	2,053
	3,313

The company remains liable for pension obligations of €373 milion that were transferred to a subsidiary through a liability assumption agreement or via carve-outs. These obligations are not expected to materialize. To our knowledge, the subsidiary in question is able to meet the underlying liabilities.

36. Derivatives / hedging relationships

In the course of their business, Bayer AG and companies in the Bayer Group are exposed to foreign exchange, interest-rate and price risks, which are hedged principally by means of derivatives. Most of these are over-the-counter (OTC) instruments. Derivative financial instruments are employed on the basis of uniform guidelines and are subject to strict internal controls. Apart from a few low-value exceptions, their use is confined to the hedging of the Bayer Group's operating business and of the related investments and financing transactions. The instruments used for currency hedging are mainly forward exchange contracts, currency options and cross-currency interest-rate swaps. Interest-rate swaps are used to hedge interest rates. Share options are used to hedge fluctuations in the value of commitments to employees under stock-based compensation programs.

The main objective of using derivatives is to reduce fluctuations in earnings and cash flows associated with changes in foreign exchange rates, interest rates, share prices and market prices.

There is a risk that the value of derivatives could change as a result of fluctuations in underlying parameters such as exchange rates, interest rates, share prices or market prices. Where derivatives are designated as hedges, possible declines in their value are offset by corresponding increases in the value of the hedged contracts.

In the case of derivatives with a positive fair value, a credit or default risk arises if the counterparties cannot meet their obligations. To minimize this risk, we assign contract limits to the individual banks according to their creditworthiness.

The notional amount of financial derivatives contracts concluded with external counterparties was €20.4 billion as of December 31, 2018 (2017: €27.6 billion). Back-to-back derivatives contracts in a notional amount of €6.0 billion (2017: €8.4 billion) were concluded with Group companies. Thus the total notional amount of derivatives was €26.4 billion (2017: €36.0 billion), including those forming hedging relationships. The derivatives comprised the following:

Derivatives

	Notional amounts		Positive fair values		Negative fair values	
€ million	**Dec. 31, 2017**	**Dec. 31, 2018**	**Dec. 31, 2017**	**Dec. 31, 2018**	**Dec. 31, 2017**	**Dec. 31, 2018**
Currency contracts	21,883	22,378	212	136	(337)	(201)
Currency options	183	64	11	–	–	–
Cross-currency interest-rate swaps	3,590	2,456	148	81	(276)	(81)
Interest-rate swaps	9,286	200	75	9	(81)	–
Share options	1,096	1,306	29	175	(28)	(226)
	36,038	**26,404**	475	**401**	(722)	**(508)**

Valuation methods

The fair values of financial derivatives are measured by the usual methods and based on the market data available at the measurement date. The following principles are applied:

// Forward exchange contracts are measured individually at their forward rates on the closing date. The forward rates depend on spot rates, including time spreads.
// The fair values of currency options are determined using a Black-Scholes model.
// The fair values of interest-rate swaps are determined by discounting expected future cash flows. Discounting applies market interest rates for the remaining term of these instruments.
// The fair value of share options is determined by a Monte Carlo simulation.

Hedging relationships

Due to existing and planned transactions, the company is subject to currency, interest rate and share price risks that in most cases are hedged through the use of financial derivatives that are pooled together to form hedging relationships. The table below presents the obligations that would arise without the hedging.

Hedging Relationships

€ million	Type of risk	Hedging relationship	Amount of the underlying transaction	Hedged risk Dec. 31, 2018
Hedging of currency risks through currency contracts and options				
– Assets and liabilities in foreign currencies	Currency risk	Macro-hedge	1,126	24
– Currency contracts passed on to Group companies	Currency risk	Portfolio-hedge	4,155*)	36
– Currency loans from Group companies	Currency risk	Micro-hedge	8,271	0
– Planned future sales	Currency risk	Micro-hedge	3,092	19
Hedging of currency risks through cross-currency interest-rate swaps				
– Cross-currency interest-rate swaps passed on to Group companies	Currency risk	Micro-hedge	1,233*)	46
Hedging of interest-rate risks through interest-rate swaps				
– Bonds	Interest-rate risk	Micro-hedge	200	9
Hedging of share-price risks from customized forward trade contracts				
– Customized forward trade contracts passed on to Group companies	Share price risk	Portfolio-hedge	575*)	0

*) These figures pertain to the nominal volumes of the hedging transactions

Hedging was focused on financial exposure as well as highly probable transactions in foreign currency.

Currency-based portfolio hedges were also formed with the respective transactions underlying the hedges concluded for Bayer AG. Provisions of €7 million were established for the negative ineffectiveness of micro-hedges.

Currency contracts concluded to hedge Group companies' transactions are generally passed through to the respective companies by way of appropriate internal transactions. The effects of these internal and external transactions cancel each other out when the contracts are closed out. Currency-based portfolio hedges were formed. The underlying transactions mature in 2019. Cross-currency interest-rate swaps exist to hedge Group loans granted by Bayer NV, Belgium. As a result of back-to-back agreements with Bayer NV, the positive and negative fair values within multiple portfolio hedges formed according to the different maturities of the cross-currency interest-rate swaps canceled each other out.

Interest-rate swaps in the form of receiver swaps were used partly to hedge the interest-rate risk relating to DIP bonds issued by Bayer AG. The swaps mature in the period through 2021 in line with the maturities of the bonds. They constituted a hedging relationship with the bonds, which were recognized in the statement of financial position. The effectiveness of the hedging relationship is examined prospectively and retrospectively using regression analysis. Since the cash flows relating to the hedged contract and the receiver swaps cancel each other out, the receiver swaps were not reflected in the statement of financial position.

Bayer AG has concluded customized forward trade contracts with external counterparties to hedge a portion of the obligations arising from the "Aspire" stock-based compensation program. These contracts were passed through to other companies in the Bayer Group. They expire between 2019 and 2022. The contracts passed through to Group companies formed micro-hedges with the contracts concluded with external counterparties. These contracts therefore canceled each other out.

Derivatives that do not form hedging relationships

Financial derivatives that do not form hedging relationships were used to hedge a portion of the obligations arising from the "Aspire" stock-based compensation program of Bayer AG. The customized forward trade contracts concluded for this purpose had a negative fair value of €51 million, which was recognized in provisions for impending losses.

Items in the statement of financial positon and carrying amounts

The carrying amounts of hedging transactions that did not form hedging relationships or that led to ineffectiveness were recognized under the following items in the statement of financial position:

	Item in the statement of financial position	Carrying amount
€ million		Dec. 31, 2018
Options premiums paid	Other assets	1
Provisions for impending losses for forward exchange transactions	Other provisions	7
Provisions for impending losses from forward stock transactions	Other provisions	51
Options premiums received	Other liabilities	1

37. Legal risks

As the parent of a global group of companies with a heterogeneous business portfolio, Bayer AG is exposed to numerous legal risks, particularly in the areas of product liability, competition and antitrust law, patent disputes, tax law and environmental protection. The outcome of any current or future proceedings cannot normally be predicted. It is therefore possible that legal or regulatory judgments or future settlements could give rise to expenses that are not covered, or not fully covered, by insurers' compensation payments and could significantly affect our revenues and earnings.

Legal proceedings currently considered to involve material risks are outlined below. The legal proceedings referred to do not represent an exhaustive list. The risks described are those to which Bayer AG is exposed either directly, or indirectly through subsidiaries with which it has profit and loss transfer and / or control agreements. Further legal risks existing in the Bayer Group are described in the notes to the consolidated financial statements of the Bayer Group.

Product-Related Litigation

Mirena™: As of January 28, 2019, lawsuits from approximately 2,360 users of Mirena™, a levonorgestrel-releasing intrauterine system providing long-term contraception, had been served upon Bayer in the United States (excluding lawsuits no longer pending). Plaintiffs allege personal injuries resulting from the use of Mirena™, including perforation of the uterus, ectopic pregnancy or idiopathic intracranial hypertension, and seek compensatory and punitive damages. Plaintiffs claim, inter alia, that Mirena™ is defective and that Bayer knew or should have known of the risks associated with it and failed to adequately warn its users. Additional lawsuits are anticipated. In 2017, most of the cases pending in U.S. federal courts in which plaintiffs allege idiopathic intracranial hypertension were consolidated in a multidistrict litigation ("MDL") proceeding for common pre-trial management. As of January 28, 2019, lawsuits from approximately 700 users of Mirena™ alleging idiopathic intracranial hypertension had been served upon Bayer in the United States. Another MDL proceeding concerning perforation cases has been dismissed. The Second Circuit Court of Appeals affirmed the perforation MDL district court's summary judgment order of 2016 dismissing approximately 1,230 cases pending before that court. In April 2018, a master settlement agreement regarding the global settlement of the perforation cases for a total amount of US$12.2 million was executed. Plaintiffs did not reach the 98% participation threshold as required under the settlement agreement, and therefore a US$200,000 reduction in the total settlement amount was negotiated. Upon completion of the settlement, the vast majority of filed cases nationwide have been (or will be) dismissed with 16 claimants affirmatively opting out of the settlement. Almost all the other non-participating claimants (approximately 200) have not filed cases and are presently unreachable by plaintiffs' attorneys. As of January 28, 2019, a total of approximately 3,800 cases would be included in the settlement.

As of January 28, 2019, five Canadian lawsuits relating to Mirena™ seeking class action certification had been served upon Bayer. Bayer believes it has meritorious defenses and intends to defend itself vigorously.

Xarelto™: As of January 28, 2019, U.S. lawsuits from approximately 24,900 recipients of Xarelto™, an oral anticoagulant for the treatment and prevention of blood clots, had been served upon Bayer. Plaintiffs allege personal injuries from the use of Xarelto™, including cerebral, gastrointestinal or other bleeding and death, and seek compensatory and punitive damages. They claim, among other things, that Xarelto™ is defective and that Bayer knew or should have known of these risks associated with the use of Xarelto™ and failed to adequately warn its users. Additional lawsuits are anticipated. Cases pending in U.S. federal courts have been consolidated in an MDL for common pre-trial management. In 2017, the first three MDL trials resulted in complete defense verdicts. In January 2018, after the first trial to proceed in Pennsylvania state court had initially resulted in a judgment in favor of the plaintiff, the trial judge vacated the jury's verdict and granted judgment in favor of Bayer. In April and August 2018, the second and third Pennsylvania state court trials also resulted in complete defense verdicts. Appeals are pending in all of the six cases. Additional Pennsylvania state court trials are currently scheduled for May and September 2019 and into the second quarter of 2020. Bayer anticipates that additional trials will be scheduled.

As of January 28, 2019, ten Canadian lawsuits relating to Xarelto™ seeking class action certification had been served upon Bayer. One of the proposed class actions has been certified. Bayer has filed a motion for leave to appeal. Bayer believes it has meritorious defenses and intends to defend itself vigorously.

Essure™: As of January 28, 2019, U.S. lawsuits from approximately 29,400 users of Essure™, a medical device offering permanent birth control with a nonsurgical procedure, had been served upon Bayer. The significant increase in filings was triggered by the statutes of limitations in some states. Plaintiffs allege personal injuries from the use of Essure™, including hysterectomy, perforation, pain, bleeding, weight gain, nickel sensitivity, depression and unwanted pregnancy, and seek compensatory and punitive damages. Additional lawsuits are anticipated.

As of January 28, 2019, two Canadian lawsuits relating to Essure™ seeking class action certification had been served upon Bayer. Bayer believes it has meritorious defenses and intends to defend itself vigorously.

Class actions over neonicotinoids in Canada: Proposed class actions against Bayer were filed in Quebec and Ontario (Canada) concerning crop protection products containing the active substances imidacloprid and clothianidin (neonicotinoids). Plaintiffs are honey producers, who have filed a proposed nationwide class action in Ontario and a Quebec-only class action in Quebec. Plaintiffs claim for damages and punitive damages and allege Bayer and another crop protection company were negligent in the design, development, marketing and sale of neonicotinoid pesticides. The proposed Ontario class action is in a very early procedural phase. In Quebec, a court certified a class proposed by plaintiffs in February 2018. Bayer believes it has meritorious defenses and intends to defend itself vigorously.

In connection with the above-mentioned proceedings, Bayer is insured against statutory product liability claims against Bayer to the extent customary in the respective industries and has, based on the information currently available, taken appropriate accounting measures in the Bayer Group for anticipated defense costs. However, the accounting measures relating to Essure™ claims exceed the available insurance coverage.

Patent Disputes

Adempas™: In January 2018, Bayer filed patent infringement lawsuits in a U.S. federal court against Alembic Pharmaceuticals Limited, Alembic Global Holding SA, Alembic Pharmaceuticals, Inc. and INC Research, LLC (together “Alembic”), against MSN Laboratories Private Limited and MSN Pharmaceuticals Inc. (together “MSN”) and against Teva Pharmaceuticals USA, Inc. and Teva Pharmaceutical Industries Ltd. (together “Teva”). In 2017, Bayer had received notices of an Abbreviated New Drug Application with a paragraph IV certification (“ANDA IV”) pursuant to which Alembic, MSN and Teva each seek approval of a generic version of Bayer’s pulmonary hypertension drug Adempas™ in the United States. In October 2018, the court decided, upon a joint request by Bayer and Teva, that Bayer´s patent is valid and infringed by Teva. This terminated the patent dispute with Teva.

Bayer believes it has meritorious defenses in the above ongoing patent disputes and intends to defend itself vigorously.

38. Related parties

Related parties are legal entities or natural persons that are able to exert influence on Bayer AG or over which Bayer AG exercises control or has a significant influence.

Transactions with related parties mainly comprise rental, service and financing transactions with subsidiaries, joint ventures and other affiliated companies, and with pension plans. Such transactions are conducted on market terms (arm’s length principle).

Bayer AG had undertaken to provide jouissance right capital (Genussrechtskapital) totaling €150 million for Bayer-Pensionskasse. The entire amount was drawn in both 2017 and 2018. Further, in 2008 the establishment of a repayable “effective initial fund” was agreed with Bayer-Pensionskasse. This was increased by €800 million to €1,600 million in 2012. On December 31, 2018, the amount drawn was €635 million (2007: €595 million).

39. Disclosures pursuant to Section 6b Paragraph 2 of the German Energy Act

There were no unusual transactions in connection with energy supply that were of material significance for the net assets and results of operations of Bayer AG and required disclosure under Section 6b Paragraph 2 of the German Energy Act (EnWG).

40. Audit fees

Information on audit fees for 2018 is provided in the Notes to the Consolidated Financial Statements of the Bayer Group. The exemption under Section 285, No. 17 of the German Commercial Code (HGB) is applied in this respect.

The non-audit-related services primarily related to the analysis of financial information concerning business entities considered for divestment (Other services), the assessment of financial and nonfinancial information outside of financial statement auditing (Audit-related services and other audit work), and compliance-related tax consultancy services that had neither a material or direct impact on the annual financial statements.

41. Events of particular significance after the end of the fiscal year

The syndicated credit facility drawn in June 2018 to finance the acquisition of Monsanto was reduced by a further US$1.1 billion to US$3.8 billion in February 2019.

42. Total compensation of the Board of Management and the Supervisory Board and loans

The compensation of the Board of Management in 2018 comprised:

Total Compensation of the Board of Management

€ thousand	2017	2018
Fixed salaries	6,148	6,387
Compensation in kind and other benefits	266	1,825
Short-term variable cash compensation	4,890	6,937
Long-term stock-based cash compensation (“Aspire”)[1]	13,020	9,360
Aggregate compensation	**24,324**	**24,509**
Service cost for pension commitments[2]	2,546	2,745

[1] Fair value as of grant date
[2] Including company contribution to Bayer-Pensionskasse VVaG or Rheinische Pensionskasse

Total compensation of the Board of Management comprised €583 thousand (2017: €529 thousand) in fixed salaries, €1,000 thousand (2017: €24 thousand) in compensation in kind and other benefits, €581 thousand (2017: €265 thousand) in short-term variable cash compensation, and €874 thousand (2017: €847 thousand) in long-term stock-based cash compensation that members of the Board of Management received from our subsidiary Bayer Consumer Care AG, Switzerland. €328 thousand (2017: €190 thousand) of the service cost for pension commitments pertained to commitments at subsidiaries outside of Germany.

Members of the Board of Management participate in stock-based compensation programs (“Aspire”). These are four-year programs under which entitlements are earned in stages. The fair value of these programs at the time they are granted forms part of the overall compensation package and is shown in the above overview as “long-term stock-based cash compensation (“Aspire”).” The entitlements earned in 2018 under the stock-based compensation programs granted in 2018 and under those from previous years are shown separately in the table below. In addition, the changes in the value of entitlements from stock-based compensation programs earned prior to 2018 are shown separately.

Until 2015, members of the Board of Management also received 50 % of their short-term variable compensation in the form of virtual Bayer shares. Payments are made after a three-year retention period and depend on the market price of Bayer shares at that time. Participants also receive an amount equal to the total dividends paid on the equivalent number of real shares during this period. Changes in the value of the virtual shares up to the payment date (including dividend claims accrued during the three-year period) are also shown in the next table.

The expense for the respective year contained the following components relating to long-term variable cash compensation based on virtual Bayer shares and long-term stock-based cash compensation ("Aspire") that differ from the amounts included in aggregate compensation:

Multi-Year Variable Compensation of the Board of Management

€ thousand	2017	2018
Long-term variable cash compensation based on virtual Bayer shares		
– Change in the value of virtual shares granted in previous years	538	(978)
	538	**(978)**
Long-term stock-based cash compensation ("Aspire")		
– Entitlements earned in the fiscal year	9,082	6,660
– Change in the value of entitlements earned in previous years	(641)	(3,768)
	8,441	**2,892**
Expense	**8,979**	**1,914**

Within the long-term stock-based cash compensation ("Aspire"), €425 thousand (2017: €1,434 thousand) of the entitlements earned in 2018 and minus €344 thousand (2017: minus €168 thousand) of the changes in the value of entitlements earned in previous years pertained to entitlements against our subsidiary Bayer Consumer Care AG, Switzerland.

At Bayer AG, expenses for pension entitlements granted to the members of the Board of Management serving in 2018 amounted to €2,417 thousand (2017: €2,356 thousand). These comprised current service cost for pension commitments and company contributions to Bayer-Pensionskasse and Rheinische Pensionskasse. The interest portion of entitlements earned in prior years and actuarial gains and losses also had an impact. Including these components, the financial expense was €3,908 thousand (2017: €4,261 thousand). Provisions for pension obligations on the closing date were €22,237 thousand (2017: €22,585 thousand).

Pension payments to former members of the Board of Management and their surviving dependents in 2018 amounted to €12,627 thousand (2017: €12,758 thousand). Provisions for pensions and similar commitments to former members of the Board of Management and their surviving dependents amounting to €158,931 thousand (2017: 153,388 thousand) were reflected in the statement of financial position of Bayer AG.

The total remuneration of the Supervisory Board in 2018 was €3,897 thousand (2017: €3,703 thousand). This included attendance fees of €134 thousand (2017: €120 thousand).

There were no loans to members of the Board of Management or the Supervisory Board as of December 31, 2018, nor were any loans repaid during the year.

Details of the compensation of the Board of Management and Supervisory Board are set out in the compensation report, which forms part of the Combined Management Report of the Bayer Group and Bayer AG.

43. Proposal for the use of the distributable profit

The Board of Management and Supervisory Board propose that the distributable profit of €2,611 million reported in the financial statements of Bayer AG be used to pay a dividend of €2.80 per share carrying dividend rights (932,551,964 shares) on the capital stock of €2,387 million entitled to the dividend for 2018.

Responsibility Statement

To the best of our knowledge, and in accordance with the applicable reporting principles, the financial statements give a true and fair representation of the assets, liabilities, financial position and profit or loss of the company, and the Combined Management Report includes a fair review of the development and performance of the business and the position of the Bayer Group and Bayer AG, together with a description of the principal opportunities and risks associated with the expected development of Bayer Group and Bayer AG.

Leverkusen, February 20, 2019
Bayer Aktiengesellschaft

The Board of Management

Werner Baumann

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

Independent Auditor's Report

To Bayer Aktiengesellschaft, Leverkusen

REPORT ON THE AUDIT OF THE ANNUAL FINANCIAL STATEMENTS AND THE COMBINED MANAGEMENT REPORT

Audit opinions

We audited the financial statements of Bayer Aktiengesellschaft, Leverkusen, – consisting of the balance sheet as of December 31, 2018 and the income statement for the fiscal year from January 1 through December 31, 2018 and also the Notes to the financial statements, together with a presentation of the accounting and valuation methods. Furthermore, we audited the combined management report of Bayer Aktiengesellschaft, Leverkusen, for the fiscal year from January 1 through December 31, 2018. In accordance with German statutory provisions, we did not audit the contents of the components of the combined management report named in the Appendix to our auditors' report.

In our opinion, based on the findings of our audit,

// the accompanying financial statements comply in all material respects with the requirements of German commercial law applicable to corporations and give a true and fair view of the net assets and financial position of the Company as of December 31, 2018 and of its results of operations for the fiscal year from January 1 to December 31, 2018 in accordance with German principles of proper accounting; and
// the accompanying combined management report provides a suitable overall view of the Company's situation. In all material respects, this combined management report is consistent with the financial statements, complies with German legal requirements and suitably presents the opportunities and risks of future development. Our audit opinion on the combined management report does not extend to the content of the components of the combined management report mentioned in the Appendix to the auditors' report.

In accordance with Section 322 (3.1) HGB, we state that our audit has not led to any objections to the correctness of the financial statements and the combined management report.

Basis for the audit opinions

We conducted our audit of the financial statements and the combined management report in accordance with Section 317 HGB and the EU Auditors' Regulation (No. 537/2014; hereafter referred to as "EU Audit Regulation") in compliance with the generally accepted German standards for the audit of financial statements promulgated by the Institut der Wirtschaftsprüfer (IDW). We conducted our audit of the financial statements with additional regard for the International Standards on Auditing (ISA). Our responsibility pursuant to these regulations, principles, and standards is described in more detail in the Section "Auditors' responsibility for the audit of the financial statements and the combined management report" of our Audit Report. We are independent of the Company in accordance with European and German commercial and professional regulations and have fulfilled our other German professional obligations in accordance with these requirements. Furthermore we state, in accordance with Article 10 (2f) EU Audit Regulation, that we have rendered no inadmissible non-audit services within the meaning of Article 5 (1) EU Audit Regulation. We believe that the audit evidence we obtained is sufficient and appropriate to provide a basis for our audit opinions on the financial statements and combined management report.

Particularly important audit issues in the audit of the financial statements

Particularly important audit issues are those issues that we considered – at our due discretion – to be the most significant in our audit of the financial statements for the fiscal year from January 1 through December 31, 2018. These issues have been taken into account in connection with our audit of the financial statements as a whole and in forming our opinion thereon; we do not express a separate opinion on these issues.

We present below what we consider to be the particularly important audit issues:

a) New Bayer – Leasing of Business Operations
b) Derivative Financial Instruments - Accounting for Valuation Units and Hedging Transactions
c) Intrinsic value of shares in affiliated companies
d) Depiction of restructuring matters

We have structured our presentation of these particularly important audit issues as follows:

a) Description of issue (including reference to associated disclosures in the financial statements),
b) Audit approach

1. New Bayer – Leasing of Business Operations

a) Bayer Aktiengesellschaft (lessee) has leased the business operations of Bayer Pharma AG (BPH AG) and Bayer CropScience AG (BCS AG) (the lessors) since 1 January 2017 and has thus taken over the management of these operations. The object of the leases is fundamentally all assets, contracts, and other legal relationships necessary for the management of the lessors' businesses. All participations and associated rights, other financial assets, including silent participations and the associated receivables, other rights, and liabilities are excluded from the leases.

   We identified this as a particularly important audit issue because the structure of the agreement and the balance sheet presentation of the leasing of business operations based thereon are of a complex nature. Furthermore, this business model has significant effects on the net assets, financial position, and results of operations of Bayer Aktiengesellschaft.

   The Company's disclosures on the leasing of business operations are included in the Section "Change in the corporate structure" of the Notes.

b) Within the framework of our audit we examined, with the support of our internal tax specialists, the extent to which the business operations lease agreements between Bayer AG and BPH AG and between Bayer Aktiengesellschaft and BCS AG are to be classified as operating leases under commercial law. On the basis of BDO's Deutsche Warentreuhand AG, Berlin (BDO) "Expert Opinion on the Balance Sheet Recognition of Fixed Assets Leased under a Business Lease" commissioned by Bayer Aktiengesellschaft in the prior year, we analyzed and assessed the organizational and procedural measures taken by Bayer Aktiengesellschaft to ensure that the actual execution of the business lease agreement is thereby guaranteed. We assessed the system safeguards and measures in Bayer Aktiengesellschaft's accounting system intended to ensure that the business operations lease models are correctly reflected in the accounts and in Bayer Aktiengesellschaft's financial statements by examining the customizing settings with the help of specialists from Internal Control Assurance.

2. Derivative Financial Instruments – Accounting for Valuation Units and Hedging Transactions

a) Bayer Aktiengesellschaft concludes a large variety of derivative financial instruments with external contract partners and Group companies to hedge against currency, interest rate, exchange rate, and price risks arising from normal business operations. The basis for this is the hedging policy prescribed by Management, which is documented in appropriate internal guidelines. The objective of using derivative financial instruments is to reduce fluctuations in net income and cash flows due to changes in foreign exchange rates, interest rates, share prices, and market prices.

The nominal volume of derivatives concluded with external counterparties amounted to EUR 20.4bn as of December 31, 2018. Offsetting derivatives with a nominal value of EUR 6.0bn have been concluded with Group companies. The fair values of derivative financial instruments are determined using standard market valuation methods, taking into account the market data (market values) available on the valuation date. These amount to EUR -107m net as of December 31, 2018 and are recognized in the balance sheet with EUR -62m net. Management assesses the effectiveness of the hedging relationship prospectively with the help of the critical term match method and retrospectively by the dollar offset method.

In our view, these issues were of particular importance due to the high complexity and the great number of transactions, and also the extensive accounting and reporting requirements.

The Company's disclosures on accounting for derivative financial instruments are included in Note 36 to the financial statements.

b) Within the framework of our audit, and with the support of our internal financial risk specialists, we assessed, among other things, the contractual and financial fundamentals and reconstructed the accounting including the recognition of valuation units (micro hedges) for the various hedging transactions. Jointly with our specialists, we also assessed the Company's internal control system in the area of derivative financial instruments, including the internal monitoring of compliance with the hedging policy, and reviewed the controls with regard to design, implementation, and effectiveness. Furthermore, for the audit of the fair value measurement of financial instruments, we verified the proper implementation of the methods by the system and reconstructed the calculation methods on the basis of market data for representative samples. In order to audit the effectiveness of the hedging relationship, we analyzed the methods used and reconstructed their correct implementation in the system. We also based our assessment of the completeness of the transactions recognized on a portfolio comparison with the counterparties. With regard to the expected cash flows and the assessment of the effectiveness of hedging transactions, we essentially assessed the past hedging ratios in retrospect.

3. Intrinsic value of shares in affiliated compa

a) As of December 31, 2018, shares in affiliated companies amounting to EUR 49.6bn (59.4 % of total assets) are reported in Bayer Aktiengesellschaft's financial statements. Bayer Aktiengesellschaft tested the intrinsic worth of the investment book values as of the closing date by carrying out internal company valuations. For all major investments, Bayer Aktiengesellschaft determines the total enterprise value, which is adjusted by the net financial position. The equity value determined in this way is compared with the relevant book value of the investment. The total enterprise values are determined as the present value of the future cash flows expected by Management, using discounted cash flow models. The result of these valuations depends in particular on Management’s assessment of future cash inflows, the discount rates and growth rates used in each case, and the calculation of the net financial position. The valuations are therefore fraught with uncertainties. Even minor changes in the discount rate used can have material effects. Against this background and in view of the material significance for the net assets and results of operations of Bayer Aktiengesellschaft, this matter was of particular importance in the context of our audit.

The Company's disclosures on the long-term financial assets and their intrinsic worth are contained in Notes 4 and 15 to the financial statements.

b) Within the framework of our audit, we assessed whether the valuation model used to determine the overall enterprise value accurately reflects the conceptual requirements of the relevant valuation standards and whether the calculations in the model were performed correctly. In the case of the valuations carried out by Bayer Aktiengesellschaft, we were convinced that the fair values were properly determined using the Discounted Cash Flow method, observing the relevant valuation standards. For this purpose, we examined whether the underlying future cash inflows and the capital costs recognized represent an appropriate basis overall. Our assessment was based, among other things, on a comparison with general and industry-specific market expectations and extensive explanations by Management of the key value drivers and planning premises. We also checked the parameters used to determine the discount rate by comparing them with market data and reproduced the calculation scheme logically and arithmetically.

4. Depiction of restructuring matters

a) At the end of 2018, the Management of Bayer Aktiengesellschaft announced a comprehensive restructuring program for the entire Bayer Group. The program essentially involves the cutback of up to 12,000 jobs in the next three fiscal years. A not inconsiderable part of the job cuts is attributable to Germany, where redundancies for operational reasons are excluded until 2025 owing to works agreements. In order to implement the restructuring program, appropriate discussions with employee bodies were already held in 2018, as a basis for job cuts and for the recognition of restructuring provisions. A further measure is the closure of an intra-group leased production plant in Germany. A provision of EUR 606m was recognized by Bayer Aktiengesellschaft for the severance payment obligations specified up to the end of the reporting year and for impending losses from uncompleted transactions. In our opinion, this matter was of particular importance for our audit, as the recognition and measurement of the provision are to a large extent based on estimates and assumptions made by Management.

The Company's disclosures on the restructuring provision are included in Note 27 of the Notes to the financial statements.

b) We examined whether provisions had been formed in compliance with the definition in Section 249 (1) HGB. To this end, we reviewed compliance with the general recognition and measurement rules for provisions. For this purpose, we received and verified the corresponding evidence and calculation documents from Management. We critically assessed and verified the plausibility of the estimates and assumptions of Management on which the evidence and calculation principles are based as to the extent to which the recognition and amount of the provisions are appropriate. In particular, we evaluated documents (resolutions, minutes, presentations) destined to inform the employee representatives in Germany as to whether they had sufficiently informed the employees, during the 2018 fiscal year or by the time the financial statements were prepared, about the restructuring programs and individual components of the planned restructuring measures. We furthermore investigated whether and to what extent Management had informed the employees in the various departments and/or at the various locations about the planned job cuts. Based on this, we examined whether the criteria for the recognition of the provision had been met as of the balance sheet date. In order to check the plausibility of the amount of the provisions, we analyzed, among other things, the job reduction programs developed in the personnel departments with regard to the premises set for the amount of severance offers to employees and the expected acceptance rates. We discussed the restructuring programs in detail with those responsible in the personnel departments and critically questioned the premises that had been set. Furthermore, we critically questioned Management's assumptions regarding the lack of alternative usability of long-term leased assets in connection with the closure of the production facility and analyzed the contractual basis of the lease. In addition, we reviewed the disclosures on the restructuring measures in the Notes to the financial statements.

Other information

The Management is responsible for the other information. This other information includes:

- the components of the combined management report named in the Appendix to the Auditors’ Report that were not audited as to their contents,
- the declaration by Management regarding the financial statements and the combined management report pursuant to Section 264 (2.3) HGB and Section 289 (1.5) HGB.

Our audit opinions on the financial statements and on the combined management report do not extend to this other information and, accordingly, we express neither an opinion nor any other form of audit conclusion on them.

In connection with our audit, it is our responsibility to read the other information and to assess whether the other information

- displays significant discrepancies with the financial statements, the combined management report or with our knowledge gained during the audit, or
- otherwise appears to be substantially incorrectly presented.

Should we, on the basis of our work, conclude that there is a material misrepresentation in this other information, we are required to report on this fact. We have nothing to report in this connection.

Responsibility of the Management and the Supervisory Board for the financial statements and the combined management report

The Management is responsible for the preparation of financial statements which in all material respects comply with the requirements of German commercial law applicable to corporations, and for the presentation of a true and fair view of the net assets, financial position, and results of operations of the Company in accordance with German principles of proper accounting. Furthermore, the Management is responsible for the internal controls that they have determined, in accordance with German generally accepted accounting principles, to be necessary to enable the preparation of financial statements that are free from material – intentional or unintentional – misstatements.

In preparing the financial statements, the Management is responsible for assessing the Company's ability to continue its business activities. Moreover, they are responsible for disclosing matters relating to the continuation of business activities, if relevant. Furthermore, they are responsible for accounting for continuing operations on the basis of the same accounting policy, unless this is contrary to fact or law.

The Management is also responsible for preparing the combined management report, which as a whole provides a suitable view of the Company's position and is consistent with the financial statements in all material respects, complies with German legal requirements, and suitably presents the opportunities and risks of future development. Management is further responsible for the arrangements and measures (systems) that they deem necessary to enable the preparation of a combined management report in accordance with the applicable German legal provisions and to provide sufficient suitable evidence for the assertions in the combined management report.

The Supervisory Board is responsible for monitoring the Company's accounting process for preparing the financial statements and the combined management report.

Auditors' responsibility for the audit of the financial statements and the combined management report

Our objective is to obtain sufficient assurance as to whether the financial statements as a whole are free from material – intentional or unintentional – misstatements, and whether the combined management report as a whole provides a suitable view of the Company's situation and is in all material respects consistent with the financial statements and with the findings of the audit, complies with German legal requirements, and suitably presents the opportunities and risks of future development, and to issue an auditors' report containing our audit opinions on the financial statements and the combined management report.

Reasonable assurance is a high degree of certainty, but there is no guarantee that an audit conducted in accordance with Section 317 HGB and the EU Audit Regulation, observing generally accepted auditing principles for the audit of financial statements promulgated by the Institute of Public Auditors in Germany (IDW), and in supplementary observance of the ISAs will always reveal a material misrepresentation. Misstatements may result from violations or inaccuracies and are considered material if it is reasonable to expect that they will affect, individually or collectively, the economic decisions of addressees made on the basis of these financial statements and the combined management report.

During the audit, we exercise due discretion and maintain a critical attitude. In addition to this

- we identify and assess the risks of material misstatements – whether intentional or unintentional – in the financial statements and the combined management report, plan and perform audit procedures in response to these risks, and obtain audit evidence that is sufficient and adequate to serve as a basis for our audit opinions. The risk that material misrepresentations are not detected is higher for violations than for inaccuracies, as violations may involve fraudulent collaboration, forgeries, intentional incompleteness, misleading representations, or the overriding of internal controls.
- we gain an understanding of the internal control system relevant to the audit of the financial statements and the arrangements and measures relevant to the audit of the combined management report to plan audit procedures that are appropriate in the circumstances, but not with the objective of expressing an audit opinion on the effectiveness of these of the Company's systems.
- we assess the appropriateness of the financial reporting methods applied by Management and the tenability of the estimates and related disclosures made by Management.
- we draw conclusions on the appropriateness of the application of the going-concern accounting principle applied by the Management and, on the basis of the audit evidence obtained, whether there is essential uncertainty in connection with events or circumstances that might give rise to significant doubts about the Group's ability to continue operations. If we come to the conclusion that there is essential uncertainty, we are obliged to draw attention to the related disclosures in the financial statements and the combined management report or, if these disclosures are inappropriate, to modify our relevant audit opinion. We draw our conclusions based on the audit evidence obtained up to the date of our audit opinion. However, future events or circumstances may result in the Company no longer being able to continue its business activities.
- we assess the overall presentation, the structure, and content of the financial statements, including the disclosures, and whether the financial statements present the underlying transactions and events in such a way that the financial statements give a true and fair view of the net assets, financial position, and results of operations of the Company in accordance with generally accepted German accounting principles.
- we assess the conformity of the combined management report with the financial statements, its legal compliance, and the view it provides of the Company's situation.
- we perform audit procedures on the forward-looking statements presented by Management in the combined management report. On the basis of adequate and suitable audit evidence, we trace in particular the significant assumptions on which the Management's forward-looking statements are based and assess the proper derivation of the forward-looking statements from these assumptions. We do not express a separate audit opinion on the forward-looking statements or on the underlying assumptions. There is a significant, unavoidable risk that future events will differ materially from the forward-looking statements.

We discuss, with those responsible for monitoring, among other things the planned scope and timing of the audit and also significant audit findings, including any deficiencies in the internal control system that we identify during our audit.

We address a declaration that we have complied with the relevant independence requirements to those responsible for monitoring and discuss with them all relationships and other issues reasonably likely to affect our independence, and the safeguards we have put in place.

On the basis of the issues which we discussed with those responsible for monitoring, we determine the issues that were most significant for the audit of the financial statements in the current reporting period and are therefore particularly important audit issues. We describe these issues in the auditor's report, unless laws or other legal provisions preclude the disclosure of such issues.

OTHER STATUTORY AND LEGAL REQUIREMENTS

Note on accounting unbundling in accordance with Section 6b EnWG

In our opinion, the accounting requirements of Section 6b(3) EnWG, which require separate accounts to be maintained for the activities to be performed under Section 6b(3) EnWG, have been complied with in respect of the fiscal year from January 1 to December 31, 2018, in all material respects.

We conducted our audit pursuant to Section 6b (5) EnWG in observance of the generally accepted German standards for the audit of financial statements promulgated by the Institut der Wirtschaftsprüfer (IDW). Our responsibility in accordance with these rules and principles is further described below and in the section "Auditors' responsibility for the audit of the financial statements and the combined management report". We believe that the audit evidence we have obtained is sufficient and appropriate to serve as a basis for our audit opinion.

Management is responsible for compliance with the obligations under Section 6b(3) EnWG to maintain separate accounts and for the precautions and measures (systems) it has deemed necessary to comply with these obligations.

Our objective is to obtain reasonable assurance about whether the financial reporting requirements set out in Section 6b (3) EnWG have been complied with in all material respects and to issue a report that includes our opinion on whether the financial reporting requirements set out in Section 6b (3) EnWG have been complied with. The audit includes an assessment of whether the valuations and the assignment of the accounts in accordance with Section 6b (3) EnWG have been carried out properly and comprehensibly and whether the principle of consistency has been observed.

Other disclosures pursuant to Article 10 EU Audit Regulation

We were elected as auditors by the Annual General Meeting on May 25, 2018. We were engaged by the Supervisory Board on July 10, 2018. We have been working uninterruptedly as statutory auditors of the financial statements of Bayer Aktiengesellschaft, Leverkusen, since the 2017 fiscal year.

We declare that the audit opinions contained in this Auditor's Report are consistent with the additional report to the Audit Committee pursuant to Article 11 EU Audit Regulation (Audit Report).

RESPONSIBLE AUDITOR

The public auditor responsible for the audit is Prof. Dr. Frank Beine.

Munich, February 20, 2019

Deloitte GmbH
Wirtschaftsprüfungsgesellschaft

Heiner Kompenhans	Professor Frank Beine
German Public Auditor	German Public Auditor

Appendix to the Auditors' Report: components of the combined management report that were not audited as to their contents

We did not audit the following components of the combined management report as to their contents:

- the parts marked "audited with limited assurance" and the following sections of the non-financial statement integrated in the combined management report pursuant to Sections 289b to 289e, 315b and 315c HGB:

Section	Chapter
Diverse stakeholders in focus	1.2.3 Sustainability Management
Collaboration formats aimed at specific target groups	1.2.3 Sustainability Management
Binding and transparent compensation structures	1.4.1 Employees
Quality management of segments	1.6.1 Product Stewardship
Biodiversity in the segments	1.6.1 Product Stewardship
Commitment to reducing animal studies	1.6.1 Product Stewardship
Global pharmaceutical monitoring system	1.6.1 Product Stewardship
Processes in plant biotechnology	1.6.1 Product Stewardship
Training of farmers and Bayer employees	1.6.1 Product Stewardship
Occupational illnesses	1.6.2 Occupational, Plant and Transportation Safety
Other Direct Air Emissions	1.6.3 Environmental Protection
Water Use in the Bayer Group 2018	1.6.3 Environmental Protection
Waste by Means of Disposal	1.6.3 Environmental Protection
Liaison offices – Contact with poltical stakeholders	4.2 Compliance

- the corporate governance statement pursuant to Section 289f and Section 315d HGB contained in Chapter 4.1 of the combined management report.

Furthermore, we did not audit the content of the following disclosures that are not normally part of the management report. Disclosures that are not normally part of the management report in the combined management report are disclosures that are neither required by Sections 289 to 289f, 315 to 315d of the German Commercial Code (HGB) nor by DRS 20.

The information in section 2.2.2 of the combined management report on pro forma sales by strategic business unit of the Crop Science Division.

Governance Bodies

Supervisory Board

Members of the Supervisory Board held offices as members of the supervisory board or a comparable supervising body of the corporations listed (as at December 31, 2018, or the date on which they ceased to be members of the Supervisory Board of Bayer AG) and as shown attended the meetings of the Supervisory Board and committees to which he or she belonged.

Werner Wenning
Leverkusen, Germany
(born October 21, 1946)

Chairman of the Supervisory Board effective October 2012

Chairman of the Supervisory Board of Bayer AG

Memberships on other supervisory boards:

- Henkel Management AG
- Siemens AG (Vice Chairman)

Memberships in comparable supervising bodies of German or foreign corporations:

- Henkel AG & Co. KGaA (Shareholders' Committee)

Attendance at Supervisory Board and committee meetings: 17 of 17

Oliver Zühlke
Solingen, Germany
(born December 11, 1968)

Vice Chairman of the Supervisory Board effective July 2015

Member of the Supervisory Board effective April 2007

Chairman of the Bayer Central Works Council

Attendance at Supervisory Board and committee meetings: 13 of 14

Dr. Paul Achleitner
Munich, Germany
(born September 28, 1956)

Member of the Supervisory Board effective April 2002

Chairman of the Supervisory Board of Deutsche Bank AG

Memberships on other supervisory boards:

- Daimler AG
- Deutsche Bank AG (Chairman)

Memberships in comparable supervising bodies of German or foreign corporations:

- Henkel AG & Co. KGaA (Shareholders' Committee)

Attendance at Supervisory Board and committee meetings: 12 of 12

Dr. rer. nat. Simone Bagel-Trah
Düsseldorf, Germany
(born January 10, 1969)

Member of the Supervisory Board effective April 2014

Chairwoman of the Supervisory Board of Henkel AG & Co. KGaA and Henkel Management AG and of the Shareholders' Committee of Henkel AG & Co. KGaA

Memberships on other supervisory boards:

- Henkel AG & Co. KGaA (Chairwoman)
- Henkel Management AG (Chairwoman)
- Heraeus Holding GmbH

Memberships in comparable supervising bodies of German or foreign corporations:

- Henkel AG & Co. KGaA (Shareholders' Committee, Chairwoman)

Attendance at Supervisory Board meetings: 6 of 7

Dr. Norbert W. Bischofberger
Hillsborough, U.S.A.
(born January 10, 1956)

Member of the Supervisory Board effective April 2017

Executive Vice President Research & Development and Chief Scientific Officer of Gilead Sciences, Inc. (until April 2018)

President and Chief Executive Officer of Kronos Bio, Inc. (effective May 2018)

Memberships in comparable supervising bodies of German or foreign corporations:

- InCarda Therapeutics, Inc. (Board of Directors)
- Kronos Bio, Inc. (Board of Directors) (effective May 2018)

Attendance at Supervisory Board and committee meetings: 8 of 8

André van Broich
Dormagen, Germany
(born June 19, 1970)

Member of the Supervisory Board effective April 2012

Chairman of the Bayer Group Works Council

Chairman of the Works Council of the Dormagen site

Attendance at Supervisory Board and committee meetings: 11 of 11

Thomas Ebeling
Muri bei Bern, Switzerland
(born February 9, 1959)

Member of the Supervisory Board effective April 2012

Chief Executive Officer of ProSiebenSat.1 Media SE (until February 2018)

Independent consultant (effective March 2018)

Memberships on other supervisory boards:

- Apleona GmbH (effective June 2018) (Chairman effective August 2018)
- GfK SE
- ClearVat AG

Memberships in comparable supervising bodies of German or foreign corporations:

- Cullinan Oncology, LLC (Board of Directors)
- Heilpflanzenwohl AG (Board of Directors)
- Ocean Outdoor Ltd. (Board of Directors) (effective October 2018)

Attendance at Supervisory Board meetings: 6 of 7

Dr. Thomas Elsner
Düsseldorf, Germany
(born April 24, 1958)

Member of the Supervisory Board effective April 2017

Chairman of the Bayer Group Managerial Employees' Committee

Chairman of the Managerial Employees' Committee of Bayer AG Leverkusen

Attendance at Supervisory Board and committee meetings: 11 of 11

Johanna W. (Hanneke) Faber
Amstelveen, Netherlands
(born April 19, 1969)

Member of the Supervisory Board effective April 2016

President Europe at Unilever N.V./plc

Attendance at Supervisory Board meetings: 6 of 7

Colleen A. Goggins
Princeton, U.S.A.
(born September 9, 1954)

Member of the Supervisory Board effective April 2017

Independent consultant

Memberships in comparable supervising bodies of German or foreign corporations:

- The Toronto-Dominion Bank (Board of Directors)
- IQVIA Holdings Inc. (Board of Directors)
- SIG Combibloc Services AG (Board of Directors) (effective September 2018)

Attendance at Supervisory Board meetings: 7 of 7

Heike Hausfeld
Leverkusen, Germany
(born September 19, 1965)

Member of the Supervisory Board effective April 2017

Chairwoman of the Works Council of the Leverkusen site

Memberships on other supervisory boards:

- Bayer Business Services GmbH (Vice Chairwoman)

Attendance at Supervisory Board and committee meetings: 9 of 10

Reiner Hoffmann
Wuppertal, Germany
(born May 30, 1955)

Member of the Supervisory Board effective October 2006

Chairman of the German Trade Union Confederation

Attendance at Supervisory Board meetings: 7 of 7

Frank Löllgen
Cologne, Germany
(born June 14, 1961)

Member of the Supervisory Board effective November 2015

North Rhine District Secretary of the German Mining, Chemical and Energy Industrial Union

Memberships on other supervisory boards:

- Evonik Industries AG
- IRR-Innovationsregion Rheinisches Revier GmbH

Attendance at Supervisory Board and committee meetings: 11 of 11

Prof. Dr. Wolfgang Plischke
Aschau im Chiemgau, Germany
(born September 15, 1951)

Member of the Supervisory Board effective April 2016

Independent consultant

Memberships on other supervisory boards:

- Evotec AG (Chairman)

Attendance at Supervisory Board and committee meetings: 12 of 12

Petra Reinbold-Knape
Gladbeck, Germany
(born April 16, 1959)

Member of the Supervisory Board effective April 2012

Member of the Executive Committee of the German Mining, Chemical and Energy Industrial Union

Memberships on other supervisory boards:

- Lausitz Energie Bergbau AG (Vice Chairwoman)
- Lausitz Energie Kraftwerk AG (Vice Chairwoman)

Memberships in comparable supervising bodies of German or foreign corporations:

- DGB Rechtsschutz GmbH (effective February 2018)

Attendance at Supervisory Board and committee meetings: 9 of 9

Detlef Rennings
Krefeld, Germany
(born April 29, 1965)

Member of the Supervisory Board effective June 2017

Chairman of the Central Works Council of CURRENTA

Chairman of the Works Council of CURRENTA of the Uerdingen site

Memberships on other supervisory boards:

- Currenta Geschäftsführungs-GmbH

Attendance at Supervisory Board meetings: 7 of 7

Sabine Schaab
Wuppertal, Germany
(born June 25, 1966)

Member of the Supervisory Board effective October 2017

Vice Chairwoman of the Works Council of the Elberfeld site

Attendance at Supervisory Board and committee meetings: 8 of 8

Michael Schmidt-Kießling
Schwelm, Germany
(born March 24, 1959)

Member of the Supervisory Board effective April 2012

Chairman of the Works Council of the Elberfeld site

Attendance at Supervisory Board meetings: 7 of 7

Dr. Klaus Sturany*
Ascona, Switzerland
(born October 23, 1946)

Member of the Supervisory Board until May 2018

Member of various supervisory boards

Memberships on other supervisory boards:

- Hannover Rück SE (Vice Chairman)

Attendance at Supervisory Board and committee meetings: 5 of 5

Prof. Dr. Dr. h.c. Otmar D. Wiestler
Berlin, Germany
(born November 6, 1956)

Member of the Supervisory Board effective October 2014

President of the Helmholtz Association of German Research Centres

Attendance at Supervisory Board and committee meetings: 8 of 8

Prof. Dr. Norbert Winkeljohann*
Osnabrück, Germany
(born November 5, 1957)

Member of the Supervisory Board effective May 2018

Chairman of the Board of Management of PricewaterhouseCoopers GmbH Wirtschaftsprüfungsgesellschaft (until June 2018)

Chief Executive Officer of PwC Europe SE (until June 2018)

Independent management consultant (effective July 2018)

Memberships on other supervisory boards:

- Deutsche Bank AG (effective August 2018)
- heristo aktiengesellschaft (Chairman) (effective July 2018)

Attendance at Supervisory Board and committee meetings: 6 of 6

* Expert member pursuant to Section 100, Paragraph 5 of the German Stock Corporation Act (AktG)

Standing committees of the Supervisory Board of Bayer AG (as at December 31, 2018)

Presidial Committee / Mediation Committee
Wenning (Chairman), Achleitner, Reinbold-Knape, Zühlke

Audit Committee
Winkeljohann* (Chairman), Elsner, Löllgen, Plischke, Wenning, Zühlke

Human Resources Committee
Wenning (Chairman), Achleitner, Hausfeld, van Broich

Nominations Committee
Wenning (Chairman), Achleitner

Innovation Committee
Plischke (Chairman), Bischofberger, van Broich, Reinbold-Knape, Schaab, Wenning, Wiestler, Zühlke

Board of Management

Members of the Board of Management held offices as members of the supervisory board or a comparable supervising body of the corporations listed (as at December 31, 2018, or the date on which they ceased to be members of the Board of Management of Bayer AG):

Werner Baumann
(born October 6, 1962)
Chairman
Member of the Board of Management effective January 1, 2010, appointed until April 30, 2021

Liam Condon
(born February 27, 1968)
Member of the Board of Management effective January 1, 2016, appointed until December 31, 2023

Dr. Hartmut Klusik
(born July 30, 1956)
Member of the Board of Management effective January 1, 2016, appointed until December 31, 2019
Labor Director
- Currenta Geschäftsführungs-GmbH (Chairman)

Kemal Malik
(born September 29, 1962)
Member of the Board of Management effective February 1, 2014, appointed until January 31, 2022

Wolfgang Nickl
(born May 9, 1969)
Member of the Board of Management effective April 26, 2018, appointed until April 25, 2021
- Bayer Business Services GmbH (Chairman) (effective June 2018)

Stefan Oelrich
(born June 1, 1968)
Member of the Board of Management effective November 1, 2018, appointed until October 31, 2021

Heiko Schipper
(born August 21, 1969)
Member of the Board of Management effective March 1, 2018, appointed until February 28, 2021

Member of the Board of Management until May 31, 2018

Johannes Dietsch
(born January 2, 1962)
- Bayer Business Services GmbH (Chairman)
- Covestro AG
- Covestro Deutschland AG

Member of the Board of Management until March 31, 2018

Erica Mann
(born October 11, 1958)

Member of the Board of Management until October 31, 2018

Dieter Weinand
(born August 16, 1960)
- HealthPrize Technologies LLC (Board of Directors) (until March 2018)
- Replimune Inc. (Board of Directors) (effective June 2018)

Financial Calendar

Q1 2019 Interim Report[1]	*April 25, 2019*
Annual Stockholders' Meeting 2019	*April 26, 2019*
Planned dividend payment day	*May 2, 2019*
Half-Year Report 2019	*July 30, 2019*
Q3 2019 Interim Report[1]	*October 30, 2019*
Annual Report 2019	*February 27, 2020*
Q1 2020 Interim Report[1]	*April 27, 2020*
Annual Stockholders' Meeting 2020	*April 28, 2020*

Masthead

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Forward-Looking Statements
This release 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.

[1] In 2019, Bayer will for the first time publish quarterly statements pursuant to Section 53 of the Exchange Rules for the Frankfurter Wertpapierbörse (FWB) for the first and third quarters.