

## 1 Summary of accounting policies

### 1.1 General information

BASF SE is a publicly listed corporation headquartered in Ludwigshafen am Rhein, Germany. Its official address is Carl-Bosch-Str. 38, 67056 Ludwigshafen am Rhein, Germany.

The Consolidated Financial Statements of BASF SE as of December 31, 2015, have been prepared in accordance with the International Financial Reporting Standards (IFRS) of the International Accounting Standards Board (IASB) and Section 315a (1) of the German Commercial Code (HGB). IFRSs are generally only applied after they have been endorsed by the European Union. For the 2015 fiscal year, all of the binding IFRSs and pronouncements of the International Financial Reporting Interpretations Committee (IFRIC) were applied.

The Consolidated Financial Statements are presented in euros. All amounts, including the figures for previous years, are given in million euros unless otherwise indicated.

The individual financial statements of the consolidated companies are prepared as of the balance sheet date of the Consolidated Financial Statements. The accounting policies that have been applied are largely the same as those in 2014, with the exception of any changes arising from the application of new or revised standards.

In its meeting on February 22, 2016, the Board of Executive Directors prepared the Consolidated Financial Statements, submitted them to the Supervisory Board for approval, and released them for publication.

### 1.2 Changes in accounting principles

#### Change in presentation of joint operation sales in BASF Group Financial Statements

At its meeting on March 24, 2015, the IFRS Interpretation Committee determined that, according to IFRS 11.20(d), a joint operator's share of the output purchased by another partner cannot be recognized as revenue as long as these sales correspond to the operator's share of ownership interest in the joint operation. As a consequence of this determination, this portion of the joint operation's sales to other partners ceased to be recognized as of January 1, 2015. Partners' share of the output purchased in excess of their ownership interest will continue to be shown as sales to third parties in the BASF Group Financial Statements. Sales by the joint operation to BASF Group companies will also continue to be eliminated.

Sales revenue for 2014 contained sales of €415 million that, according to the new recognition method, would have been eliminated against cost of sales. If the recognition method had remained unchanged, sales and cost of sales for 2015 would each have been €76 million higher. A restatement of the prior-year figures was not necessary, as this change in recognition would have had no material impact on the presentation of the net assets, financial position and results of operations of the BASF Group in 2014.

#### Change in presentation of hedges for financial receivables and payables in the statement of cash flows

The presentation in the statement of cash flows of hedges for financial receivables and payables was adjusted as of January 1, 2015. Without changing cash provided by operating activities, hedging is now better reflected by offsetting adjustment effects from underlying transactions with changes in the market value of hedging transactions. The effects from hedging transactions were previously contained in the item "changes in receivables" and those from underlying transactions in the item "changes in pension provisions, defined benefit assets and other items." The figures for 2014 have been adjusted accordingly.

In 2014, this led to an increase of €76 million in the line item changes in receivables and a decrease in the line item changes in pension provisions, defined benefit assets and other items in the amount of €76 million.

#### Changes in the measurement of emission right certificates granted free of charge

To improve the presentation of net assets and the financial position, the measurement of emission right certificates granted free of charge was conducted according to the net method for the first time as of December 31, 2015. According to this method, emission right certificates are no longer recognized at the applicable market prices (fair value) at the time they are credited to the electronic register run by the relevant governmental authority, but are recognized on the balance sheet with a value of zero. Accordingly, the counter items (deferred income and provisions for emission right certificates) are also reported with a value of zero. The conversion from gross method to the net method led to balance sheet contraction in the amount of €153 million with no effect on income.

#### IFRSs and IFRICs not yet to be considered

The effects on the BASF Group financial statements of the IFRSs and IFRICs not yet in force or not yet endorsed by the European Union in 2015 were reviewed and are explained below. Other new standards or interpretations and amendments of existing standards and interpretations have no material impact on the BASF Group. Early adoption of the standards before endorsement by the European Union is not planned.

#### IFRS 9 – Financial Instruments

On July 24, 2014, the IASB issued the final version of IFRS 9 – Financial Instruments, concluding the multiyear project to replace IAS 39 – Financial Instruments: Recognition and Measurement. IFRS 9 contains new requirements for the classification and measurement of financial instruments, fundamental changes regarding the accounting treatment of financial asset impairments, and a reformed approach to hedge accounting.

IFRS 9 retains “amortized cost” and “fair value” as the criteria for measuring financial instruments. Whether financial assets are measured at amortized cost or fair value will depend on two factors: the entity’s business model for managing the portfolio to which the financial asset belongs and the contractual cash flow characteristics of the financial asset.

In the future, the recognition of financial asset impairments is based on expected losses according to IFRS 9. The general approach adopts a three-stage model to assess the provisions for risks. The model requires different degrees of impairment based on the credit default risk of the counterparties. For certain financial instruments, such as trade accounts receivable, operational simplifications for recognizing impairment losses apply.

The IFRS 9 regulations on hedge accounting aim for a closer alignment of hedge accounting with the entity’s risk management strategy.

The new standard will be effective for reporting periods beginning on or after January 1, 2018. An endorsement by the European Union is still pending. The new requirements could have an impact on the accounting treatment of other shareholdings. The further potential impact on BASF is currently being analyzed.

#### **IFRS 15 – Revenues from Contracts with Customers**

The IASB published the new standard on revenue recognition, IFRS 15 – Revenues from Contracts with Customers, on May 28, 2014. The revised standard particularly aims to standardize existing regulations and thus improve transparency and the comparability of financial information. The rules and definitions of IFRS 15 supersede the content of IAS 11, IAS 18, IFRIC 13, IFRIC 15, IFRIC 18, and SIC 31.

The new standard does not differentiate between different types of contracts and services, but rather introduces uniform criteria for the timing of revenue recognition. According to IFRS 15, sales revenue is recognized when control of the agreed-upon goods or services and the benefits obtainable from them are transferred to the customer. The transfer of major risks and rewards of ownership of the goods is no longer the deciding factor. Sales revenue is measured as the amount the entity expects to receive in exchange for goods and services.

The new model for the determination of revenue recognition is based on five steps, whereby the contract with the customer and the individual performance obligations within the contract are initially identified. The transaction price is then determined and allocated to the performance obligations in the contract. Finally, sales are recognized for each performance obligation in the amount of the allocated portion of the transaction price as soon as the agreed-upon good or service has been provided or the customer receives control over it. Principles are set out for determining whether the good or service has been provided over time or at one point in time.

The new standard will be effective for reporting periods beginning on or after January 1, 2018. An endorsement by the European Union is still pending. The potential impact on BASF is currently being analyzed.

#### **IFRS 16 – Leasing**

The IASB published standard IFRS 16 Leases on January 13, 2016. The rules and definitions of IFRS 16 supersede the content of IAS 17, IFRIC 4, SIC 15 and SIC 27. The new standard introduces a single lessee accounting model. It requires a lessee to recognize assets and liabilities for all leases with a term of more than twelve months, unless the underlying asset is of low value. As for the lessor, the new standard substantially carries forward the lessor accounting requirements of IAS 17. The new standard will be effective for reporting periods beginning on or after January 1, 2019. An endorsement by the European Union is still pending. The potential impact on BASF is currently being analyzed.

#### **Disclosure Initiative (Amendments to IAS 1)**

On December 18, 2014, the IASB issued amendments made to IAS 1. The revisions pertain to various disclosure requirements, and clarify that information needs to be disclosed in the notes only if it is material for the company. This explicitly applies if a standard calls for a list of minimum disclosures. Explanations are moreover provided on the aggregation and disaggregation of line items in the balance sheet and income statement. Furthermore, the revised standard clarifies how an entity’s share of the other comprehensive income of equity-accounted companies is to be presented in the income statement. The changes will be effective for reporting periods beginning on or after January 1, 2016. An endorsement by the European Union was issued on December 19, 2015. The amendments are not expected to have a material effect on BASF.

#### **Amendments to IAS 16 and IAS 38: Clarification of Acceptable Methods of Depreciation and Amortization**

The IASB issued amendments to IAS 16 and IAS 38 on May 12, 2014. These revisions provide further guidance on determining an acceptable method of depreciation and amortization. Revenue-based methods are not permissible for property, plant and equipment and are only permissible for intangible assets in specific exceptional cases (rebuttable presumption of inappropriateness). The changes will be effective for reporting periods beginning on or after January 1, 2016. The European Union’s endorsement was issued on December 3, 2015. The amendments are not expected to have a material effect on BASF.

### Amendments to IAS 19 – Employee Contributions to Defined Benefit Plans

The IASB issued amendments to IAS 19 on November 11, 2013. The revisions clarify the requirements that relate to how contributions from employees or third parties that are linked to service should be attributed to periods of service. In addition, practical expedients are permitted if the amount of the contributions is independent of the number of years of service. The European Union endorsed the changes on January 9, 2015. In a deviation from the IASB's effective date (reporting periods beginning on or after July 1, 2014), IFRS-based financial statements of the European Union must apply the changes for reporting periods beginning on or after February 1, 2015. The amendments are not expected to have a material effect on BASF.

### Amendments to IFRS 10 and IAS 28 – Sale or Contribution of Assets between an Investor and its Associate or Joint Venture

The IASB issued amendments to IFRS 10 and IAS 28 on September 11, 2014. The amendments address a known inconsistency between the requirements of IFRS 10 and IAS 28 (2011) in the case of the sale of an asset to an associated company or a joint venture or the contribution of an asset to an associated company or a joint venture. According to IFRS 10, if the disposal of a subsidiary by a parent company results in a loss of control, it recognizes the gain or loss on the sale of the subsidiary in the full amount in the income statement. In contrast, the currently applicable IAS 28.28 requires that a gain on sales transactions between an investor and an investment accounted for using the equity method – whether it be an associated company or joint venture – is recognized only to the extent of the investor's interests in the associated company or joint venture. In the future, the entire gain or loss arising from a transaction shall only be recognized when the assets sold or contributed constitute a business combination according to IFRS 3. This applies regardless of whether the transaction is a share or asset deal. Only a pro rata recognition of gain is permissible if the assets do not constitute a business combination. IASB has postponed the effective date of the changes indefinitely. The potential impact on BASF is currently being analyzed.

### Amendments to IFRS 11 – Accounting for Acquisitions of Interests in Joint Operations

The IASB issued amendments to IFRS 11 on May 6, 2014. IFRS 11 includes regulations on the recognition of assets and liabilities and gains or losses of joint ventures and joint operations. Whereas joint ventures are accounted for using the equity method, joint operations, according to IFRS 11, are recognized in a similar fashion to proportional consolidation. With the changes in IFRS 11, IASB regulates the accounting for the acquisition of shares in a joint operation, which constitutes a business according to IFRS 3 – Business Combinations. In such cases, the acquirer shall apply the principles of the accounting for business combinations according to IFRS 3.

Furthermore, the disclosure requirements in IFRS 3 also apply in such cases. The changes will be effective for reporting periods beginning on or after January 1, 2016. An endorsement by the European Union was issued on November 25, 2015. The amendments are not expected to have a material effect on BASF.

### IFRS Annual Improvements Cycle 2010–2012

Under its Annual Improvement Project, the IASB issued amendments to several standards on December 12, 2013. The affected standards are IFRS 2, IFRS 3, IFRS 8, IAS 16, IAS 24, and IAS 38. The amendments address details of the recognition, measurement and disclosure of business transactions or serve to standardize terminology. The European Union endorsed the changes on January 9, 2015. In a deviation from the IASB's effective date (reporting periods beginning on or after July 1, 2014), IFRS-based financial statements in the European Union must apply the changes for reporting periods beginning on or after February 1, 2015. The amendments are not expected to have a material effect on BASF.

### IFRS Annual Improvements Cycle 2012–2014

Under its Annual Improvement Project, the IASB issued amendments to several standards on September 25, 2014. The affected standards are IAS 19, IAS 34, IFRS 5 and IFRS 7. The amendments address details of the recognition, measurement and disclosure of business transactions or serve to standardize terminology. The changes will be effective for reporting periods beginning on or after January 1, 2016. An endorsement by the European Union was issued on December 16, 2015. The amendments are not expected to have a material effect on BASF.

## 1.3 Group accounting principles

**Scope of consolidation:** The scope of consolidation is based on the application of the standards IFRS 10 and 11.

According to IFRS 10, a group consists of a parent entity and the subsidiaries controlled by the parent. "Control" of an investee assumes the simultaneous fulfillment of the following three criteria:

- The parent company holds decision-making power over the relevant activities of the investee,
- The parent company has rights to variable returns from the investee, and
- The parent company can use its decision-making power to affect the variable returns.

Based on corporate governance and potential supplementary agreements, companies are analyzed for their relevant activities and variable returns, and the link between the variable returns and the extent to which their relevant activities could be influenced.

According to IFRS 11, which regulates the accounting of joint arrangements, a distinction must be made between joint ventures and joint operations. In the case of a joint venture, the parties that have joint control of a legally independent company have rights to the net assets of that arrangement. In joint operations, the parties that have joint control have direct rights to the assets and obligations for the liabilities relating to the arrangement. This requirement is particularly fulfilled if the production output of the joint arrangement is almost entirely transferred to the partners, through which the partners guarantee the joint arrangements' ongoing financing.

Companies whose corporate governance structures classify them as joint arrangements are analyzed to determine if they meet the criteria for joint ventures or joint operations as per IFRS 11. This requires an analysis of the joint arrangement's structure and, if the arrangement is structured through a separate vehicle, its legal form, contractual arrangements and all other facts and circumstances are reviewed.

**Consolidation:** In addition to BASF SE, the Consolidated Financial Statements include all material subsidiaries on a fully consolidated and all material joint operations on a proportionally consolidated basis. Companies whose business is dormant or of low volume, and are of secondary importance for the presentation of a true and fair view of the net assets, financial position and results of operations, are not consolidated, but rather are reported under other shareholdings. These companies are carried at amortized cost and are written down in the case of an impairment. The aggregate assets and equity of these companies amount to less than 1% of the corresponding value at the Group level.

Joint ventures and associated companies are accounted for using the **equity method** in the Consolidated Financial Statements. Associated companies are entities in which significant influence can be exercised over their operating and financial policies and which are not subsidiaries, joint ventures or joint operations. In general, this applies to companies in which BASF has an investment of between 20% and 50%. Equity-accounted income is reported as part of income from operations (EBIT).

**Consolidation methods:** Assets and liabilities of consolidated companies are uniformly recognized and measured in accordance with the principles described herein. For equity-accounted companies, material deviations in measurement resulting from the application of other accounting principles are adjusted for.

Transactions between consolidated companies as well as intercompany profits resulting from trade between consolidated companies are eliminated in full; for joint operations, they are proportionally eliminated. Material intercompany profits related to companies accounted for using the equity method are eliminated.

Capital consolidation is conducted at the acquisition date according to the purchase method. Initially, all assets, liabilities and additional intangible assets that are to be capitalized are measured at fair value. Finally, the acquisition cost is compared with the proportional share of the net assets acquired at fair value. The resulting positive differences are capitalized as goodwill. Negative differences are reviewed once more, then recognized directly in the income statement.

The incidental acquisition costs of a business combination are recognized in the income statement under other operating expenses.

**Foreign currency translations:** The cost of assets acquired in foreign currencies and revenue from sales in foreign currencies are determined by the exchange rate on the date of the transaction. Foreign currency receivables and liabilities are valued at the exchange rates on the balance sheet date. Changes in assets and liabilities arising from foreign currency translation are recognized in the income statement and reported under other operating expenses or income, other financial result, and available-for-sale financial assets in other comprehensive income.

**Translation of foreign currency financial statements:** The translation of foreign currency financial statements depends on the functional currency of the consolidated companies. For companies whose functional currency is not the euro but a local currency, translation into the reporting currency is based on the closing rate method: Balance sheet items are translated into euros using closing rates on the balance sheet date; expenses and income are translated into euros at monthly average rates and accumulated for the year. The difference between a company's translated equity at historical rates at the time of acquisition and its equity at closing rates on the balance sheet date is reported separately in equity under other comprehensive income (translation adjustments) and is recognized in income only upon the company's disposal.

For certain companies outside the eurozone or U.S. dollar zone, the euro or U.S. dollar is the functional currency. In such cases the translation into the functional currency of financial statements prepared in the local currency is done according to the temporal method: All nonmonetary assets and related depreciation and amortization as well as equity are translated at the exchange rate applying to the respective transactions. All other balance sheet items are translated using closing rates on the balance sheet date; other expenses and income are translated at monthly average rates. The resulting translation differences are recognized in the income statement under other operating income or expenses. If necessary, financial statements in the functional currency are translated into the presentation currency according to the closing rate method.

**Selected exchange rates** (€1 equals)

	Closing rates		Average rates	
	Dec. 31, 2015	Dec. 31, 2014	2015	2014
Brazil (BRL)	4.31	3.22	3.70	3.12
China (CNY)	7.06	7.54	6.97	8.19
Great Britain (GBP)	0.73	0.78	0.73	0.81
Japan (JPY)	131.07	145.23	134.28	140.31
Malaysia (MYR)	4.70	4.25	4.33	4.34
Mexico (MXN)	18.91	17.87	17.61	17.66
Russia (RUB)	80.67	72.34	68.02	50.95
Switzerland (CHF)	1.08	1.20	1.07	1.21
South Korea (KRW)	1,280.78	1,324.80	1,255.98	1,398.14
United States (USD)	1.09	1.21	1.11	1.33

## 1.4 Accounting policies

### Revenue recognition

Revenues from the sale of goods or the rendering of services are recognized upon the transfer of ownership and risk to the buyer. They are measured at the fair value of the consideration received. Sales revenues are reported without sales tax. Expected rebates and other trade discounts are accrued or deducted. Provisions are recognized according to the principle of individual measurement to cover probable risks related to the return of products, future warranty obligations and other claims.

Revenues from the sale of precious metals to industrial customers as well as revenues from natural gas trading are recognized at the time of shipment and the corresponding purchase prices are recorded at cost of sales. In the trading of precious metals and their derivatives with broker-traders, where there is usually no physical delivery, revenues are netted against their corresponding costs. Revenues from marketing the natural gas from the Yuzhno Russkoye gas field are treated in the same manner.

Income relating to the sale or licensing of technologies or technological expertise are recognized in the income statement according to the contractually agreed-upon transfer of the rights and obligations associated with those technologies.

### Assets

**Acquired intangible assets (excluding goodwill)** with defined useful lives are valued at cost less scheduled straight-line amortization. The useful life is determined using the period of the underlying contract or the period of time over which the intangible asset can be expected to be used.

Impairments are recognized if the recoverable amount of the asset is lower than the carrying amount. The recoverable amount is the higher of either fair value less costs to sell or the value in use. The value in use is determined on the basis of future cash inflows and outflows and the weighted average cost of capital after taxes, depending on tax rates and country-related risks. If the reasons for an impairment no longer exist, the write-downs are reversed up to the value of the asset, had an impairment not been recognized. Depending on the type of intangible asset, amortization is reported under cost of sales, selling expenses, research expenses or other operating expenses.

Intangible assets with indefinite useful lives are trade names and trademarks that have been acquired as part of acquisitions. These are measured at cost and tested for impairment annually, or if there is an indication that their value has declined.

**Internally generated intangible assets** primarily comprise internally developed software. Such software and other internally generated assets are measured at cost and amortized over their estimated useful lives. Impairments are recognized if the carrying amount of an asset exceeds the recoverable amount. In addition to those costs directly attributable to the asset, costs of internally generated intangible assets also include an appropriate portion of overhead costs. Borrowing costs are capitalized to the extent that they apply to the purchase or the period of construction of qualifying assets.

The estimated useful lives and amortization methods of intangible assets are based on historical values, plans and estimates. These estimates also consider the period and distribution of future cash inflows and outflows. The amortization methods, useful lives and residual values are reviewed at each balance sheet date. The weighted average amortization periods of intangible assets amounted to:

#### Average amortization in years

	2015	2014
Distribution, supply and similar rights	14	14
Product rights, licenses and trademarks	18	18
Know-how, patents and production technologies	12	12
Internally generated intangible assets	4	4
Other rights and values	7	8

**Emission rights:** Emission right certificates, granted free of charge by the German Emissions Trading Authority (Deutsche Emissionshandelsstelle) or a similar authority in other countries, are recognized on the balance sheet with a value of zero. Certificates purchased on the market are capitalized at cost as intangible assets. Emissions generated create an obligation to surrender the emission certificates. Emission certificates purchased on the market are subsequently measured at fair value, up to a maximum of the amount of the acquisition costs. If the fair value is lower than the carrying amount on the balance sheet date, the emission rights are impaired.



**Goodwill** is only written down if there is an impairment. Impairment testing takes place once a year and whenever there is an indication of an impairment.

**Property, plant and equipment** are measured at cost less depreciation and impairment over their useful lives. The revaluation method is not applied. Low-value assets are fully written off in the year of acquisition.

The cost of self-constructed plants includes direct costs, appropriate allocations of material and manufacturing costs, and a share of the general administrative costs of the divisions involved in the construction of the plants. Borrowing costs are capitalized to the extent that they apply to the purchase or the period of construction of qualifying assets.

Expenditures related to the scheduled maintenance of large-scale plants are separately capitalized and depreciated using the straight-line method over the period until the next planned turnaround. Costs for the replacement of components are recognized as assets when an additional future benefit is expected. The carrying amount of the replaced components is derecognized. Costs for maintenance and repair as part of normal business operations are recognized as an expense.

Both movable and immovable fixed assets are for the most part depreciated using the straight-line method, with the exception of production licenses and plants in the Oil & Gas segment, which are primarily depreciated based on use in accordance with the unit of production method. The estimated useful lives and depreciation methods applied are based on historical values, plans and estimates. These estimates also consider the period and distribution of future cash inflows and outflows. The depreciation methods, useful lives and residual values are reviewed at each balance sheet date. The weighted average depreciation periods were as follows:

#### Average depreciation in years

	2015	2014
Buildings and structural installations	23	24
Machinery and technical equipment	10	11
Long-distance natural gas pipelines	25	25
Miscellaneous equipment and fixtures	7	7

Impairments are recognized if the recoverable amount of the asset is lower than the carrying amount. The measurement is based on fair value less costs to sell or the value in use. The value in use is determined on the basis of future cash inflows and outflows, and the weighted average cost of capital after taxes, depending on tax rates and country-related risks. An impairment is recognized for the difference between the carrying amount and the recoverable amount. If the reasons for an impairment no longer exist, the write-downs are reversed up to the value of the asset, had an impairment not been recognized.

Investment properties held to realize capital gains or rental income are immaterial. They are valued at the lower of fair value or acquisition cost less depreciation.

**Leases:** A lease is an agreement whereby the lessor conveys to the lessee the right to use an asset for an agreed period of time in return for a payment or series of payments. Leasing contracts are classified as either finance or operating leases.

Assets subject to operating leases are not capitalized. Lease payments are recognized in the income statement in the period they are incurred.

A lease is classified as a finance lease if it substantially transfers all the risks and rewards related to the leased asset. Assets subject to a finance lease are capitalized at the lower of the fair value of the leased assets or the present value of the minimum lease payments. A leasing liability is recorded in the same amount. The periodic lease payments must be divided into principal and interest components. The principal component reduces the outstanding liability, while the interest component represents an interest expense. Depreciation takes place over the shorter of the useful life of the asset or the period of the lease.

Leases can be embedded within other contracts. If separation is required under IFRS, then the embedded lease is recorded separately from its host contract and each component of the contract is carried and measured in accordance with the applicable regulations.

**Borrowing costs:** Borrowing costs directly incurred as part of the acquisition, construction or production of a qualifying asset are capitalized as part of the acquisition or production cost of that asset. A qualifying asset is an asset for which the time period necessary to make it ready for its intended use or sale is longer than one year. Borrowing costs are capitalized up to the date the asset is ready for its intended use. The borrowing costs were calculated based on a rate of 3.0% (2014: 4.0%), adjusted on a country-specific basis. All other borrowing costs are recognized as an expense in the period in which they are incurred.

**Government grants:** Government grants related to the acquisition or construction of property, plant and equipment reduce the acquisition or construction cost of the respective assets. Other government grants or government assistance are recognized immediately as other operating income or treated as deferred income and reversed over the underlying period.

**Investments accounted for using the equity-method:** The carrying amounts of these companies are adjusted annually based on the pro rata share of net income, dividends and other changes in equity. Should there be indications of a permanent reduction in the value of an investment, an impairment is recognized in the income statement.

**Inventories** are measured at acquisition cost or cost of conversion based on the weighted average method. If the market price or fair value of the sales product which forms the basis for the net realizable value is lower, then the sales products are written down to this lower value. The net realizable value is the estimated price in the ordinary course of business less the estimated costs of completion and the estimated selling costs.

In addition to direct costs, cost of conversion includes an appropriate allocation of production overhead costs based on normal utilization rates of the production plants, provided that they are related to the production process. Pensions, social services and voluntary social benefits are also included, as well as allocations for administrative costs, provided they relate to the production. Borrowing costs are not included in cost of conversion.

Inventories may be written down if the prices for the sales products decline, or in cases of a high rate of days sales of inventory (DSI). Write-downs on inventories are reversed if the reasons for them no longer apply.


The exception made by IAS 2 for traders is applied to the measurement of precious metal inventories. Accordingly, inventories held exclusively for trading purposes are to be measured at fair value less costs to sell. All changes in value are recognized in the income statement.

**Deferred taxes:** Deferred taxes are recorded for temporary differences between the carrying amount of assets and liabilities in the financial statements and the carrying amounts for tax purposes as well as for tax loss carryforwards and unused tax credits. This also comprises temporary differences arising from business combinations, with the exception of goodwill. Deferred tax assets and liabilities are calculated using the respective country-specific tax rates applicable for the period in which the asset or liability is realized or settled. Tax rate changes enacted or substantively enacted on or before the balance sheet date are taken into consideration.

Deferred tax assets are offset against deferred tax liabilities provided they are related to the same taxation authority and have the same maturities. Surpluses of deferred tax assets are only recognized provided that the tax benefits are likely to be realized. The valuation of deferred tax assets is based on the estimated probability of a reversal of the differences and the ability to utilize tax loss carryforwards and unused tax credits. This depends on whether future taxable profits will exist during the period in which temporary differences are reversed and in which tax loss carryforwards and unused tax credits can be claimed. Based on experience and the expected development of taxable income, it is assumed that the benefits of the recognized deferred tax assets will be realized. The valuation of deferred tax assets is based on internal projections of the future earnings of the particular Group company.

Changes in deferred taxes in the balance sheet are recorded as deferred tax expense or income if the underlying transaction is not to be recognized directly in equity or in income and expenses recognized in equity. For those effects which have been recognized in equity, changes to deferred tax assets and tax liabilities are also recognized directly in equity.

Deferred tax liabilities are recognized for differences between the proportional IFRS equity and the tax base of the investment in a consolidated subsidiary if a reversal of these differences is expected in the foreseeable future. Deferred tax liabilities are recognized for dividend distributions which are planned for the following year if these distributions lead to a reversal of temporary differences.

 For more information, see Note 11 from page 186 onward

### Financial instruments

Financial assets and financial liabilities are recognized in the balance sheet when the BASF Group becomes a party to a financial instrument. Financial assets are derecognized when the contractual rights to the cash flows from the financial asset expire or when the financial asset, with all risks and rewards of ownership, is transferred. Financial liabilities are derecognized when the contractual obligation expires, is discharged or cancelled. Regular way purchases and sales of financial instruments are accounted for using the settlement date; in precious metals trading, the day of trading is used.

The fair value of a financial instrument is the amount that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. When pricing on an active market is available, for example on a stock exchange, this price is used for the measurement. Otherwise, the measurement is based on internal measurement models using current market parameters or external measurements, for example, from banks. These internal measurements predominantly use the net present value method and option pricing models.

If there is objective evidence of a permanent impairment of a financial instrument that is not measured at fair value through profit or loss, an impairment loss is recognized. If the reason for the impairment of loans and receivables as well as held-to-maturity financial instruments no longer exists, the impairment is reversed up to the amortized cost and recognized in the income statement. Impairments on financial instruments are booked in separate accounts.

Financial assets and liabilities are divided into the following measurement categories:

- **Financial assets and liabilities at fair value recognized in the income statement** consist of derivatives and other trading instruments. At BASF, this measurement category only includes derivatives. Derivatives are reported in other receivables and miscellaneous assets or other liabilities. BASF does not make use of the fair value option under IAS 39. The calculation of fair values is based on market parameters or measurement models based on such parameters. In some exceptional cases, the fair value is calculated using parameters which are not observable on the market.
- **Loans and receivables** comprise financial assets with fixed or determinable payments, which are not quoted on an active market and are not derivatives or classified as available-for-sale. This measurement category includes trade accounts receivable as well as other receivables and loans reported under other receivables and miscellaneous assets. Initial measurement is done at fair value, which generally matches the nominal value of the receivable or loan. Interest-free and low-interest long-term loans and receivables are recorded at present value. Subsequent measurement recognized in income is generally made at amortized cost using the effective interest method.

If there is objective evidence for an impairment of a receivable or loan, an individual valuation allowance is made. When assessing the need for a valuation allowance, regional and sector-specific conditions are considered. In addition, use is made of internal and external ratings as well as the assessments of debt collection agencies and credit insurers, when available. A portion of receivables is covered by credit insurance. Bank guarantees and letters of credit are used to an insignificant extent. Valuation allowances are only recognized for those receivables which are not covered by insurance or other collateral. The valuation allowances for receivables whose insurance includes a deductible are not recognized in excess of the amount of the deductible. Write-downs are based on historical values relating to customer solvency and the age, period overdue, insurance policies and customer-specific risks. In addition, a valuation allowance must be recognized when the contractual conditions which form the basis for the receivable are changed through renegotiation in such a way that the present value of the future cash flows decreases.

In addition, valuation allowances are made on receivables based on transfer risks for certain countries.

If, in a subsequent period, the amount of the valuation allowance decreases and the decrease can be related objectively to an event occurring after the valuation allowance was made, then it must be reversed in the income statement. Reversals of valuation allowances may not exceed amortized cost. Loans and receivables are derecognized when they are definitively found to be uncollectible.

- **Held-to-maturity financial assets** consist of nonderivative financial assets with fixed or determinable payments and a fixed term, for which there is the ability and intent to hold until maturity, and which do not fall under other valuation categories. Initial measurement is done at fair value, which matches the nominal value in most cases. Subsequent measurement is carried out at amortized cost, using the effective interest method.

For BASF, there are no material financial assets that fall under this category.

- **Available-for-sale financial assets** comprise financial assets which are not derivatives and do not fall under any of the previously stated valuation categories. This measurement category comprises shareholdings reported under the item other financial assets which are not accounted for using the equity method as well as short and long-term securities.

The measurement is carried out at fair value. Changes in fair value are recognized directly in equity under the item other comprehensive income and are only recognized in the income statement when the assets are disposed of or have been impaired. Subsequent reversals are recognized directly in equity (other comprehensive income). Only in the case of debt instruments are reversals up to the amount of the original impairment recognized in the income statement; reversals above this amount are recognized directly in equity. If the fair value of available-for-sale financial assets drops below acquisition costs, the assets are impaired if the decline in value is significant and can be considered lasting. The fair values are determined using market prices. Shareholdings whose fair value cannot be reliably determined are carried at acquisition cost and are written down in the case of an impairment. When determining the value of these shareholdings, the acquisition costs constitute the best estimate of their fair value. This category of shareholdings includes investments in other shareholdings, provided that these shares are not publicly traded. There are no plans to sell significant stakes in these shareholdings.

- **Financial liabilities which are not derivatives** are initially measured at fair value, which normally corresponds to the amount received. Subsequent measurement is carried out at amortized cost, using the effective interest method.
- **Cash and cash equivalents** consist primarily of cash on hand and bank balances with maturities of less than three months.

There were no reclassifications from one measurement category to another in 2015 and 2014. The same applies for transfers between levels in the fair value hierarchy.

Revenue from interest-bearing assets is recognized on the outstanding receivables on the balance sheet date using interest rates calculated by means of the effective interest method. Dividends from shareholdings not accounted for using the equity method are recognized when the shareholders' right to receive payment is established.



Derivative financial instruments can be embedded within other contracts. If IFRS requires separation, then the embedded derivative is accounted for separately from its host contract and measured at fair value.

**Financial guarantees** of the BASF Group are contracts that require compensation payments to be made to the guarantee holder if a debtor fails to make payment when due under the terms of the financial guarantee. Financial guarantees given by BASF are measured at fair value upon initial recognition. In subsequent periods, financial guarantees are carried at the higher of amortized cost or the best estimate of the present obligation on the financial reporting date.

**Cash flow hedge accounting** is applied for selected deals to hedge future transactions. The effective portion of the change in fair value of the derivative is thereby recognized directly in equity under other comprehensive income, taking deferred taxes into account. The ineffective portion is recognized immediately in the income statement. In the case of future transactions that will lead to a nonfinancial asset or a nonfinancial debt, the cumulative fair value changes in equity are either charged against the acquisition costs on initial recognition or recognized in profit or loss in the reporting period in which the hedged item is recorded in the income statement. For hedges based on financial assets or debts, the cumulative fair value changes of the hedges are transferred from equity to the income statement in the reporting period in which the hedged item is recognized in the income statement. The maturity of the hedging instrument is determined based on the effective date of the future transaction.

When **fair value hedges** are used, the asset or liability is hedged against the risk of a change in fair value. Here, changes in the market value of the derivative financial instruments are recognized in the income statement. Furthermore, the carrying amount of the underlying transaction is adjusted by the profit or loss resulting from the hedged risk, offsetting the effect in the income statement.

The derivatives employed by BASF for hedging purposes are effective hedges from an economic point of view. Changes in the fair value of the derivatives almost completely offset the changes in the value of the underlying transactions.

### Other comprehensive income

The income and expenses shown in other comprehensive income are divided into two categories. Items that will be recognized in the income statement in the future (known as "recycling") and those that will not. The first category includes translation adjustments, the measurement of securities at fair value, and changes in the fair value of derivatives held to hedge future cash flows and net investments in a foreign operation. Items in other comprehensive income that will not be reclassified to the income statement at a future date include effects from the remeasurement of defined benefit plans.


## Debt

**Provisions for pensions and similar obligations:** Provisions for pensions are based on actuarial computations made according to the projected unit credit method, which applies valuation parameters that include: future developments in compensation, pensions and inflation, employee turnover and the life expectancy of beneficiaries. The resulting obligations are discounted on the balance sheet date using the market yields on high-quality corporate fixed-rate bonds with a minimum of one AA rating.

Similar obligations, especially those arising from commitments by North American Group companies to pay the healthcare costs and life insurance premiums of retired staff and their dependents, are reported under provisions for similar obligations.

The calculation of pension provisions is based on actuarial reports.

Actuarial gains and losses from changed estimations with regard to the actuarial assumptions used for calculating defined benefit obligations, the difference between standardized and actual returns on plan assets as well as the effects of the asset ceiling are recognized directly in equity as other comprehensive income.

 For more information on provisions for pensions and similar obligations, see Note 22 from page 199 onward

**Other provisions:** Other provisions are recognized when there is a present obligation as a result of a past event and when there is a probable outflow of resources whose amount can be reliably estimated. Provisions are recognized at the probable settlement value.

Provisions for German trade income tax, German corporate income tax and similar income taxes are determined and recognized in the amount necessary to meet the expected payment obligations less any prepayments that have been made. Other taxes to be assessed are considered accordingly.

Provisions are established for certain environmental protection measures and risks if there exist present legal or constructive obligations arising from a past event, and the expected cash outflow can be estimated with sufficient reliability. Provisions for restoration obligations primarily concern the filling of wells and the removal of production facilities upon the termination of production in the Oil & Gas segment. When the obligation arises, the provision is measured at the present value of the future restoration costs. An asset is capitalized for the same amount as part of the carrying amount of the plant concerned and is depreciated along with the plant. The discount on the provision is unwound annually until the time of the planned restoration.

Other provisions also include expected charges for the rehabilitation of contaminated sites, the recultivation of landfills, the removal of environmental contamination at existing production or storage facilities and other similar measures. If BASF is the only responsible party that can be identified, the provision covers the entire expected claim. At sites operated together with one or more partners, the provision generally covers only BASF's share of the expected claim. The determination of the amount of the provision is based on the available technical information on the site, the technology used, legal regulations, and official obligations.

Provisions are recognized for expected severance payments or similar personnel expenses as well as for demolition expenses and other charges related to restructuring measures that have been planned and publicly announced by management.

Provisions for long-service and anniversary bonuses are predominantly calculated based on actuarial principles. For contracts signed under the early retirement programs, approved supplemental payments are accrued in installments until the end of the exemption phase at the latest. Accounting and measurement follow the German Accounting Standards Committee e.V.'s Application Note 1 (IFRS) of December 2012.

Other provisions also cover risks resulting from legal disputes and proceedings, provided the criteria for recognizing a provision are fulfilled. In order to determine the amount of the provisions, the Company takes into consideration the facts related to each case, the size of the claim, claims awarded in similar cases and independent expert advice as well as assumptions regarding the probability of a successful claim and the range of possible claims. The actual costs can deviate from these estimates.

 For more information, see Note 26 from page 209 onward

The probable amount required to settle noncurrent provisions is discounted if the effect of discounting is material. In this case, the provision is recognized at present value. Assumptions must be made in determining the discount rate used for calculating noncurrent provisions. Financing costs related to unwinding the discount on provisions in subsequent periods are shown in other financial result.

## Other accounting policies

**Business combinations:** In business combinations, the acquired assets and liabilities are recognized at fair value on the date the acquirer effectively obtains control. The fair value of acquired assets and assumed liabilities at the date of exchange, as well as the useful lives of the acquired assets, are determined on the basis of assumptions. The measurement is largely based on projected cash flows. The actual cash flows can differ significantly from the cash flows used to determine the fair values. Independent external appraisals are used for the purchase price allocation of business combinations. Valuations in the course of business combinations are based on existing information as of the acquisition date.

## Groups of assets and liabilities held for disposal or disposal groups:

These comprise those assets and directly associated liabilities shown on the balance sheet whose sale in the context of a single transaction is highly probable. The assets and liabilities of disposal groups are recognized at the lower of the sum of their carrying amounts or fair value less costs to sell; this does not apply to assets which do not fall under the valuation principles of IFRS 5. Scheduled depreciation of noncurrent assets and the use of the equity method are suspended.

**Oil and gas production:** Exploration and development expenditures are accounted for using the successful efforts method. Under this method, costs of successful exploratory drilling as well as successful and dry development wells are capitalized.

An exploration well is a well located outside of an area with proven oil and gas reserves. A development well is a well which is drilled to the depth of a reservoir of oil or gas within an area with proven reserves.

Exploratory drilling is generally reported under construction in progress until its success can be determined. When the presence of hydrocarbons is proven such that the economic development of the field is probable, the costs remain capitalized as suspended well costs. At least once a year, all suspended wells are assessed from an economic, technical and strategic viewpoint to see if development is still intended. If this is not the case, the capitalized costs for the well in question are impaired. When reserves are proven, the exploration wells are reclassified as machinery and technical equipment when production begins.

Production costs include all costs incurred to operate, repair and maintain the wells as well as the associated plant and ancillary production equipment, including the associated depreciation.

The unit of production method is used to depreciate assets from oil and gas production at the field or reservoir level. Depreciation is generally calculated on the basis of the production of the period in relation to the proven, developed reserves.

Exploration expenses pertain exclusively to the Oil & Gas segment and include all costs related to areas with unproven oil or gas deposits. These include costs for the exploration of areas with possible oil or gas deposits, among others. Costs for geological and geophysical investigations are always reported under exploration expenses. In addition, this item includes valuation allowances for capitalized expenses for exploration wells which did not encounter proven reserves. Depreciation of successful exploratory drilling is reported under cost of sales.

An Exploration and Production Sharing Agreement is a type of contract in crude oil and gas concessions whereby the expenses and profits from the exploration, development and production phases are divided between the state and one or more exploration and production companies using defined keys. The revenue BASF is entitled to under such contracts is reported as sales.

The intangible asset from the marketing contract for natural gas from the Yuzhno Russkoye natural gas field is amortized based on BASF's share of the produced and distributed volumes.

Intangible assets in the Oil & Gas segment relate primarily to exploration and production rights. During the exploration phase, these are not subject to scheduled amortization but are tested for impairment annually. When economic success is determined, the rights are amortized in accordance with the unit of production method.

### Use of estimates and assumptions in the preparation of the Consolidated Financial Statements

The carrying amount of assets, liabilities and provisions, contingent liabilities and other financial obligations in the Consolidated Financial Statements depends on the use of estimates, assumptions and use of discretionary scope. Specific estimates or assumptions used in individual accounting or valuation methods are disclosed in their respective sections. They are based on the circumstances and estimates on the balance sheet date and affect the reported amounts of income and expenses during the reporting periods. These assumptions particularly concern discounted cash flows in the context of impairment tests and purchase price allocations; the determination of useful lives of property, plant and equipment and intangible assets; the carrying amount of investments; and the measurement of provisions for such things as employee benefits, warranties, trade discounts, environmental protection and taxes. Although uncertainty is appropriately incorporated in the valuation factors, actual results can differ from these estimates.

The assumptions for oil and gas prices concern internal company projections. The projections are based on an empirical analysis of the global oil and gas supply and demand. Short-term estimates up to three years consider the current prices on active markets or forward transactions. In long-term estimates, assumptions are made regarding factors such as inflation, production quantities and costs as well as energy efficiency and the substitution of energy sources. Using external sources and reports, the oil and gas price estimates are regularly checked for plausibility.

**Impairment tests** on assets are carried out whenever certain triggering events indicate that an impairment may be necessary. External triggering events include, for example, changes in customer industries, technologies used and economic downturns. Internal triggering events for an impairment test include lower product profitability, planned restructuring measures or physical damage to assets.

Impairment tests are based on a comparison of the carrying amount and the recoverable amount. The recoverable amount is the higher of fair value less costs to sell and the value in use. Value in use is generally determined using the discounted cash flow method. The estimation of cash flows and the assumptions used consider all information available on the respective balance sheet date on the future development of the operating business. Actual future developments may vary. Impairment testing relies upon the cash-generating unit's long-term earnings forecasts, which are based on economic trends. The weighted average cost of capital (WACC) based on the Capital Asset Pricing Model plays an important role in impairment testing. It comprises a risk-free rate, the market risk premium and the spread for the credit risk. Additional important assumptions are the forecasts for the detailed planning period and the terminal growth rates used.

For more information, see Note 14 from page 189 onward

An impairment is recognized if the recoverable amount of the asset is lower than the carrying amount. The impairment of the asset (excluding goodwill) is made in the amount of the difference between these amounts.

The goodwill impairment test is based on cash-generating units. At BASF, the cash-generating units are predominantly the business units, or in certain cases, the divisions. If there is a need for a valuation allowance, the existing goodwill is, if necessary, completely written off as a first step. If there is further need for a valuation allowance, this is allocated to the remaining assets of the cash-generating unit. Goodwill impairments are reported under other operating expenses. Impairment reversals are not conducted for goodwill.

## 2 Scope of consolidation

### 2.1 Changes in scope of consolidation

In 2015, the scope of consolidation for the Consolidated Financial Statements encompassed 258 companies (2014: 281). Of this number, five companies were first-time consolidations (2014: four). Since the beginning of 2015, a total of 28 companies (2014: 32) were deconsolidated due to divestiture, merger, liquidation or immateriality.

First-time consolidations in 2015 comprised:

- A newly acquired company headquartered in Japan
- An additional four companies which had previously not been consolidated, headquartered in Germany, China, India and Pakistan

First-time consolidations in 2014 comprised:

- Two newly established companies with headquarters in Germany and China
- Two additional companies which had previously not been consolidated, headquartered in Germany and Peru

While BASF does not hold majority shares in ZAO Gazprom YRGM Trading, BASF is entitled to the earnings of the company due to profit distribution arrangements, so that the company is fully consolidated in the Group Consolidated Financial Statements.

A list of companies included in the Consolidated Financial Statements and a list of all companies in which BASF SE has a shareholding as required by Section 313(2) of the German Commercial Code is provided in the List of Shares Held.

For more information, see Note 3 on page 179

#### Scope of consolidation

	Europe	Thereof Germany	North America	Asia Pacific	South America, Africa, Middle East	2015	2014
<b>As of January 1</b>	<b>164</b>	<b>65</b>	<b>39</b>	<b>54</b>	<b>24</b>	<b>281</b>	<b>309</b>
Thereof proportionally consolidated	6	–	–	1	–	7	8
First-time consolidations	1	1	–	4	–	5	4
Thereof proportionally consolidated	–	–	–	–	–	–	–
Deconsolidations	24	11	2	1	1	28	32
Thereof proportionally consolidated	–	–	–	–	–	–	1
<b>As of December 31</b>	<b>141</b>	<b>55</b>	<b>37</b>	<b>57</b>	<b>23</b>	<b>258</b>	<b>281</b>
Thereof proportionally consolidated	6	–	–	1	–	7	7

#### Overview of impact of changes to the scope of consolidation (excluding acquisitions and divestitures)<sup>1</sup>

	2015		2014	
	Million €	%	Million €	%
<b>Sales</b>	<b>48</b>	<b>0.1</b>	<b>15</b>	<b>0.0</b>
Noncurrent assets	29	0.1	3	0.0
Thereof property, plant and equipment	15	0.1	3	0.0
Current assets	41	0.2	16	0.1
Thereof cash and cash equivalents	4	0.2	(3)	(0.2)
<b>Assets</b>	<b>70</b>	<b>0.1</b>	<b>19</b>	<b>0.0</b>
Equity	(7)	0.0	8	0.0
Noncurrent liabilities	(3)	0.0	0	0.0
Thereof financial indebtedness	–	–	0	0.0
Current liabilities	80	0.6	11	0.1
Thereof financial indebtedness	9	0.2	9	0.3
<b>Total equity and liabilities</b>	<b>70</b>	<b>0.1</b>	<b>19</b>	<b>0.0</b>
Other financial obligations	41	0.1	7	0.1

<sup>1</sup> The totals of the amounts from the deconsolidation of Wintershall Noordzee B.V. in connection with the asset swap with Gazprom are not shown in this table, but included in the table of assets and liabilities transferred as a result of the asset swap with Gazprom in Note 2.4 on page 178.

## 2.2 Joint operations

Proportionally consolidated joint operations particularly comprise:

- Ellba C.V., Rotterdam, Netherlands, which is operated jointly with Shell and produces propylene oxide and styrene monomer
- BASF DOW HPPO Production B.V.B.A., Antwerp, Belgium, which is operated jointly with The Dow Chemical Company to produce propylene oxide
- AO Achimgaz, Novy Urengoy, Russia, which is jointly operated with Gazprom for the production of natural gas and condensate

BASF holds a 50% share in each of these companies and controls them jointly with the respective partner. The companies sell their products directly to the partners. The partners ensure the ongoing financing of the companies by purchasing the production. They were therefore classified as joint operations in accordance with IFRS 11.

In the following table, the previous year's income statement and statement of cash flows include the share in Ellba Eastern Private Ltd., Singapore, which was sold on December 31, 2014.

### Financial information on proportionally consolidated companies (BASF stake, unconsolidated) (in million €)

	2015	2014
<b>Income statement</b>		
Sales	370	1,088
Income from operations	195	220
Income before taxes and minority interests	202	222
Net income	159	189
<b>Balance sheet</b>		
Noncurrent assets	540	446
Thereof property, plant and equipment	523	431
Current assets	152	172
Thereof marketable securities, cash and cash equivalents	53	41
<b>Assets</b>	<b>692</b>	<b>618</b>
Equity	515	453
Noncurrent liabilities	84	54
Thereof financial indebtedness	–	–
Current liabilities	93	111
Thereof financial indebtedness	–	–
<b>Total equity and liabilities</b>	<b>692</b>	<b>618</b>
Other financial obligations	479	412
<b>Statement of cash flows</b>		
Cash provided by operating activities	205	252
Cash used in investing activities	(159)	(224)
Cash used in / provided by financing activities	(36)	14
Net changes in cash and cash equivalents	10	42

A majority of the activities in the Oil & Gas segment's Exploration & Production business sector take place through joint activities which are not incorporated in separate companies. This primarily relates to activities in Germany, Norway and Argentina. These are generally accounted for as joint operations in accordance with IFRS 11 and contribute the largest part of the sales, depreciation and amortization, and fixed assets in the Oil & Gas segment.

## 2.3 Joint ventures and associated companies

Equity-accounted joint ventures particularly comprise:

- BASF-YPC Company Ltd., Nanjing, China, Verbund site operated together with Sinopec (BASF stake: 50%)
- Heesung Catalysts Corporation, Seoul, South Korea, which is operated jointly with Heesung (BASF stake: 50%)
- N.E. Chemcat Corporation, Tokyo, Japan, which is operated jointly with Sumitomo Metal Mining Co. Ltd. (BASF stake: 50%)
- Wintershall Noordzee B.V., Rijswijk, Netherlands, which is operated jointly with Gazprom (BASF stake: 50%) (effective September 30, 2015)

### Joint ventures accounted for using the equity method (BASF stake) (in million €)

	2015	2014
<b>Investments accounted for using the equity method as of the beginning of the year</b>	<b>1,263</b>	<b>1,218</b>
Proportional net income	25	87
Proportional change of other comprehensive income	80	96
<b>Total comprehensive income</b>	<b>105</b>	<b>183</b>
Capital measures/dividends/changes in the scope of consolidation/other adjustments	260	(119)
Other adjustments of income and expense	(35)	(19)
<b>Investments accounted for using the equity method as of the end of the year</b>	<b>1,593</b>	<b>1,263</b>

Equity-accounted associated companies particularly comprise:

- Achim Development, a limited liability company in Novy Urengoy, Russia (BASF stake: 25.01%) and Achim Trading, a closed joint stock company in Moscow, Russia (BASF stake 18.01%, economic share 25.01%), which together with Gazprom, develop and market the output from blocks IV and V of the Achimov formation
- Wintershall AG, Kassel, Germany, which operates Libyan exploration and production activities together with Gazprom Libyen Verwaltungs GmbH (BASF stake: 51%). Despite an investment of 51%, BASF does not exercise control according to IFRS 10, as contractual arrangements with the Libyan government strictly limit influence on variable returns after income taxes.
- Although BASF only has a 15.5% share in Nord Stream AG, Zug, Switzerland, this was classified as associated company, as BASF exercises significant influence over the company as its approval is required for relevant board resolutions



- OAO Severneftegazprom, Krasnoselkup, Russia (BASF stake: 25%, economic share: 35%)
- Shanghai Lianheng Isocyanate Co. Ltd., Shanghai, China (BASF stake: 35%)
- GASCADE Gastransport GmbH, Kassel, Germany (BASF stake: 50.02%)
- NEL Gastransport GmbH, Kassel, Germany (BASF stake: 50.02%). Due to the corporate governance structure of GASCADE Gastransport GmbH, Kassel, Germany, and NEL Gastransport GmbH in connection with requirements of Section 10 of the Energy Management Act (EnWG), BASF only exercises significant influence over both companies, despite an investment of more than 50%.

Effective July 1, 2015, BASF sold its 25% share in SolVin to its partner, Solvay.

**Associated companies accounted for using the equity method (BASF stake) (in million €)**

	2015	2014
<b>Investments accounted for using the equity method as of the beginning of the year</b>	<b>1,982</b>	<b>2,956</b>
Proportional net income	250	196
Proportional change of other comprehensive income	(21)	(213)
<b>Total comprehensive income</b>	<b>229</b>	<b>(17)</b>
Capital measures/dividends/changes in the scope of consolidation/other adjustments	621	(966)
Other adjustments of income and expense	11	9
<b>Investments accounted for using the equity method as of the end of the year</b>	<b>2,843</b>	<b>1,982</b>

**Financial information on companies accounted for using the equity method (BASF stake) (in million €)**

	2015	2014
<b>Income statement information</b>		
Sales	4,686	9,133
Income from operations	427	455
Income before taxes and minority interests	338	383
Net income	275	283
<b>Balance sheet information</b>		
Noncurrent assets	5,998	4,083
Thereof property, plant and equipment	3,791	3,393
Current assets	1,819	1,971
Thereof marketable securities, cash and cash equivalents	334	299
<b>Assets</b>	<b>7,817</b>	<b>6,054</b>
Equity	4,494	2,605
Noncurrent liabilities	2,285	2,152
Thereof financial indebtedness	813	1,148
Current liabilities	1,038	1,297
Thereof financial indebtedness	248	367
<b>Total equity and liabilities</b>	<b>7,817</b>	<b>6,054</b>

Neither of the companies accounted for using the equity method are deemed material for BASF. The table therefore includes the totals of the amounts from the financial statements of the companies accounted for using the equity method. Deviations between proportional equity and the carrying

amount of shareholdings accounted for using the equity method are mainly a consequence of changes in equity not affecting profit or loss.

## 2.4 Acquisitions and divestitures

### Acquisitions

In 2015, BASF acquired the following activities:

- On February 12, 2015, BASF concluded the acquisition, announced on December 8, 2014, of the business from Taiwan Sheen Soon Co., Ltd. (TWSS), Lukang Town, Taiwan. TWSS is a leading manufacturer of precursors for adhesives based on thermoplastic polyurethanes (TPU). Following receipt of the official approval, BASF also took over TWSS's activities on the Chinese mainland, effective December 1, 2015. The takeover consolidated BASF's market position in the areas of TPU extrusion and injection molding for various

industries. BASF can now offer its customers complete solutions for TPUs and TPU adhesives. At BASF, the activities have been integrated in the Performance Materials division.

- On February 18, 2015, BASF took over technologies, patents and know-how for silver nanowires from Seashell Technology LLC, based in San Diego, California. Through this acquisition, BASF has extended its product portfolio for displays in the Electronic Materials business unit, which is part of the Monomers division.

- On February 24, 2015, BASF acquired a 66% share from TODA KOGYO CORP., based in Hiroshima, Japan, in a company to which TODA had contributed its business with cathode materials for lithium-ion batteries, patents and production capacities in Japan. The transaction had been announced on October 30, 2014. The company focuses on the research, development, production, marketing and sales of a number of cathode materials. At BASF, the activities were assigned to the Catalysts division.
- On March 31, 2015, BASF concluded the acquisition of the polyurethane (PU) business from Polioles, S.A. de C.V., based in Lerma, Mexico, that was announced on July 10, 2014. Polioles is a joint venture with the Alpek Group. BASF holds a 50% share, which is accounted for using the equity method. The acquisition comprised marketing and selling rights, current assets, and to a minor extent, production facilities. The business has been assigned to the Performance Materials division.
- On April 23, 2015, BASF concluded an agreement with Lanxess Aktiengesellschaft, Cologne, Germany, on the acquisition and use of technologies and patents for the production of high-molecular-weight polyisobutene (HM PIB). The transaction furthermore included the acquisition of selling rights and current assets as well as a manufacturing agreement in which Lanxess will produce HM PIB exclusively for BASF. The activities were allocated to the Performance Chemicals division.

The purchase prices for businesses acquired in 2015 totaled €224 million; as of December 31, 2015, payments made for these amounted to €142 million. The purchase price allocations were carried out in accordance with IFRS 3. The resulting goodwill amounted to €19 million. In the course of the acquisition from TODA, minority interests in the amount of €42 million were recognized, measured at fair value. The purchase price allocations consider all the facts and circumstances prevailing as of the respective dates of acquisition which were known prior to the preparation of the Consolidated Financial Statements. In accordance with IFRS 3, should further facts and circumstances become known within the 12-month evaluation period, the purchase price allocation will be adjusted accordingly.

In 2014, BASF acquired the following activities:

- On October 31, 2014, BASF completed the acquisition of a 2.5% share in the Brage production field in the Norwegian North Sea from Tullow Oil Norge AS, Oslo, Norway, in the Oil & Gas segment. With this acquisition, BASF increased its investment in Brage to a total of 35.2%.
- On December 1, 2014, in its Oil & Gas segment, BASF concluded the acquisition agreed upon with Statoil Petroleum AS (Stavanger, Norway) on September 12, 2014, of shares in the Gjøa (5%) and Vega (24.5%) production fields, the Aasta Hansteen development project (24%), the Asterix discovery (19%) and the Polarled pipeline project (13.2%), in addition to four exploration licenses near Aasta Hansteen.

Along with Gjøa and Vega, Aasta Hansteen – with Polarled as its technical link to the European gas distribution network – and Asterix were also classified as businesses according to IFRS 3. Together with the exploration licenses, they were measured in accordance with IFRS 3. The purchase price amounted to \$1.25 billion, or €1.0 billion. Furthermore, BASF agreed to pay up to an additional \$50 million if the Aasta Hansteen field is developed according to the project plan.

The preliminary purchase price allocation from the previous year for the acquisition of assets from Statoil on December 1, 2014, was reviewed at the end of the 12-month evaluation period as per IFRS 3; parts were adjusted on the basis of more detailed information on the production and cost profiles of the acquired fields and licenses. This led to a €74 million reduction in noncurrent assets to €1,089 million, and a €57 million reduction in noncurrent liabilities to €517 million. Furthermore, the expected value of the payment obligation to Statoil in connection with the development of the Aasta Hansteen field was reduced by €10 million to zero. Taking into account a cash-effective adjustment of €4 million, the total purchase price was €961 million. The adjustments led to a total increase of goodwill in the amount of €7 million to €590 million. The goodwill recognized was nearly entirely due to deferred tax liabilities.

The purchase price allocation in connection with the acquisition of a 2.5% stake in Brage from the previous year was not adjusted.

The following overview shows the effects of the acquisitions conducted in 2015 and 2014 on the Consolidated Financial Statements. If acquisitions resulted in the transfer of assets or the assumption of additional liabilities, these are shown as a net impact.

## Effects of acquisitions and changes in the preliminary purchase price allocations

	2015		2014	
	Million €	%	Million €	%
Goodwill	26	0.3	623	7.7
Other intangible assets	62	1.5	109	2.3
Property, plant and equipment	72	0.3	1,001	4.3
Financial assets	–	–	–	–
Other noncurrent assets	9	0.5	67	1.8
<b>Noncurrent assets</b>	<b>169</b>	<b>0.4</b>	<b>1,800</b>	<b>4.1</b>
<b>Current assets</b>	<b>74</b>	<b>0.3</b>	<b>4</b>	<b>0.0</b>
Thereof cash and cash equivalents	–	–	–	–
<b>Total assets</b>	<b>243</b>	<b>0.3</b>	<b>1,804</b>	<b>2.5</b>
<b>Equity</b>	<b>42</b>	<b>0.1</b>	<b>2</b>	<b>0.0</b>
<b>Noncurrent liabilities</b>	<b>(40)</b>	<b>(0.2)</b>	<b>621</b>	<b>2.3</b>
Thereof financial indebtedness	–	–	–	–
<b>Current liabilities</b>	<b>95</b>	<b>0.7</b>	<b>218</b>	<b>1.4</b>
Thereof financial indebtedness	–	–	–	–
<b>Total equity and liabilities</b>	<b>97</b>	<b>0.1</b>	<b>841</b>	<b>1.2</b>
<b>Payments related to acquisitions</b>	<b>146</b>		<b>963</b>	

## Divestitures

In 2015, BASF divested the following activities:

- On March 31, 2015, BASF sold its white expandable polystyrene (EPS) business in North and South America to Alpek S.A.B. de C.V., Monterrey, Mexico. The sale comprised customer lists and current assets in addition to production facilities in Canada, Brazil, Argentina and the United States. The disposed activities had been part of BASF's Performance Materials division. The shares in Aislapol S.A., based in Santiago de Chile, Chile, were also sold. Polioles, a joint venture accounted for using the equity method, transferred its white EPS business to Alpek.
- On June 30, 2015, BASF concluded the divestiture announced on October 16, 2014, of its global textile chemicals business to Archroma Textiles S.à r.l., Luxembourg. The portfolio comprised products for pretreatment, printing and coating. The transaction furthermore involved the transfer of the subsidiary BASF Pakistan (Private) Ltd., based in Karachi, Pakistan, completed in the third quarter of 2015. The textile chemicals business had been part of the Performance Chemicals division.
- Effective July 1, 2015, BASF sold its 25% share in SolVin to its partner, Solvay. SolVin was established in 1999 by Solvay and BASF for the production of polyvinylchloride (PVC). At BASF, the SolVin investment and the income associated with it had been allocated to the Monomers division.
- On September 30, 2015, BASF concluded the agreed-upon sale of portions of its pharmaceutical ingredients and services business to Siegfried Holding AG, based in Zofingen, Switzerland. This involved the custom synthesis business and parts of the active pharmaceutical ingredients portfolio. The transaction comprised the divestiture of the production sites in Minden, Germany; Evionnaz, Switzerland; and Saint-Vulbas, France. At BASF, the activities had been allocated to the Nutrition & Health division.

- On November 1, 2015, BASF divested its global paper hydrous kaolin business to Imerys Kaolin, Inc., Roswell, Georgia, as announced on June 8, 2015. The divestiture included the kaolin processing production site in Wilkinson County, Georgia. For a limited period of time, BASF will take care of the order production for the paper hydrous kaolin business on behalf of Imerys, in order to smooth the transfer for the customers. The activities at BASF had been allocated to the Performance Chemicals division.

In the first-half and third quarter interim reports for 2015, an agreement was reported with Tellus Petroleum AS, Oslo, Norway, to sell shares in several fields and exploration licenses on the Norwegian continental shelf. On December 22, 2015, BASF complied with the request from Tellus Petroleum to release it from its obligation arising from the purchase contract, announced on June 18, 2015. The disposal group created for this planned transaction was dissolved.

## Asset swap with Gazprom

In its Oil & Gas segment, BASF concluded the swap of assets of equal value with Gazprom on September 30, 2015, with retroactive economic effect to April 1, 2013. As a result of the transaction, BASF received an economic share of 25.01% in blocks IV and V of the Achimov formation of the Urengoy natural gas and condensate field in western Siberia. According to the development plan originally confirmed by Russian authorities, blocks IV and V have total hydrocarbon resources of 274 billion cubic meters of natural gas and 74 million metric tons of condensate. As these figures are still undergoing review, new findings may give rise to adjustments. Production is scheduled to start up in 2018.

In return, BASF transferred its shares in the previously jointly run natural gas trading and storage business to Gazprom. This included the 50.02% shares in the following: the natural gas trading company WINGAS GmbH, Kassel, Germany; the storage company astora GmbH & Co. KG, Kassel, Germany, which operates natural gas storage facilities in Rehden and Jemgum, Germany; and WINGAS Holding GmbH, Kassel, Germany, including its share in the natural gas storage facility in Haidach, Austria. BASF also transferred its 50% share in each of the natural gas trading companies Wintershall Erdgas Handelshaus GmbH & Co. KG, Berlin, Germany, and Wintershall Erdgas Handelshaus Zug AG, Zug, Switzerland. Gazprom furthermore became a 50% shareholder in Wintershall Noordzee B.V. in Rijswijk, Netherlands, which is active in the exploration and production of natural gas and crude oil deposits in the North Sea. Because the transaction is economically retroactive to April 1, 2013, BASF will pay Gazprom a cash compensation estimated to total €50 million.

As a result of the disposal of its 50% share in Wintershall Noordzee B.V., BASF no longer exerts control over the company alone, but rather shares joint control with Gazprom. In accordance with IFRS 10, Wintershall Noordzee B.V. was reclassified in the Consolidated Financial Statements from a fully consolidated company to a joint venture accounted for using the equity method from this point in time.

The following table shows the balance sheet values of the assets and liabilities that went to Gazprom as a result of the swap, taking into account 100% of the balance sheet values of Wintershall Noordzee B.V., as of the point of transfer from full consolidation to the equity method:

**Assets and liabilities retired as part of the asset swap with Gazprom (Wintershall Noordzee B.V. included at 100%)** (in million €)

	Sep. 30, 2015
Intangible assets	192
Property, plant and equipment	1,157
Inventories	710
Accounts receivable, trade	569
Positive fair values of derivatives	328
Other receivables and miscellaneous assets	261
Cash and cash equivalents	284
<b>Total assets</b>	<b>3,501</b>
Provisions for pensions and similar obligations	29
Other provisions	394
Accounts payable, trade	573
Negative fair values of derivatives	376
Other liabilities	1,079
<b>Liabilities</b>	<b>2,451</b>
Income and expense recognized directly in equity (recycled to income upon disposal)	102
<b>Net assets</b>	<b>1,152</b>
Minority interests	(344)
<b>Proportion of net assets</b>	<b>808</b>

The swap of assets of equal value is treated in accordance with IAS 16.26. As per this regulation, the fair value of the assets received is deemed to constitute their acquisition cost.

The acquisition of the 25.01% economic share in blocks IV and V of the Achimov formation was conducted through a capital share in two Russian companies that will be equity accounted as associated companies in BASF's Consolidated Financial Statements due to the material influence BASF exercises over them. As of September 30, 2015, both companies, together with the now-50% share in Wintershall Noordzee B.V., were measured at fair value and reported as investments accounted for using the equity method.

The following overview shows the individual components of BASF's profit realization from the asset swap with Gazprom and the reclassification of Wintershall Noordzee B.V.:

**Profit realization from asset swap with Gazprom and reclassification of Wintershall Noordzee B.V.**

(in million €)

	Sep. 30, 2015
Fair value 25.01% Achimov IV/V	779
Fair value 50% Wintershall Noordzee B.V.	407
Disposed proportion of net assets	(808)
Expected compensation payment and other expenses	(64)
<b>Income from swap and reclassification</b>	<b>314</b>

To determine the fair value of the investments in Achimov IV/V and Wintershall Noordzee B.V. as per IAS 28, the proportional share of assets and liabilities was measured in accordance with IFRS 3. As per IFRS 3, the purchase price allocation is to be adjusted accordingly if facts and circumstances become known within the 12-month evaluation period that apply at the time of sale or transfer. Accordingly, the determined fair values and the resulting earnings arising from the asset swap and the transfer from Wintershall Noordzee B.V. are to be seen as preliminary.

In 2014, BASF divested the following activities:

- On March 25, 2014, BASF concluded the sale of selected oil and gas investments in the North Sea to the Hungarian MOL Group, as agreed upon on December 12, 2013. In addition to 14 licenses, MOL also purchased BASF's shares in the infrastructure of the Sullom Voe Terminal and in the Brent Pipeline System.
- On June 2, 2014, BASF completed the sale of its PolyAd Services business to Edgewater Capital Partners, L.P. The activities had been allocated to the Performance Chemicals division.
- Effective as of November 17, 2014, BASF sold its 50% share in Styrolution Holding GmbH, Frankfurt am Main, Germany, to the INEOS Group. The partnership agreement of 2011 already included a cross option, giving BASF the option to sell its share in Styrolution and INEOS the option to buy BASF's share in Styrolution. The share in Styrolution and the related income had been allocated to Other.
- On December 31, 2014, BASF completed the sale of its 50% stake in the joint operation Ellba Eastern Private Ltd., Singapore, which produces propylene oxide and styrene monomers, to its partner Shell. The activities of Ellba Eastern had been allocated to BASF's Petrochemicals division as well as to Other.

The following overview shows the effects on the Consolidated Financial Statements of the asset swap with Gazprom and the divestitures conducted in 2015 and 2014. The line item sales

reflects the year-on-year decline resulting from divestitures. The impact on equity relates mainly to gains and losses from divestitures.

#### Effects of divestitures and asset swap with Gazprom

	2015		2014	
	Million €	%	Million €	%
<b>Sales</b>	<b>(3,948)</b>	<b>(5.6)</b>	<b>(157)</b>	<b>(0.2)</b>
<b>Noncurrent assets</b>	<b>(408)</b>	<b>(0.9)</b>	<b>(343)</b>	<b>(0.8)</b>
Thereof property, plant and equipment	(1,276)	(5.1)	(250)	(1.1)
<b>Current assets</b>	<b>(2,199)</b>	<b>(9.0)</b>	<b>(644)</b>	<b>(2.3)</b>
Thereof cash and cash equivalents	(285)	(12.7)	(1)	0.0
<b>Total assets</b>	<b>(2,607)</b>	<b>(3.7)</b>	<b>(987)</b>	<b>(1.4)</b>
<b>Equity</b>	<b>185</b>	<b>0.6</b>	<b>763</b>	<b>2.7</b>
<b>Noncurrent liabilities</b>	<b>(942)</b>	<b>(3.8)</b>	<b>(104)</b>	<b>(0.4)</b>
Thereof financial indebtedness	—	—	—	—
<b>Current liabilities</b>	<b>(1,148)</b>	<b>(8.1)</b>	<b>(309)</b>	<b>(1.9)</b>
Thereof financial indebtedness	(1)	0.0	—	—
<b>Total equity and liabilities</b>	<b>(1,905)</b>	<b>(2.7)</b>	<b>350</b>	<b>0.5</b>
<b>Proceeds from divestitures</b>	<b>702</b>		<b>1,337</b>	

### 3 BASF Group List of Shares Held in accordance with Section 313(2) of the German Commercial Code

The list of consolidated companies and the complete list of all companies in which BASF SE has a share as required by Section 313(2) of the German Commercial Code and information for exemption of subsidiaries from accounting and

disclosure obligations are an integral component of the audited Consolidated Financial Statements submitted to the electronic Federal Gazette. The list of shares held is also published online.

For more information, see [basf.com/en/governance](http://basf.com/en/governance)

### 4 Reporting by segment and region

Since January 1, 2015, BASF's business has been conducted by 13 operating divisions aggregated into five segments for reporting purposes. The divisions are allocated to the segments based on their business models.

The Chemicals segment entails the classical chemicals business with basic chemicals and intermediates. It forms the core of BASF's Production Verbund and is the starting point for a majority of the value chains. In addition to supplying the chemical industry and other sectors, the segment ensures that other BASF divisions are supplied with chemicals for producing downstream products. The Chemicals segment comprises the Petrochemicals, Monomers and Intermediates divisions.

Until the end of 2014, the Performance Products segment consisted of the Dispersions & Pigments, Care Chemicals, Nutrition & Health, Paper Chemicals and Performance Chemicals divisions. Customized products allow customers to make their production processes more efficient or to give their products improved application properties. The Paper Chemicals division was dissolved as of January 1, 2015. The paper chemicals business is being continued in the Performance Chemicals and Dispersions & Pigments divisions.

The Functional Materials & Solutions segment bundles system solutions, services and innovative products for specific sectors and customers, in particular for the automotive, electronic, chemical and construction industries. It is made up of the Catalysts, Construction Chemicals, Coatings, and Performance Materials divisions.

The Agricultural Solutions segment consists of the Crop Protection division, whose products secure yields and guard crops against fungal infections, insects and weeds, in addition to serving as biological and chemical seed treatments. Plant biotechnology research is not assigned to this segment; it is reported in Other.

Until September 30, 2015, the Oil & Gas segment comprised the Oil & Gas division with its Exploration & Production and Natural Gas Trading business sectors. At the end of the third quarter of 2015, BASF exited the natural gas trading and storage business, operated together with Gazprom to that point in time, and as of October 1, 2015, has concentrated on the exploration and production of oil and gas as well as on the transport of natural gas.



Activities not assigned to a particular division are reported under Other. These include the sale of raw materials, engineering and other services, rental income and leases, the production of precursors not assigned to a particular segment, the steering of the BASF Group by corporate headquarters, and corporate research.

With cross-divisional corporate research, BASF is creating new businesses and ensuring its long-term competence with regard to technology and methods. This includes plant biotechnology research.

Earnings from currency conversion that are not allocated to the segments are also reported under Other, as are earnings from the hedging of raw material prices and foreign currency

exchange risks. Furthermore, revenues and expenses from the long-term incentive (LTI) program are reported here.

Transfers between the segments are generally executed at adjusted market-based prices which take into account the higher cost efficiency and lower risk of Group-internal transactions. Assets, as well as their depreciation and amortization, are allocated to the segments based on economic control. Assets used by more than one segment are allocated based on the percentage of usage.

**Income from operations (EBIT) of Other** (in million €)

	2015	2014
Corporate research costs	(402)	(389)
Costs of corporate headquarters	(233)	(218)
Other businesses	170	590
Foreign currency results, hedging and other measurement effects	(220)	(2)
Miscellaneous income and expenses	(300)	(114)
<b>Income from operations of Other</b>	<b>(985)</b>	<b>(133)</b>

**Income from operations of Other** decreased by €852 million year-on-year to minus €985 million.

The previous year had primarily included disposal gains of €458 million, shown under **other businesses**, from BASF's share in Styrolution Holding GmbH, Frankfurt am Main, Germany.

Furthermore, the item **foreign currency results, hedging and other measurement effects** declined in comparison with 2014. This was partly due to higher currency losses. It was

also the result of expenses arising from the addition to provisions for the long-term incentive program in the amount of €49 million in 2015; in the previous year, by contrast, income in the amount of €54 million had been recognized from the reversal of such provisions.

**Miscellaneous income and expenses** decreased especially as a result of expenses for BASF's 150th anniversary celebrations in 2015.

**Assets of Other** (in million €)

	December 31, 2015	December 31, 2014
Assets of businesses included in Other	2,097	2,241
Financial assets	526	540
Deferred tax assets	1,791	2,193
Cash and cash equivalents/marketable securities	2,262	1,737
Net interest income from overfunded pensions	133	91
Other liabilities/deferrals	2,823	3,027
<b>Assets of Other</b>	<b>9,632</b>	<b>9,829</b>

**Reconciliation reporting Oil & Gas** (in million €)

	2015	2014
<b>Income from operations</b>	<b>1,072</b>	<b>1,688</b>
Net income from shareholdings	(6)	246
Other income	267	124
<b>Income before taxes and minority interests</b>	<b>1,333</b>	<b>2,058</b>
Income taxes	(168)	(519)
<b>Income before minority interests</b>	<b>1,165</b>	<b>1,539</b>
Minority interests	(115)	(75)
<b>Net income</b>	<b>1,050</b>	<b>1,464</b>

The reconciliation reporting Oil & Gas reconciles the income from operations in the Oil & Gas segment with the contribution of the segment to the net income of the BASF Group.

**Income from operations** declined due to lower oil and gas prices, and the currency-related decrease in earnings contributions from BASF's share in the Yuzhno Russkoye natural gas field. Impairments for exploration and production licenses dampened earnings by €609 million in 2015 and €230 million in 2014.

In 2015, the asset swap with Gazprom led to income in the amount of €314 million. In 2014, the sale of oil and gas investments in the North Sea to the MOL Group resulted in income of €132 million. As a result of the asset swap with Gazprom on September 30, 2015, the share of earnings from the exited natural gas trading and storage business as well as from the

50% share in Wintershall Noordzee B.V., Rijswijk, Netherlands, was no longer included in the income from operations in the fourth quarter of 2015.

**Income from shareholdings** in the Oil & Gas segment decreased significantly. This was due to the sale of VNG – Verbundnetz Gas AG, Leipzig, Germany, to EWE AG in 2014.

**Other income** in the oil and gas business relates to income and expenses not included in the segment's income from operations, interest result and other financial result. As in the previous year, other income largely consisted of currency effects from Group loans.

Significantly lower earnings contributions from Norway, due in part to the impairments recognized there as well as to currency effects, led to a considerable decline in **income tax** and the tax rate.

#### Segments 2015 (in million €)

	Chemicals	Performance Products	Functional Materials & Solutions	Agricultural Solutions	Oil & Gas	Other	BASF Group
Sales	14,670	15,648	18,523	5,820	12,998	2,790	70,449
Intersegmental transfers	5,300	463	873	28	766	(3)	7,427
Sales including intersegmental transfers	19,970	16,111	19,396	5,848	13,764	2,787	77,876
Income from operations	2,131	1,340	1,607	1,083	1,072	(985)	6,248
Assets	12,823	14,232	13,341	8,435	12,373	9,632	70,836
Thereof goodwill	58	2,201	2,326	2,048	1,660	70	8,363
other intangible assets	155	1,428	1,181	342	1,030	38	4,174
property, plant and equipment	7,933	4,958	3,645	1,488	6,421	815	25,260
investments accounted for using the equity method	840	195	387	–	2,589	425	4,436
Debt	3,550	4,639	3,511	1,628	2,214	23,749	39,291
Research expenses	207	383	392	514	50	407	1,953
Additions to property, plant and equipment and intangible assets	1,859	964	854	402	1,823	111	6,013
Amortization of intangible assets and depreciation of property, plant and equipment	959	949	621	238	1,515	119	4,401
Thereof impairments	24	86	67	10	500	3	690

#### Segments 2014 (in million €)

	Chemicals	Performance Products	Functional Materials & Solutions	Agricultural Solutions	Oil & Gas	Other	BASF Group
Sales	16,968	15,433	17,725	5,446	15,145	3,609	74,326
Intersegmental transfers	6,135	489	832	37	907	16	8,416
Sales including intersegmental transfers	23,103	15,922	18,557	5,483	16,052	3,625	82,742
Income from operations	2,396	1,417	1,150	1,108	1,688	(133)	7,626
Assets	12,498	14,502	12,987	7,857	13,686	9,829	71,359
Thereof goodwill	59	2,099	2,218	1,931	1,765	69	8,141
other intangible assets	284	1,653	1,220	364	1,248	57	4,826
property, plant and equipment	6,898	4,637	3,166	1,240	6,676	879	23,496
investments accounted for using the equity method	841	177	348	–	1,480	399	3,245
Debt	3,920	5,049	3,508	1,687	3,669	25,331	43,164
Research expenses	185	369	379	511	50	390	1,884
Additions to property, plant and equipment and intangible assets	2,085	849	650	391	3,162	148	7,285
Amortization of intangible assets and depreciation of property, plant and equipment	816	815	528	189	938	131	3,417
Thereof impairments	54	18	45	2	230	5	354

Regions 2015 (in million €)

	Europe	Thereof Germany	North America	Asia Pacific	South America, Africa, Middle East	BASF Group
<b>Location of customers</b>						
Sales	36,897	13,483	15,390	12,334	5,828	70,449
Share %	52.4	19.1	21.8	17.5	8.3	100.0
<b>Location of companies</b>						
Sales	38,675	28,229	15,665	11,712	4,397	70,449
Sales including intersegmental transfers <sup>1</sup>	46,056	34,297	18,311	12,384	4,623	81,374
Income from operations	4,174	2,303	1,295	445	334	6,248
Assets	38,993	20,307	15,968	11,002	4,873	70,836
Thereof intangible assets	6,845	2,467	4,406	839	447	12,537
property, plant and equipment	13,877	6,942	5,613	4,053	1,717	25,260
investments accounted for using the equity method	3,009	1,182	113	1,314	–	4,436
Additions to property, plant and equipment and intangible assets	3,162	1,446	1,263	986	602	6,013
Amortization of intangible assets and depreciation of property, plant and equipment	2,889	1,081	911	422	179	4,401
Employees as of December 31	70,079	52,837	17,471	17,562	7,323	112,435

Regions 2014 (in million €)

	Europe	Thereof Germany	North America	Asia Pacific	South America, Africa, Middle East	BASF Group
<b>Location of customers</b>						
Sales	40,911	15,126	15,213	12,341	5,861	74,326
Share %	55.0	20.4	20.5	16.6	7.9	100.0
<b>Location of companies</b>						
Sales	42,854	32,241	15,467	11,643	4,362	74,326
Sales including intersegmental transfers <sup>1</sup>	50,401	38,346	17,981	12,270	4,595	85,247
Income from operations	5,010	1,894	1,548	673	395	7,626
Assets	41,487	22,987	14,605	10,251	5,016	71,359
Thereof intangible assets	7,631	2,725	4,088	795	453	12,967
property, plant and equipment	13,979	7,172	4,638	3,279	1,600	23,496
investments accounted for using the equity method	1,951	1,229	35	1,259	–	3,245
Additions to property, plant and equipment and intangible assets	4,880	1,774	917	835	653	7,285
Amortization of intangible assets and depreciation of property, plant and equipment	2,304	1,169	662	331	120	3,417
Employees as of December 31	71,474	53,277	17,120	17,060	7,638	113,292

<sup>1</sup> The sum of sales including intersegmental transfers for all the regions can differ from the sum of sales including intersegmental transfers for all the segments, as the segments are viewed globally, and therefore shipments and services between regions within the same segment are not classified as transfers.

In the United States, sales to third parties in 2015 amounted to €13,831 million (2014: €13,877 million) according to company location and €13,302 million (2014: €13,329 million) according to customer location. In the United States, intangible assets,

property, plant and equipment, and investments accounted for using the equity method amounted to €9,262 million compared with €7,983 million in the previous year.

## 5 Earnings per share

### Earnings per share

	2015	2014
Net income million €	3,987	5,155
Weighted-average number of outstanding shares 1,000	918,479	918,479
<b>Earnings per share €</b>	<b>4.34</b>	<b>5.61</b>
Diluted earnings per share €	4.33	5.60

In accordance with IAS 33, a potential dilutive effect must be considered in the diluted earnings per share for those BASF shares which will be granted in the future as a part of the BASF share program “*plus*.” This applies regardless of the fact that the necessary shares are acquired by third parties on the market on behalf of BASF, and the fact that there are no plans for the issuance of new shares. The dilutive effect of the issue of plus shares amounted to €0.01 in 2015 (2014: €0.01).

## 6 Functional costs

Under the cost-of-sales method, functional costs incurred by the operating functions are determined on the basis of cost center accounting. The functional costs particularly contain the personnel costs, depreciation and amortization accumulated on the underlying final cost centers as well as allocated costs within the cost accounting cycle. Operating expenses that cannot be allocated to the functional costs are reported as other operating expenses.

For more on other operating expenses, see Note 8 from page 184

### Cost of sales

Cost of sales includes all production and purchase costs of the company's own products as well as merchandise which has been sold in the period, particularly plant, energy and personnel costs.

### Selling expenses

Selling expenses particularly include marketing and advertising costs, freight costs, packaging costs, distribution management costs, commissions, and licensing costs.

### General and administrative expenses

General and administrative expenses primarily include the costs of the central units, the costs of managing business units and divisions, and costs of general management, the Board of Executive Directors and the Supervisory Board.

### Research and development expenses

Research and development expenses include the costs resulting from research projects as well as the necessary license fees for research activities.

For more on research and development expenses by segment, see Note 4 on page 181

## 7 Other operating income

Million €	2015	2014
Income from the adjustment and reversal of provisions recognized in other operating expenses	118	181
Revenue from miscellaneous revenue-generating activities	179	165
Income from foreign currency and hedging transactions	305	398
Income from the translation of financial statements in foreign currencies	101	75
Gains on the disposal of fixed assets and divestitures	525	772
Income on the reversal of valuation allowances for business-related receivables	41	47
Other	735	593
<b>Other operating income</b>	<b>2,004</b>	<b>2,231</b>

**Income from the adjustment and reversal of provisions recognized in other operating expenses** in 2014 included income of €79 million from the reversal of the provision for the long-term incentive (LTI) program; this was due to the decline in the BASF share price in 2014. In 2015, however, an expense of €53 million arose from the LTI program, and was recognized in other operating expenses.

For more information, see Note 8 from page 184 onward

Furthermore, the reversal of provisions in both years was largely related to closures and restructuring measures, employee obligations, risks from lawsuits and damage claims, and various other items as part of the normal course of business. Provisions were reversed if the circumstances on the balance sheet date were such that utilization was no longer expected, or expected to a lesser extent.

**Revenue from miscellaneous revenue-generating activities** primarily included income from rentals, property sales, catering operations, cultural events and logistics services.

**Income from foreign currency and hedging transactions** pertained to the foreign currency translation of receivables and payables as well as changes in the fair value of currency derivatives and other hedging transactions. The decline in comparison with the previous year was attributable to lower income as a result of the depreciation of the Russian ruble.

**Income from the translation of financial statements in foreign currencies** contained gains from the translation of companies whose local currency is different from the functional currency.

**Gains on the disposal of fixed assets and divestitures** in the amount of €314 million resulted from the asset swap with Gazprom. Income of €71 million was related to the sale of the global textile chemicals business to Archroma Textiles S.à r.l., Luxembourg. Additional income of €39 million was attributable to the sale of the white expandable polystyrene (EPS) business to Alpek S.A.B. de C.V., Monterrey, Mexico. Furthermore, income in the amount of €37 million arose from the sale of buildings in China and India as well as income in the amount of €29 million from the sale of the custom synthesis business and parts of the active pharmaceutical ingredients portfolio to Siegfried Holding AG, Zofingen, Switzerland. The previous year mainly included gains from the sale of the 50% share in Styrolution Holding GmbH, Frankfurt am Main, Germany, in the amount of €458 million to INEOS. Further income of €132 million was related to the sale of selected oil and gas investments in the North Sea to the Hungarian MOL Group. Additional income in the amount of €109 million resulted from the sale to Shell of the share in the Ellba Eastern Private Ltd. joint operation in Singapore, as well as €31 million from the sale of the PolyAd Services business to Edgewater Capital Partners, L.P., Cleveland, Ohio.

**Income from the reversal of valuation allowances for business-related receivables** resulted mainly from the settlement of customer-related receivables for which a valuation allowance had been recorded.

**Other income** included government grants and government assistance from several countries amounting to €135 million in 2015 and €112 million in 2014. In both years, these were primarily attributable to price compensation from the Argentinian government for gas producers, which was introduced in connection with the New Gas Price Scheme (NGPS) in response to the lower, partly locally regulated gas prices.

Further income resulted from refunds in the amount of €254 million in 2015 and €122 million in 2014. These were predominantly due in both years to insurance refunds arising from a plant outage at the Ellba C.V. joint operation in Moerdijk, Netherlands. In 2015, income also arose from a one-off payment for a price revision relating to the previous year in the Oil & Gas segment as well as a one-off payment from Tellus Petroleum AS, Oslo, Norway, in connection with the intended sale of selected assets on the Norwegian continental shelf, which was not completed. The previous year had included income from reimbursement claims in the amount of €43 million.

Moreover, income in both years was related to gains from precious metal trading, the reversal of impairments on property, plant and equipment, tax refunds, income from the adjustment of pension plans, and a number of other items.

## 8 Other operating expenses

Million €	2015	2014
Restructuring measures	306	176
Environmental protection and safety measures, costs of demolition and removal, and planning expenses related to capital expenditures that are not subject to mandatory capitalization	457	330
Amortization, depreciation and impairments of intangible assets and property, plant and equipment	675	370
Costs from miscellaneous revenue-generating activities	179	160
Expenses from foreign-currency and hedging transactions as well as from the measurement of LTI options	639	439
Losses from the translation of the financial statements in foreign currencies	92	88
Losses from the disposal of fixed assets and divestitures	40	28
Oil and gas exploration expenses	195	132
Expenses from the addition of valuation allowances for business-related receivables	81	87
Expenses from the use of inventories measured at market value and the derecognition of obsolete inventory	259	225
Other	717	594
<b>Other operating expenses</b>	<b>3,640</b>	<b>2,629</b>

Expenses for **restructuring measures** were primarily related to severance payments amounting to €69 million in 2015 and €40 million in 2014. Further expenses for restructuring measures amounting to €15 million concerned one site in the United States in the Petrochemicals division. In the Dispersions & Pigments division, expenses arose in the amount of €16 million in 2015 and €12 million in 2014; these concerned several sites worldwide. Furthermore, expenses of €15 million were incurred for a regional restructuring project in South America as well as the outsourcing of the computer centers. In 2014, expenses of €9 million had arisen from measures at several sites in the Care Chemicals division.

Expenses arose from **environmental protection and safety measures, demolition and removal, and planning expenses related to capital expenditures that are not subject to mandatory capitalization** according to IFRS. Expenses for demolition, removal and project planning totaled €376 million in 2015 and €286 million in 2014. These especially pertained to the Ludwigshafen site in both years. Further expenses of €37 million in 2015 and €19 million in 2014 were due to additional environmental provisions. In both years, these primarily concerned several discontinued sites in North America and Switzerland.



**Amortization, depreciation and impairments of intangible assets and property, plant and equipment** arose from impairments in the Oil & Gas segment in the amount of €500 million in 2015 and €230 million in 2014. Further impairments of €57 million concerned the Functional Materials & Solutions segment in 2015 (2014: €42 million). Impairments of €53 million were recognized the Performance Products segment in 2015. Impairments in the Chemicals segment amounted to €18 million in 2015 and €33 million in 2014.

Costs from miscellaneous revenue-generating activities concerned the respective item presented in other operating income.

For more information, see Note 7 from page 183 onward

**Expenses from foreign-currency and hedging transactions as well as from the measurement of LTI options** were related to foreign currency translations of receivables and payables as well as changes in the fair value of currency derivatives and other hedging transactions. Compared with the previous year, higher expenses particularly arose from the appreciation of the U.S. dollar against various currencies. In 2015, there was also an expense for the long-term incentive (LTI) program of €53 million. In 2014, an expense of €25 million was recognized for newly issued LTI options at the end of the year.

#### Losses from the disposal of fixed assets and divestitures

in 2015 mainly stemmed from the sale of the global paper hydrous kaolin business to Imerys Kaolin, Inc., Roswell, Georgia. Losses in 2014 arose predominantly from losses of €9 million in connection with the disposal of the Brattvåg site in Norway in the Nutrition & Health division.

**Other expenses** included expenses of €121 million for BASF's 150th anniversary.

The previous year had included strike-related expenses in connection with the construction of the acrylic acid and super-absorbent production complex in Camaçari, Brazil, in the amount of €16 million. Furthermore, in both years, expenses arose from the implementation of further projects, REACH, and the provision of services.

## 9 Income from companies accounted for using the equity method

Million €	2015	2014
Proportional net income	275	283
Thereof joint ventures	25	87
associated companies	250	196
Other adjustments of income and expense	(24)	(10)
Thereof joint ventures	(35)	(19)
associated companies	11	9
<b>Income from companies accounted for using the equity method</b>	<b>251</b>	<b>273</b>

The decline in income from companies accounted for using the equity method was predominantly the result of an impairment at Wintershall Noordzee B.V., Rijswijk, Netherlands. The reduction was partly alleviated by higher earnings contributions from other shareholdings, particularly OAO Severneftegazprom, Krasnoselkup, Russia, and BASF-YPC Company Ltd., Nanjing, China.

The Oil & Gas segment contributed €106 million to **income from companies accounted for using the equity method**. Especially contributing to this total were OAO Severneftegazprom, Krasnoselkup, Russia; Nord Stream AG, Zug, Switzerland; and GASCADE Gastransport GmbH, Kassel, Germany. Further significant earnings contributions were made by shareholdings in BASF-YPC Company Ltd., Nanjing, China; Lucura Versicherungs AG, Ludwigshafen am Rhein, Germany; and BASF SONATRACH Propanchem S.A., Tarragona, Spain.

## 10 Financial result

Million €	2015	2014
Dividends and similar income	47	52
Income from the disposal of shareholdings	31	245
Income from profit transfer agreements	2	5
Income from tax allocation to participating interests	–	1
<b>Income from other shareholdings</b>	<b>80</b>	<b>303</b>
Losses from loss transfer agreements	(16)	(9)
Write-downs on/losses from the sale of shareholdings	(55)	(16)
<b>Expenses from other shareholdings</b>	<b>(71)</b>	<b>(25)</b>
Interest income from cash and cash equivalents	184	178
Interest and dividend income from securities and loans	29	29
<b>Interest income</b>	<b>213</b>	<b>207</b>
<b>Interest expenses</b>	<b>(638)</b>	<b>(711)</b>
Net interest income from overfunded pension plans and similar obligations	3	2
Income from the capitalization of borrowing costs	149	156
Miscellaneous financial income	–	–
<b>Other financial income</b>	<b>152</b>	<b>158</b>
Write-downs on/losses from the disposal of securities and loans	(18)	(2)
Net interest expense from underfunded pension plans and similar obligations	(196)	(151)
Net interest expense from other long-term personnel obligations	(3)	(22)
Interest compounding on other noncurrent liabilities	(68)	(75)
Miscellaneous financial expenses	(151)	(105)
<b>Other financial expenses</b>	<b>(436)</b>	<b>(355)</b>
<b>Financial result</b>	<b>(700)</b>	<b>(423)</b>

Income from shareholdings was €269 million lower in 2015 than in the previous year. In 2014, higher **income from the disposal of shareholdings** was reported, particularly €220 million from the disposal of the share in VNG – Verbundnetz Gas AG, Leipzig, Germany.

The interest result improved by €79 million compared with the previous year. This was primarily attributable to lower interest expenses as a result of more favorable refinancing conditions.

The **net interest expense from underfunded pension plans and similar obligations** increased compared with the previous year, mainly as a result of the higher defined benefit obligation as of December 31, 2014.

Compared with the previous year, **income from the capitalization of borrowing costs** slightly decreased as a

result of the startup of major investment projects, particularly the TDI complex in Ludwigshafen, Germany; the production complex for acrylic acid and superabsorbents in Camaçari, Brazil; the MDI plant in Chongqing, China; and oil and gas production facilities.

**Miscellaneous financial expenses** in 2015 predominantly included hedging costs from the hedging of loans in U.S. dollars. In addition to expenses for hedging loans in U.S. dollars, the previous year had included an expense of €42 million for the market valuation of options for the disposal of shares in Styrolution. Effective as of November 17, 2014, BASF sold its share in Styrolution to the INEOS Group.

## 11 Income taxes

In Germany, a uniform corporate income tax rate of 15.0% as well as a solidarity surcharge of 5.5% thereon is levied on all paid out and retained earnings. In addition to corporate income tax, income generated in Germany is subject to a trade tax that varies depending on the municipality in which the company is represented. Due to an increase in the rate of assessment for Ludwigshafen, Germany, the weighted average trade tax rate was 14.1% in 2015 (2014: 13.4%). As the increase had already

been enacted in the previous year, the 30% rate used to calculate deferred taxes for German Group companies remained unchanged in 2015. The profits of foreign Group companies are assessed using the tax rates applicable in their respective countries. These are also generally used to calculate deferred taxes to the extent that tax rate adjustments for the future have not yet been enacted.

**Tax expense**

Million €	2015	2014
<b>Current tax expense</b>	<b>1,610</b>	<b>1,645</b>
Corporate income tax, solidarity surcharge and trade taxes (Germany)	514	528
Foreign income tax	1,231	1,244
Taxes for prior years	(135)	(127)
<b>Deferred tax expense (+) / income (-)</b>	<b>(363)</b>	<b>66</b>
From changes in temporary differences	(314)	66
From changes in tax loss carryforwards / unused tax credits	(59)	(41)
From changes in the tax rate	7	38
From valuation allowances on deferred tax assets	3	3
<b>Income taxes</b>	<b>1,247</b>	<b>1,711</b>
Other taxes as well as sales and consumption taxes	302	266
<b>Tax expense</b>	<b>1,549</b>	<b>1,977</b>

The BASF Group tax rate amounted to 22.5% in 2015 (2014: 23.8%). This lower rate was primarily attributable to lower contributions to income from countries with higher tax rates, especially Norway. Taxes for prior years primarily contained reversals of long-term tax provisions.

Changes in valuation allowances on deferred tax assets for tax loss carryforwards resulted in expenses of €4 million in 2015 and income of €3 million in 2014.

Other taxes included real estate taxes and other comparable taxes totaling €106 million in 2015 and €96 million in 2014.

**Reconciliation of the effective tax rate and the tax rate in Germany**

	2015		2014	
	Million €	%	Million €	%
Income before taxes and minority interests	5,548	–	7,203	–
Expected tax based on German corporate income tax (15%)	832	15.0	1,080	15.0
Solidarity surcharge	11	0.2	11	0.2
German trade tax	234	4.2	217	3.0
Foreign tax-rate differential	225	4.1	920	12.8
Tax-exempt income	(103)	(1.9)	(354)	(4.9)
Nondeductible expenses	239	4.3	111	1.5
Income after taxes of companies accounted for using the equity method	(38)	(0.7)	(45)	(0.6)
Taxes for prior years	(135)	(2.4)	(127)	(1.8)
Deferred tax liabilities for the future reversal of temporary differences associated with shares in participating interests	(28)	(0.5)	(7)	(0.1)
Other	10	0.2	(95)	(1.3)
<b>Income taxes / effective tax rate</b>	<b>1,247</b>	<b>22.5</b>	<b>1,711</b>	<b>23.8</b>

Gains from the asset swap with Gazprom did not result in tax burdens. The previous year had included higher tax-exempt income in connection with the disposal of investments, especially of the shares in Styrolution and in VNG – Verbundnetz Gas AG, as well as the sale of oil and gas fields in the North Sea to the MOL Group.

Nondeductible expenses particularly included an impairment of the goodwill of the Exploration & Production business sector.

Future reversals of temporary differences for shares in investments that are assumed to have a planning horizon of one year led to deferred tax income of €28 million in 2015 (2014: €7 million).

## Deferred taxes

### Deferred tax assets and liabilities (in million €)

	Deferred tax assets		Deferred tax liabilities	
	2015	2014	2015	2014
Intangible assets	90	119	1,553	1,747
Property, plant and equipment	182	199	3,322	3,195
Financial assets	12	24	106	87
Inventories and accounts receivable	251	294	517	766
Provisions for pensions	2,410	2,687	472	487
Other provisions and liabilities	1,346	1,574	177	152
Tax loss carryforwards	271	388	–	–
Other	164	155	107	146
Netting	(2,873)	(3,160)	(2,873)	(3,160)
Valuation allowances for deferred tax assets	(62)	(87)	–	–
Thereof for tax loss carryforwards	(25)	(40)	–	–
<b>Total</b>	<b>1,791</b>	<b>2,193</b>	<b>3,381</b>	<b>3,420</b>
Thereof current	439	597	256	346

Deferred taxes result from temporary differences between tax balances and the measurement of assets and liabilities according to IFRS as well as from tax loss carryforwards and unused tax credits. The remeasurement of all the assets and liabilities associated with acquisitions according to IFRS 3 has resulted in significant deviations between fair values and the values in the tax accounts. This leads primarily to deferred tax liabilities.

Undistributed earnings of subsidiaries resulted in temporary differences of €9,241 million in 2015 (2014: €7,472 million) for which deferred tax liabilities were not recognized, as they are either not subject to taxation on payout or they are expected to be reinvested for indefinite periods of time.

### Tax loss carryforwards

The regional distribution of tax loss carryforwards is as follows:

### Tax loss carryforwards (in million €)

	Tax loss carryforwards		Deferred tax assets	
	2015	2014	2015	2014
Germany	1	1	–	–
Foreign	2,490	2,302	246	348
<b>Total</b>	<b>2,491</b>	<b>2,303</b>	<b>246</b>	<b>348</b>

Tax loss carryforwards exist in all regions, especially in Europe and Asia. German tax losses may be carried forward indefinitely. In foreign countries, tax loss carryforwards are in some cases only possible for a limited period of time. The bulk of the tax loss carryforwards will expire in Europe by 2018 and in Asia by 2020. No deferred tax assets were recognized for tax loss carryforwards of €1,767 million in 2015 (2014: €1,441 million).

### Tax obligations

Tax obligations primarily include assessed income taxes and other taxes as well as estimated income taxes not yet assessed for the current year. Tax obligations amounted to €1,082 million in 2015 (2014: €1,079 million).

## 12 Minority interests

Million €	2015	2014
Minority interests in profits	343	374
Minority interests in losses	(29)	(37)
<b>Total</b>	<b>314</b>	<b>337</b>

Lower **minority interests in profits** arose in 2015 mainly at BASF Total Petrochemicals LLC, Port Arthur, Texas, due to reduced prices. Higher minority interests in profits compared with the previous year were mainly reported at WINGAS GmbH, Kassel, Germany, as a result of greater

sales volumes and more favorable procurement conditions in the natural gas trading business.

**Minority interests in losses** in 2015 arose particularly at Shanghai BASF Polyurethane Company Ltd., Shanghai, China, due to margin pressure from declining sales prices. In the previous year, companies active in natural gas trading were the main contributors to minority interests in losses.

For more information on minority interests in consolidated companies, see Note 21 on page 199

## 13 Personnel expenses and employees

### Personnel expenses

Personnel expenses increased by 8.2%, from €9,224 million in 2014 to €9,982 million in 2015, largely owing to currency effects. The rise was also due in part to wage and salary increases as well as expenses for the anniversary bonus to employees and the long-term incentive (LTI) program.

#### Personnel expenses (in million €)

	2015	2014
Wages and salaries	7,943	7,380
Social security contributions and expenses for pensions and assistance	2,039	1,844
Thereof for pension benefits	658	560
<b>Personnel expenses</b>	<b>9,982</b>	<b>9,224</b>

### Number of employees

The number of employees was 112,435 on December 31, 2015 and 113,292 employees on December 31, 2014.

The average number of employees was distributed over the regions as follows:

#### Average number of employees

	2015	2014
Europe	70,922	71,128
Thereof Germany	52,987	52,726
North America	17,342	16,980
Asia Pacific	17,428	16,885
South America, Africa, Middle East	7,557	7,651
<b>BASF Group</b>	<b>113,249</b>	<b>112,644</b>
Thereof apprentices and trainees	2,942	2,884
temporary staff	2,574	2,596

Employees from joint operations are included in the average number of employees relative to BASF's share in the company. On average 398 employees worked for joint operations in 2015 (2014: 376 employees).

## 14 Intangible assets

The **goodwill** of BASF is allocated to 21 cash-generating units (2014: 23), which are defined either on the basis of business units or on a higher level.

Annual impairment testing took place in the fourth quarter of the year on the basis of the cash-generating units. Recoverable amounts were determined in each case using the value in use. This was done using plans approved by company management and their respective cash flows, generally for the next five years. For the time period after the fifth year, a terminal value was calculated using a forward projection from the last detailed planning year as a perpetual annuity. The planning is based on experience, current performance and management's best possible estimates on the future development of

individual parameters, such as raw material prices and profit margins. The oil price is also among the main input parameters that provide the basis for the forecast of cash inflows in the current financial plans. Market assumptions regarding, for example, economic development and market growth are included based on external macroeconomic sources as well as sources specific to the industry.

The weighted average cost of capital rate after tax required for impairment testing is determined using the Capital Asset Pricing Model. It comprises a risk-free rate, a market risk premium, and a spread for credit risk based on the respective industry-specific peer group. The calculation also takes into account capital structure and the beta factor of the respective



peer group as well as the average tax rate of each cash-generating unit. Impairment tests were conducted assuming a weighted average cost of capital rate after taxes between 6.04% and 7.67% (2014: between 6.60% and 7.76%). This represents a weighted average cost of capital rate before taxes between 7.77% and 10.81% (2014: between 8.19% and 10.30%). For the Exploration & Production business sector in the Oil & Gas segment, a cost of capital rate after taxes of 10.93% (2014: 9.46%) or before taxes of 16.66% (2014: 17.72%) was applied, taking country-specific risks into account.

In determining the value in use for the great majority of cash-generating units, BASF generally anticipates that a reasonably possible deviation from the key assumptions will not lead to the carrying amount of the units exceeding their respective recoverable amounts. For the goodwill of the Construction Chemicals division and the cash-generating units Pigments (in the Dispersions & Pigments division), Catalysts (excluding battery materials), and Exploration & Production (in the Oil & Gas segment), this is not the case.

In the 2015 business year, the recoverable amount of the Construction Chemicals unit exceeded the carrying amount by around €397 million. Earnings in the Construction Chemicals division are influenced by the growth of the construction industry. The weighted average cost of capital rate after taxes used for impairment testing was 7.67% (2014: 7.76%). The recoverable amount would equal the unit's carrying amount if the cost of capital rate increased by 0.96 percentage points (2014: by 0.5 percentage points) or if income from operations of the last detailed planning year – as the basis for the terminal value – were lower by 16.65% (2014: by 9.10%).

The weighted average cost of capital rate after taxes used for impairment testing for Pigments was 6.07% (2014: 6.64%). In 2015, the recoverable amount of this unit exceeded the carrying amount by €15 million, so that even slightly unfavor-

able changes in the assumptions would lead to an impairment. An increase of 0.5% in the cost of capital rate would result in impairments amounting to €163 million; a 10% decrease in income from operations of the last detailed planning year – used as the basis for the terminal value – would result in impairments of €143 million.

In 2015, the recoverable amount of Catalysts (excluding battery materials) exceeded the carrying amount by €708 million. The weighted average cost of capital rate after taxes used for the impairment testing of this unit was 7.66% (2014: 7.75%). The recoverable value of the unit would equal the carrying amount if the cost of capital rate increased by 0.73 percentage points or if income from operations of the last detailed planning year – as the basis for the terminal value – were 14.52% lower.

For impairment testing in the Exploration & Production business sector in the Oil & Gas segment, assumptions regarding expected price development were adjusted to reflect the current oil price development. BASF now assumes an average oil price of \$40 per barrel (Brent) in 2016, and expects this to rise again in subsequent years to over \$100 per barrel (Brent) in determining the terminal value. The revised assumptions resulted in an impairment of goodwill for Exploration & Production in the amount of €137 million. The recoverable amount corresponds to the value in use of the unit, amounting to €8,746 million as of December 31, 2015. A decrease of \$10 per barrel of Brent crude in the average oil price assumption would reduce income from operations by roughly €200 million each year. Such a reduction over the entire planning period would lead to an impairment of €1 billion in the Exploration & Production cash-generating unit. Irrespective of the price of oil, an increase in the cost of capital rate by 0.5% would lead to an additional impairment of €526 million. Impairments may be allocated to intangible assets, goodwill and property, plant and equipment depending on the nature, timing and size of changes in the individual parameters.

#### Goodwill of cash-generating units (in million €)

Cash-generating unit	2015		2014	
	Goodwill	Growth rate <sup>1</sup>	Goodwill	Growth rate <sup>1</sup>
Crop Protection division	2,048	2.0%	1,931	2.0%
Exploration & Production in the Oil & Gas segment	1,660	(2.0%)	1,765	(2.0%)
Catalysts division (excluding battery materials)	1,411	2.0%	1,360	2.0%
Construction Chemicals division	700	1.5%	675	1.5%
Personal care ingredients in the Care Chemicals division	537	2.0%	516	2.0%
Pigments in the Dispersions & Pigments division	484	2.0%	450	2.0%
Other cash-generating units	1,523	0.0–2.0%	1,444	0.0–2.0%
<b>Goodwill as of December 31</b>	<b>8,363</b>		<b>8,141</b>	

<sup>1</sup> Growth rates used in impairment tests to determine terminal values in accordance with IAS 36

**Development of intangible assets 2015** (in million €)

	Distribution, supply and similar rights	Product rights, licenses and trademarks	Know-how, patents and production technologies	Internally generated intangible assets	Other rights and values <sup>1</sup>	Goodwill	Total
<b>Cost</b>							
Balance as of January 1, 2015	4,014	1,410	2,000	86	674	8,141	16,325
Changes in scope of consolidation	5	–	(53)	–	(1)	–	(49)
Additions	–	56	23	11	45	–	135
Additions from acquisitions	47	–	38	–	32	19	136
Disposals	(94)	(43)	(137)	(7)	(147)	(149)	(577)
Transfers	(2)	(167)	34	1	(170)	(24)	(328)
Exchange differences	93	62	46	–	17	513	731
Balance as of December 31, 2015	4,063	1,318	1,951	91	450	8,500	16,373
<b>Accumulated amortization</b>							
Balance as of January 1, 2015	1,879	379	809	59	232	–	3,358
Changes in scope of consolidation	3	–	(38)	–	(1)	–	(36)
Additions	302	71	193	14	84	137	801
Disposals	(92)	(43)	(125)	(6)	(123)	–	(389)
Transfers	–	(1)	8	–	(7)	–	–
Exchange differences	68	5	18	–	11	–	102
Balance as of December 31, 2015	2,160	411	865	67	196	137	3,836
<b>Net carrying amount as of December 31, 2015</b>	<b>1,903</b>	<b>907</b>	<b>1,086</b>	<b>24</b>	<b>254</b>	<b>8,363</b>	<b>12,537</b>

<sup>1</sup> Including licenses to such rights and values

Besides goodwill, **intangible assets** also include acquired intangible assets as well as internally generated intangible assets. In addition, they include rights belonging to the Oil & Gas segment, which are amortized in accordance with the unit of production method. As of December 31, 2015, their acquisition costs amounted to €835 million and accumulated amortization to €246 million; amortization in 2015 amounted to €41 million.

Additions from acquisitions amounted to €136 million in 2015. Significant acquisitions concerned the purchase of a 66% share in a company to which TODA KOGYO CORP., Hiroshima, Japan, contributed its business, and the purchase of the polyurethane (PU) business from Polioles, S.A. de C.V., Lerma, Mexico. In connection with these transactions, additions to intangible assets amounted to €87 million. Moreover, BASF concluded an agreement with Lanxess on the acquisition and use of technologies and patents for the production of high-molecular-weight polyisobutene (HM PIB), which added €23 million to intangible assets.

Concessions for oil and gas production under the category **product rights, licenses and trademarks** with a net carrying amount of €480 million in 2015 authorize the exploration and production of oil and gas in certain areas. At the end of the term of a concession, the rights are returned. Aside from transfers to property, plant and equipment, transfers in 2015 included €54 million from the subsequent adjustments of the purchase price allocation for the acquisition of assets from Statoil.

**Other rights and values** under transfers also included derecognitions of €153 million resulting from the change in accounting to the net method for emission right certificates granted free of charge in 2015. Disposals of €17 million were attributable to the asset swap with Gazprom.

Related to this, **goodwill** of €173 million was derecognized, €32 million of which was reported under transfers.

In 2015, additions to **accumulated amortization** included impairments of €205 million. These primarily concerned the Oil & Gas segment. The revised assumptions for oil and gas prices led to €137 million in goodwill impairments as well as €27 million in impairments on a license in Norway. Furthermore, under the category know-how, patents and production technologies, a once-advantageous supply contract of €36 million in the Functional Materials & Solutions segment was fully impaired due to lower market prices.

In 2015, additions to accumulated amortization included write-ups of €2 million.

**Development of intangible assets 2014** (in million €)

	Distribution, supply and similar rights	Product rights, licenses and trademarks	Know-how, patents and production technologies	Internally generated intangible assets	Other rights and values <sup>1</sup>	Goodwill	Total
<b>Cost</b>							
Balance as of January 1, 2014	4,201	1,366	1,984	77	856	6,936	15,420
Changes in scope of consolidation	–	–	15	–	–	–	15
Additions	1	29	38	12	104	–	184
Additions from acquisitions	–	109	–	–	–	623	732
Disposals	(73)	(153)	(82)	(4)	(128)	(28)	(468)
Transfers	247	1	(12)	–	(192)	–	44
Exchange differences	(362)	58	57	1	34	610	398
Balance as of December 31, 2014	4,014	1,410	2,000	86	674	8,141	16,325
<b>Accumulated amortization</b>							
Balance as of January 1, 2014	1,664	429	695	43	265	–	3,096
Changes in scope of consolidation	–	–	15	–	–	–	15
Additions	338	55	158	20	76	–	647
Disposals	(73)	(109)	(82)	(4)	(106)	–	(374)
Transfers	15	–	–	–	(20)	–	(5)
Exchange differences	(65)	4	23	–	17	–	(21)
Balance as of December 31, 2014	1,879	379	809	59	232	–	3,358
<b>Net carrying amount as of December 31, 2014</b>	<b>2,135</b>	<b>1,031</b>	<b>1,191</b>	<b>27</b>	<b>442</b>	<b>8,141</b>	<b>12,967</b>

<sup>1</sup> Including licenses to such rights and values

Besides goodwill, **intangible assets** also include acquired intangible assets as well as internally generated intangible assets. In addition, they include rights belonging to the Oil & Gas segment, which are amortized in accordance with the unit of production method. As of December 31, 2014, their acquisition costs amounted to €916 million and accumulated amortization to €235 million; amortization in 2014 amounted to €52 million.

In connection with the acquisition of assets from Statoil, Stavanger, Norway, €704 million was added to intangible assets in 2014. Of this amount, €121 million pertained to exploration rights and licenses and €583 million to goodwill.

Concessions for oil and gas production under the category **product rights, licenses and trademarks** with a net carrying amount of €579 million in 2014 authorize the exploration and production of oil and gas in certain areas. Some of these rights entail obligations to deliver a portion of the production output to local companies. At the end of the term of a concession, the rights are returned.

In **other rights and values**, the line item transfers includes additions and fair value adjustments of emission rights recognized directly in equity as of the balance sheet date.

Disposals were largely attributable to the sale of selected oil and gas investments in the North Sea to the Hungarian MOL Group.

Impairments of €56 million were recognized in 2014. Due to the weak development of the coal mining business in China, impairments of €40 million relating to distribution, supply and similar rights were recognized in the Construction Chemicals division. The recoverable amount equals the value in use, amounting to €10 million. The value in use was determined using a weighted average cost of capital rate before taxes of 11.02%.

In 2014, transfers included a write-up of €5 million.

## 15 Property, plant and equipment

**Machinery and technical equipment** included oil and gas deposits, such as related wells, production facilities and further

infrastructure, which were depreciated according to the unit of production method.

### Development of property, plant and equipment 2015 (in million €)

	Land, land rights and buildings	Machinery and technical equipment	Thereof depreciation according to the unit of production method	Miscellaneous equipment and fixtures	Construction in progress	Total
<b>Cost</b>						
Balance as of January 1, 2015	9,635	43,410	5,729	3,688	7,681	64,414
Changes in scope of consolidation	(32)	(12)	–	–	4	(40)
Additions	396	1,474	492	226	3,555	5,651
Additions from acquisitions	25	46	–	1	19	91
Disposals	(263)	(2,974)	(977)	(184)	(606)	(4,027)
Transfers	734	2,529	483	391	(4,518)	(864)
Exchange differences	216	1,332	245	94	367	2,009
Balance as of December 31, 2015	10,711	45,805	5,972	4,216	6,502	67,234
<b>Accumulated depreciation</b>						
Balance as of January 1, 2015	5,391	32,463	3,203	2,774	290	40,918
Changes in scope of consolidation	(36)	(19)	–	–	–	(55)
Additions	329	2,707	959	303	261	3,600
Disposals	(156)	(2,250)	(866)	(165)	(348)	(2,919)
Transfers	7	(935)	(595)	176	19	(733)
Exchange differences	102	999	126	64	(2)	1,163
Balance as of December 31, 2015	5,637	32,965	2,827	3,152	220	41,974
<b>Net carrying amount as of December 31, 2015</b>	<b>5,074</b>	<b>12,840</b>	<b>3,145</b>	<b>1,064</b>	<b>6,282</b>	<b>25,260</b>

**Additions** to property, plant and equipment arising from investment projects amounted to €5,651 million in 2015. Significant investments were primarily related to the construction of a TDI complex in Ludwigshafen, Germany; a production complex for acrylic acid and superabsorbents in Camaçari, Brazil; and an MDI plant in Chongqing, China. Each of these began operations either fully or partly in 2015. Further significant investments included the construction of an integrated aroma ingredients complex in Kuantan, Malaysia, and oil and gas production facilities and wells in Europe and South America. Investments for expansion purposes were particularly made at the sites in Ludwigshafen, Germany; Freeport, Texas; Geismar, Louisiana; and Antwerp, Belgium. Government grants of €10 million related to tangible assets were deducted. Due to acquisitions, property, plant and equipment rose by €91 million primarily from the acquisition of BASF TODA Battery Materials LLC, Tokyo, Japan.

In 2015, **impairments** of €485 million were included in accumulated depreciation. Of this amount, €336 million pertained to impairments on oil and gas fields in Norway, Libya and Germany in the Oil & Gas segment. These impairments arose particularly from the ongoing low oil and gas price level and the resulting revision of planning assumptions. These fields were written down to their recoverable amount, totaling

€1,338 million. The weighted average cost of capital rate before taxes used ranged between 9.13% and 88.83%. The high cost of capital rates were due to the special income tax for the oil and gas industry in Norway. The recoverable amount for impaired property, plant and equipment equals their value in use. In 2015, additions to accumulated depreciation contained write-ups of €5 million.

For more information on oil price sensitivity and property, plant and equipment, see Note 14 from page 189 onward

**Disposals** of property, plant and equipment were primarily attributable to the asset swap with Gazprom and related primarily to the transferred natural gas trading and storage business. Furthermore, BASF's share in Wintershall Noordzee B.V., Rijswijk, Netherlands, was reduced to 50%. With this loss of control, the company was reclassified as an investment accounted for using the equity method. 50% of the property, plant and equipment was reported in disposals and the remaining 50% in transfers.

**Exchange differences** arose particularly from the appreciation of the U.S. dollar relative to the euro.

**Development of property, plant and equipment 2014** (in million €)

	Land, land rights and buildings	Machinery and technical equipment	Thereof depreciation according to the unit of production method	Miscellaneous equipment and fixtures	Construction in progress	Total
<b>Cost</b>						
Balance as of January 1, 2014	8,735	39,697	4,664	3,295	5,463	57,190
Changes in scope of consolidation	1	11	–	3	–	15
Additions	355	1,280	771	240	3,493	5,368
Additions from acquisitions	–	424	–	–	577	1,001
Disposals	(109)	(1,063)	(19)	(141)	(173)	(1,486)
Transfers	320	1,517	180	176	(2,003)	10
Exchange differences	333	1,544	133	115	324	2,316
Balance as of December 31, 2014	9,635	43,410	5,729	3,688	7,681	64,414
<b>Accumulated depreciation</b>						
Balance as of January 1, 2014	5,091	30,112	2,595	2,558	200	37,961
Changes in scope of consolidation	2	8	–	2	–	12
Additions	261	2,176	528	229	104	2,770
Disposals	(93)	(939)	(19)	(136)	(22)	(1,190)
Transfers	–	(38)	–	42	4	8
Exchange differences	130	1,144	99	79	4	1,357
Balance as of December 31, 2014	5,391	32,463	3,203	2,774	290	40,918
<b>Net carrying amount as of December 31, 2014</b>	<b>4,244</b>	<b>10,947</b>	<b>2,526</b>	<b>914</b>	<b>7,391</b>	<b>23,496</b>

**Additions** to property, plant and equipment from investment projects in 2014 amounted to €5,368 million. Significant investments particularly concerned the construction of a TDI complex in Ludwigshafen, Germany; a production complex for acrylic acid and superabsorbents in Camaçari, Brazil; an MDI plant in Chongqing, China; and oil and gas production facilities and wells in Europe and South America. Investments for expansion purposes were particularly made at the sites in Ludwigshafen, Germany; Antwerp, Belgium; Geismar, Louisiana; and Freeport, Texas. Property, plant and equipment rose by €1,001 million primarily from the acquisition of assets from Statoil, Stavanger, Norway.

In 2014, the **impairments** of €298 million recognized under accumulated depreciation primarily concerned the Oil & Gas segment. They resulted mainly from the complete write-down of property, plant and equipment from projects for the development of a gas field in Qatar in the amount of €81 million as well as an oilfield in the United Kingdom in the amount of

€44 million. Furthermore, impairments of €94 million were recognized on oil and gas fields in Norway and Germany. The oil and gas fields were written down to their recoverable amount of €554 million. The recoverable amounts for the individual oil and gas fields were calculated using a weighted average cost of capital rate before taxes ranging between 8.46% and 73.56%. The high cost of capital rates were due to the special income tax for the oil and gas industry in Norway. A plant in the Chemicals segment was written down to its recoverable amount of €31 million, requiring the recognition of an impairment in the amount of €27 million. The weighted average cost of capital rate before taxes used was 9.38%. The recoverable amount for impairments was determined on the basis of value in use.

**Disposals** of property, plant and equipment were largely attributable to the sale of selected oil and gas investments in the North Sea to the Hungarian MOL Group.

In 2014, **transfers** included a write-up of €3 million.



**16 Investments accounted for using the equity method and other financial assets****Investments accounted for using the equity method** (in million €)

	2015	2014
Balance as of January 1	3,245	4,174
Changes in scope of consolidation	–	16
Additions	847	40
Disposals	(107)	(781)
Transfers	398	(117)
Exchange differences	53	(87)
<b>Net carrying amount as of December 31</b>	<b>4,436</b>	<b>3,245</b>

**Other financial assets** (in million €)

	December 31, 2015	December 31, 2014
Other shareholdings	420	462
Long-term securities	106	78
<b>Other financial assets</b>	<b>526</b>	<b>540</b>

**Additions** of €847 million to investments accounted for using the equity method were primarily due to the asset swap with Gazprom. As a result, the closed joint stock company Achim Trading in Moscow, Russia, and the limited liability company Achim Development in Novy Urengoy, Russia, were accounted for using the equity method for the first time.

**Disposals** totaling €107 million were primarily attributable to the sale of BASF's 25% share in SolVin to its partner Solvay, effective July 1, 2015. In the previous year, the sale of BASF's share in Styrolution Holding GmbH to the INEOS Group had been primarily responsible for disposals of €781 million.

**Transfers** include €407 million from the first-time use of the equity method to account for Wintershall Noordzee B.V., Rijswijk, Netherlands. As a result of the disposal of its 50% share in Wintershall Noordzee B.V. to Gazprom, BASF no longer exercises control over this company alone but rather shares control with Gazprom. Wintershall Noordzee B.V. must now therefore be accounted for using the equity method in the Consolidated Financial Statements. Due to ongoing low prices

for oil and gas and the resulting revision of planning assumptions, the share in Wintershall Noordzee B.V. was impaired by €109 million. This amount is also reflected in transfers. The recoverable amount of €291 million corresponds to the value in use of the company, and was determined using the after-tax cash flows from the oil and gas fields in which the company has interests. They were discounted using a cost of capital rate after taxes of 7.8%. In 2014, transfers had included impairments of €25 million. Transfers additionally contains income and dividend distributions from companies accounted for using the equity method.

For a detailed overview of income from companies accounted for using the equity method, see Note 9 on page 185

The change in **other shareholdings** resulted from additions of €24 million and disposals of €57 million. Impairments amounted to €47 million. Other shareholdings increased by €26 million as a result of reclassifications and transfers. Currency effects amounted to €12 million.

**17 Inventories**

Million €	December 31, 2015	December 31, 2014
Raw materials and factory supplies	2,944	2,814
Work-in-process, finished goods and merchandise	6,680	8,358
Advance payments and services-in-process	69	94
<b>Inventories</b>	<b>9,693</b>	<b>11,266</b>

**Work-in-process, finished goods and merchandise** are combined into one item due to the production conditions in the chemical industry. Services-in-process primarily relate to services not invoiced as of the balance sheet date.

Cost of sales included inventories recognized as an expense amounting to €38,199 million in 2015, and €43,841 million in 2014.

A write-up of inventory was recognized in the amount of €22 million in 2015 and in the amount of €2 million in 2014.

Of total **inventories**, €770 million was measured at net realizable value in 2015 and €1,320 million in 2014.

## 18 Receivables and miscellaneous assets

### Other receivables and miscellaneous assets (in million €)

	December 31, 2015		December 31, 2014	
	Noncurrent	Current	Noncurrent	Current
Loans and interest receivables	811	194	855	173
Derivatives with positive fair values	384	474	177	656
Receivables from finance leases	33	8	39	4
Insurance compensation receivables	–	16	–	10
Other	130	357	88	839
<b>Other receivables and assets which qualify as financial instruments</b>	<b>1,358</b>	<b>1,049</b>	<b>1,159</b>	<b>1,682</b>
Prepaid expenses	61	176	49	238
Defined benefit assets	133	–	91	–
Tax refund claims	102	875	62	831
Employee receivables	–	21	11	29
Precious metal trading items	–	663	–	933
Other	66	311	126	319
<b>Other receivables and assets which do not qualify as financial instruments</b>	<b>362</b>	<b>2,046</b>	<b>339</b>	<b>2,350</b>
<b>Other receivables and assets</b>	<b>1,720</b>	<b>3,095</b>	<b>1,498</b>	<b>4,032</b>

Noncurrent **loans and interest receivables** in 2015 predominantly included loans granted by WIGA Transport Beteiligungs-GmbH & Co. KG, Kassel, Germany, to NEL Gastransport GmbH, Kassel, Germany, and GASCADE Gastransport GmbH, Kassel, Germany, in the amount of €398 million to finance the pipeline network, as well as loans granted by BASF Belgium Coordination Center Comm. V., Antwerp, Belgium, in the amount of €216 million mainly to finance the business expansion of Asian companies. This item also included receivables in favor of BASF SE from the BASF Pensionskasse arising from an agreement regarding the granting of profit participation capital in the amount of €80 million.

The increase in noncurrent **derivatives with positive fair values** was largely attributable to the increase in interest rate and currency swaps. The decrease in current derivatives with positive fair values was mainly due to the disposal of WINGAS GmbH, Kassel, Germany. In connection with this, derivatives with positive fair values amounting to €158 million were derecognized. This was partially offset by increasing fair values of precious metal derivatives.

**Prepaid expenses** in 2015 included prepayments of €41 million related to operating activities compared with €58 million in 2014, as well as €36 million in prepayments for license costs in 2015 compared with €29 million in 2014. At €30 million, prepayments for insurance in 2015 remained at the prior-year level.

The increase in other receivables from **tax refund claims** was largely due to higher income tax receivables as a result of prepayments.

**Precious metal trading items** primarily comprise physical items and precious metal accounts as well as long positions in precious metals, which are largely hedged through sales or derivatives. In comparison with the previous year, there was a decline particularly relating to the physical items.

**Other receivables and assets which qualify as financial instruments** include financial receivables, such as receivables from the sale of assets. The decrease in 2015 was primarily attributable to the settlement of the receivable in the amount of €200 million arising from the sale of Styrolution Holding GmbH.

**Valuation allowances for receivables 2015** (in million €)

	Balance as of January 1, 2015	Additions recognized in income	Reversals recognized in income	Additions not recognized in income	Reversals not recognized in income	Balance as of December 31, 2015
Accounts receivable, trade	337	80	41	33	111	298
Other receivables	108	18	–	19	70	75
<b>Total</b>	<b>445</b>	<b>98</b>	<b>41</b>	<b>52</b>	<b>181</b>	<b>373</b>

**Valuation allowances for receivables 2014** (in million €)

	Balance as of January 1, 2014	Additions recognized in income	Reversals recognized in income	Additions not recognized in income	Reversals not recognized in income	Balance as of December 31, 2014
Accounts receivable, trade	326	86	47	24	52	337
Other receivables	101	1	1	25	18	108
<b>Total</b>	<b>427</b>	<b>87</b>	<b>48</b>	<b>49</b>	<b>70</b>	<b>445</b>

The changes recognized in income contained individual valuation allowances, group-wise individual valuation allowances and valuation allowances due to transfer risks.

The changes not recognized in income were primarily related to changes in the scope of consolidation, translation adjustments and derecognition of uncollectible receivables.

Even in the current economic environment, BASF has not observed any material changes in the credit quality of its receivables. In 2015, individual valuation allowances of €57 million were recognized for **accounts receivable, trade**, and valuation allowances of €17 million were reversed. In 2014, individual valuation allowances of €65 million were recognized for trade accounts receivable and valuation allowances of €23 million were reversed.

At BASF, a new comprehensive, global credit insurance program covers trade accounts receivable incurred since January 1, 2015. As part of a global excess of loss policy, an essential part of future bad debts of the BASF Group are insured. There were no compensation claims in 2015.

In 2015, individual valuation allowances of €18 million were recognized for **other receivables**. In 2014, individual valuation allowances of €1 million were recognized for other receivables and €1 million were reversed.

The recognition and reversal of individual valuation allowances for trade accounts receivable and other receivables are recognized in the income statement.

**Aging analysis of accounts receivable, trade** (in million €)

	December 31, 2015		December 31, 2014	
	Gross value	Valuation allowances	Gross value	Valuation allowances
Not yet due	8,822	22	9,465	29
Past due less than 30 days	435	3	697	4
Past due between 30 and 89 days	135	8	136	3
Past due more than 90 days	422	265	424	301
<b>Total</b>	<b>9,814</b>	<b>298</b>	<b>10,722</b>	<b>337</b>

As of December 31, 2015, there were no material other receivables classified as financial instruments that were overdue and for which no valuation allowance was made.

## 19 Capital, reserves and retained earnings

### Authorized capital

At the Annual Shareholders' Meeting on May 2, 2014, shareholders authorized the Board of Executive Directors, with the approval of the Supervisory Board, to increase the subscribed capital by issuing new registered shares up to a total of €500 million against cash or contributions in kind through May 1, 2019. The Board of Executive Directors is empowered, following the approval of the Supervisory Board, to decide on the exclusion of shareholders' subscription rights for these new shares in certain predefined cases covered by the enabling resolution. Until now, this option has not been exercised and no new shares have been issued.

BASF SE has only issued fully paid-up registered shares with no par value. There are no preferences or other restrictions. BASF SE does not hold any treasury shares.

### Reserves and retained earnings

Capital surplus includes effects from BASF's share program, premiums from capital increases and consideration for warrants and negative goodwill from the capital consolidation resulting from acquisitions of subsidiaries in exchange for the issue of BASF SE shares at par value.

Million €	Dec. 31, 2015	Dec. 31, 2014
Legal reserves	594	534
Other retained earnings	29,526	28,243
<b>Retained earnings</b>	<b>30,120</b>	<b>28,777</b>

Transfers from **other retained earnings** increased **legal reserves** by €60 million in 2015 (2014: €46 million).

Due to the disposal of the 25% share in SolVin to partner Solvay, of parts of the pharmaceutical ingredient business to Siegfried Holding AG, Zofingen, Switzerland, and the asset swap with Gazprom, an amount of €68 million resulting from the remeasurement of defined benefit plans was transferred from other comprehensive income into retained earnings.

The acquisition of shares in companies which BASF already controls or includes as a joint arrangement in the Consolidated Financial Statements is treated as a transaction between shareholders, as long as this does not lead to a change in the consolidation method. There were no transactions of this type in 2015, as in the previous year.

### Payment of dividends

In accordance with the resolution of the Annual Shareholders' Meeting on April 30, 2015, BASF SE paid a dividend of €2.80 per share from the retained profit of the 2014 fiscal year. With 918,478,694 shares entitled to dividends, this amounts to a total dividend payout of €2,571,740,343.20.

## 20 Other comprehensive income

### Translation adjustments

The strong decline in the value of the euro relative to the U.S. dollar in the 2015 business year was the main factor leading to an increase of €911 million in the translation adjustment to €652 million.

### Cash flow hedges

The significant decline in the hedging of future cash flows in 2015 was primarily a result of the disposal of the negative fair values of commodity derivatives at WINGAS GmbH, Kassel, Germany, in connection with the asset swap with Gazprom.

Hedging future cash flows at Nord Stream AG, Zug, Switzerland, a company accounted for using the equity method, resulted in a change of €16 million in 2015 and of minus €29 million in 2014.

For more information on cash flow hedge accounting, see Note 27.4 on page 215

### Remeasurement of defined benefit plans

Due to the disposal of the 25% share in SolVin to partner Solvay, parts of the pharmaceutical ingredients and services business to Siegfried Holding AG, Zofingen, Switzerland, and the asset swap with Gazprom, an amount of €68 million resulting from the remeasurement of defined benefit plans was reclassified from other comprehensive income into retained earnings.

For more information on the remeasurement of defined benefit plans, see Note 22 on page 199

## 21 Minority interests

Group company	Partner	December 31, 2015		December 31, 2014	
		Equity stake		Equity stake	
		%	Million €	%	Million €
W & G Beteiligungs-GmbH & Co. KG, WINGAS GmbH, WINGAS Holding GmbH, WINGAS UK Limited	Gazprom Group, Moscow, Russia	–	–	49.98	114
WIGA Transport Beteiligungs-GmbH & Co. KG, W & G Transport Holding GmbH <sup>1</sup> , OPAL Gastransport GmbH & Co. KG <sup>1</sup>	Gazprom Germania GmbH, Berlin, Germany	49.98 <sup>1</sup>	(128)	49.98	(157)
BASF India Ltd., Mumbai, India	Free float	26.67	35	26.67	36
BASF PETRONAS Chemicals Sdn. Bhd., Shah Alam, Malaysia	Petroleum Nasional Bhd., Kuala Lumpur, Malaysia	40.00	221	40.00	149
BASF TOTAL Petrochemicals LLC, Port Arthur, Texas	Total Petrochemicals Inc., Houston, Texas	40.00	249	40.00	237
Shanghai BASF Polyurethane Company Ltd., Shanghai, China	Shanghai Hua Yi (Group) Company, Shanghai, China, and Sinopec Shanghai GaoQiao Petrochemical Corporation, Shanghai, China	30.00	62	30.00	71
BASF TODA Battery Materials, LLC, Tokyo, Japan	TODA KOGYO CORP., Hiroshima, Japan	34.00	39	–	–
BASF Shanghai Coatings Co. Ltd., Shanghai, China	Shanghai HuaYi Fine Chemical Co., Ltd, Shanghai, China	40.00	49	40.00	35
Other			102		96
<b>Total</b>			<b>629</b>		<b>581</b>

<sup>1</sup> Equity stake in W & G Transportation Holding GmbH and OPAL Gastransport GmbH & Co. KG: 50.03%; voting rights and portion of earnings: 49.98%

The minority interests in W & G Beteiligungs-GmbH & Co. KG, Kassel, Germany; WINGAS GmbH, Kassel, Germany; WINGAS Holding GmbH, Kassel, Germany; and WINGAS UK

Limited, Richmond, England, were eliminated due to the asset swap with Gazprom on September 30, 2015.

## 22 Provisions for pensions and similar obligations

In addition to state pension plans, most employees are granted company pension benefits from either defined contribution or defined benefit plans. Benefits generally depend on years of service, contributions or compensation, and take into consideration the legal framework of labor, tax and social security laws of the countries where the companies are located. To limit the risks of changing financial market conditions as well as demographic developments, employees have been almost exclusively offered defined contribution plans for future years of service in recent years.

The Group Pension Committee monitors the risks of all pension plans of the Group. In this connection, it issues guidelines regarding the governance and risk management of pension plans, particularly with regard to the funding of the pension plans and the portfolio structure of the existing plan assets. The organization, responsibilities, strategy, implementation and reporting requirements are documented for the units involved.

### Economic and legal environment of the plans

In some countries – especially in Germany, the United Kingdom, Switzerland and Belgium – there are pension obligations subject to government supervision or similar legal restrictions. For example, there are minimum funding requirements

to cover pension obligations, which are based on actuarial assumptions that may differ from those in IAS 19. Furthermore, there are restrictions in qualitative and quantitative terms relating to parts of the plan assets for the investment in certain asset categories. This could result in fluctuating employer contributions, financing requirements and the assumption of obligations in favor of the pension funds to comply with the regulatory requirements.

The obligations and the plan assets used to fund the obligations are exposed to demographic, legal and economic risks. Economic risks are primarily due to unforeseen developments on commodity and capital markets. They affect, for example, pension adjustments based on the level of inflation in Germany and in the United Kingdom, as well as the impact of the discount rate on the amount of the defined benefit obligation. In previous years, measures taken to close plans with defined benefits for future service, especially benefits based on final pay promises and the assumption of healthcare costs for former employees, however, led to a reduction in risk with regard to future benefit levels.

The strategy of the BASF Group with regard to financing pension commitments is aligned with country-specific supervisory and tax regulations.

### Description of the defined benefit plans

#### Germany

For BASF SE and German Group companies, a basic level of benefits is provided by BASF Pensionskasse VVaG, a legally independent funded plan, which is financed by contributions of employees and the employer as well as the return on plan assets. BASF SE ensures the necessary contributions to adequately finance the benefits promised by BASF Pensionskasse VVaG. Some of the benefits financed via the BASF Pensionskasse VVaG are subject to adjustments that must be borne by its member companies to the extent that these cannot be borne by BASF Pensionskasse VVaG due to the regulations imposed by the German supervisory authority. In 2004, the basic benefits plan at BASF was closed for new employees at German BASF companies and replaced by a defined contribution plan. At BASF SE, occupational pension promises that exceed the basic level of benefits are financed under a contractual trust arrangement by BASF Pensionstreuhand e.V.; at German Group companies, these benefits are almost exclusively financed via pension provisions. The benefits are largely based on cash balance plans. Furthermore, employees are given the option of participating in various deferred compensation schemes.

#### United States

Employees are granted benefits based on defined contribution plans.

The existing defined benefit plans were closed to further increases in benefits based on future years of service, and benefits earned in the past have been frozen. There is no entitlement to pension adjustments to compensate for cost-of-living increases.

The legal and regulatory frameworks governing the plans are based on the U.S. Employee Retirement Income Security Act (ERISA), which requires the plan sponsor to ensure a minimum funding level. Any employer contributions necessary to meet the minimum funding level would be based on the results of an actuarial valuation. Furthermore, there are unfunded pension plans that are not subject to ERISA.

Additional similar obligations arise from plans which assume the healthcare costs and life insurance premiums of retired employees and their dependents. Such plans are closed to new entrants since 2007. In addition, the amount of the benefits for such plans is frozen.

#### Switzerland

The employees of the BASF Group in Switzerland receive a company pension, which is financed through a pension fund by employer and employee contributions as well as the return on assets. The pension plan is accounted for as a defined benefit plan, as the obligatory minimum pension guaranteed by law according to the Swiss law "Berufliche Vorsorge (BVG)" is included in the scheme. All benefits vest immediately. According to government regulations, the employer is obligated to make contributions, so that the pension fund is able to grant minimum benefits guaranteed by law. The pension fund is managed by a board, where employer and employees are equally represented, that steers and monitors the benefit plan and assets.

#### United Kingdom

Employees are granted benefits based on a defined contribution plan.

A part of the workforce received benefit increases depending on service period in connection with a career average plan until December 31, 2015. The BASF Group maintains defined benefit plans in the United Kingdom, which were closed for further increases in benefit from future years of service. Adjustments to compensate for increases in the cost of living until the beginning of retirement are legally required for beneficiaries of defined benefit plans.

The financing of the pension plans is determined by the provisions of the regulatory authority for pensions and the relevant social and labor law requirements. The defined benefit plans are administered by a trust company, whose Board of Trustees, according to the trustee agreement and law, represents the interests of the beneficiaries and ensures that the benefits can be paid in the future. The required funding is determined using technical valuations according to local regulations every three years.

#### Other countries

In the case of subsidiaries in other countries, defined benefits are covered in some cases by pension provisions, but mainly by external insurance companies or pension funds.



## Actuarial assumptions

The valuation of the defined benefit obligation is largely based on the following assumptions:

### Assumptions used to determine the defined benefit obligation as of December 31

	Germany		United States		Switzerland		United Kingdom	
	2015	2014	2015	2014	2015	2014	2015	2014
Discount rate	2.50	2.40	4.20	3.90	0.80	1.00	4.00	3.70
Projected pension increase	1.50	1.75	–	–	–	–	2.90	2.90

### Assumptions used to determine expenses for pension benefits in each business year

	Germany		United States		Switzerland		United Kingdom	
	2015	2014	2015	2014	2015	2014	2015	2014
Discount rate	2.40	3.90	3.90	4.80	1.00	2.40	3.70	4.40
Projected pension increase	1.75	2.00	–	–	–	–	2.90	3.10

The assumptions used to ascertain the defined benefit obligation as of December 31 are used in the following year to determine the expenses for pension plans.

A Group-wide, uniform procedure is used to determine the discount rates used for the valuation of material pension obligations of the BASF Group. Accordingly, the discount rates were derived from the yields on corporate bonds in the respective currency zones with an issuing volume of more than 100 million units of the respective currency with a minimum rating of AA– up to AA+ from one of the three rating agencies: Fitch, Moody's, or Standard & Poor's.

The valuation of the defined benefit obligation is generally made using the most recent actuarial mortality tables as of December 31 of the respective financial year, which in Germany and the United States are derived from the BASF Group population and were last updated for the pension obligations in Germany in 2015 and for the pension obligations in the United States in 2014.

### Actuarial mortality tables (significant countries) as of Dec. 31, 2015

Germany	Heubeck Richttafeln 2005G (modified)
United States	RP-2014 (modified) with MP-2014 generational projection
Switzerland	BVG 2010 generation
United Kingdom	S1PxA (standard actuarial mortality tables for self-administered plans [SAPS])

## Sensitivity analysis

A change in the material actuarial assumptions would have the following effects on the defined benefit obligation:

### Sensitivity of the defined benefit obligation as of December 31 (in million €)

	Increase by 0.5 percentage points		Decrease by 0.5 percentage points	
	2015	2014	2015	2014
Discount rate	(1,750)	(1,850)	2,000	2,100
Projected pension increase	1,120	1,240	(930)	(1,070)

An alternative valuation of the defined benefit obligation was conducted in order to determine how changes in the underlying assumptions would influence the amount of the defined benefit obligation. A linear extrapolation of these

amounts based on alternative changes in the assumptions as well as an addition of combined changes in the individual assumptions is not possible.

## Explanation of the amounts in the statement of income and balance sheet

### Composition of expenses for pension benefits (in million €)

	2015	2014
Expenses for defined benefit plans	385	286
Expenses for defined contribution plans	273	274
<b>Expenses for pension benefits (recognized in income from operations)</b>	<b>658</b>	<b>560</b>
Net interest expenses from underfunded pension plans and similar obligations	196	149
Net interest income from overfunded pension plans	(3)	(2)
Interest cost for the asset ceiling	–	2
<b>Expenses for pension benefits (recognized in the financial result)</b>	<b>193</b>	<b>149</b>

**Expenses for defined benefit plans** increased significantly in comparison with the previous year, as the decline in the discount rate in the course of 2014 led to an increase in the **current service cost** in 2015.

The net interest on the defined benefit liability is recognized in the financial result. This results from the difference between the interest cost of the defined benefit obligation and the standardized return on plan assets as well as the interest cost for the asset ceiling. The expected contribution payments and

benefits paid over the course of the financial year are considered in the determination of net interest.

Net interest expense of the respective financial year is based on the discount rate and the defined benefit obligation at the beginning of the year. The **net interest expense from underfunded pensions and similar obligations** increased compared with the previous year, mainly as a result of the higher defined benefit obligation as of December 31, 2014.

### Development of defined benefit obligation (in million €)

	2015	2014
Defined benefit obligation as of January 1	25,474	20,784
Current service cost	397	301
Interest cost	680	806
Benefits paid	(1,006)	(959)
Participants' contributions	53	54
Actuarial gains/losses		
for adjustments relating to financial assumptions	(868)	4,095
adjustments relating to demographic assumptions	(135)	118
experience adjustments	(103)	38
Effects from acquisitions and divestitures	(313)	–
Past service cost	(48)	(37)
Plan settlements	–	(357)
Other changes	(65)	3
Currency effects	795	628
<b>Defined benefit obligation as of December 31</b>	<b>24,861</b>	<b>25,474</b>

In the Netherlands in 2014, pension obligations and plan assets were transferred to an insurance company with discharging effect in connection with a plan settlement.

As of December 31, 2015, the weighted average duration of the defined benefit obligation amounted to 15.3 years (previous year: 16.1 years).

**Development of plan assets** (in million €)

	2015	2014
Plan assets as of January 1	18,252	17,186
Standardized return on plan assets	487	659
Deviation between actual and standardized return on plan assets	(145)	678
Employer contributions	284	397
Participants' contributions	53	54
Benefits paid	(630)	(784)
Effects from acquisitions and divestitures	(165)	–
Past service cost	(36)	–
Plan settlements	–	(379)
Other changes	(39)	(23)
Currency effects	620	464
<b>Plan assets as of December 31</b>	<b>18,681</b>	<b>18,252</b>

The standardized return on plan assets is calculated by multiplying plan assets at the beginning of the year with the discount rate used for existing defined benefit obligation at the beginning of the year, taking into account benefit and contribution payments expected to be made during the year.

The estimated contribution payments for defined benefit plans for 2016 are €300 million.

**Development of asset ceiling** (in million €)

	2015	2014
Asset ceiling as of January 1	–	82
Interest cost for the asset ceiling	–	2
Changes recognized directly in equity in the business year	–	(84)
<b>Asset ceiling as of December 31</b>	<b>–</b>	<b>–</b>

Assets from overfunded plans can only be recognized to the extent that it is possible that the existing overfunded plans can be used for the reduction of future contributions or the return

to plan sponsors. To the extent that these requirements are not met, recognition is not possible due to the necessity of an asset ceiling.

**Development of the net defined benefit liability** (in million €)

	2015	2014
Net defined benefit liability as of January 1	(7,222)	(3,680)
Current service cost	(397)	(301)
Interest cost	(680)	(806)
Interest cost for the asset ceiling	–	(2)
Standardized return on plan assets	487	659
Deviation between actual and standardized return on plan assets	(145)	678
Actuarial gains/losses of the defined benefit obligation	1,106	(4,251)
Changes in asset ceiling recognized directly in equity	–	84
Benefits paid by unfunded plans	376	175
Employer contributions	284	397
Effects from acquisitions and divestitures	148	–
Past service cost	12	37
Plan settlements	–	(22)
Other changes	26	(26)
Currency effects	(175)	(164)
<b>Net defined benefit liability as of December 31</b>	<b>(6,180)</b>	<b>(7,222)</b>
Thereof defined benefit assets	133	91
provisions for pensions and similar obligations	(6,313)	(7,313)

**Regional allocation of defined benefit plans as of December 31** (in million €)

	Pension obligations		Plan assets		Net defined benefit liability	
	2015	2014	2015	2014	2015	2014
Germany	16,029	16,864	11,671	11,394	(4,358)	(5,470)
United States	4,356	4,131	2,717	2,604	(1,639)	(1,527)
Switzerland	2,108	2,019	1,939	1,875	(169)	(144)
United Kingdom	1,780	1,769	1,890	1,840	110	71
Other	588	691	464	539	(124)	(152)
<b>Total</b>	<b>24,861</b>	<b>25,474</b>	<b>18,681</b>	<b>18,252</b>	<b>(6,180)</b>	<b>(7,222)</b>

**Explanations regarding plan assets**

The target asset allocation has been defined by using asset liability studies and is reviewed regularly. Accordingly, plan assets are aligned with the long-term development of the obligations, taking into consideration the risks associated with the specific asset classes and the regulations relating to the investment of plan assets. The existing portfolio structure is oriented towards the target asset allocation. In addition, current market assessments are taken into consideration. In order to mitigate risks and maximize returns, a widely spread global portfolio of individual asset classes is held.

Liability-driven investment (LDI) techniques, such as hedging the risk of changes in interest rates and inflation, are used in some pension plans, especially in the U.K. and U.S. plans.

**Structure of plan assets** (in %)

	2015	2014
Equities	26	27
Debt instruments	54	55
Thereof for government debtors	15	11
for other debtors	39	44
Real estate	4	4
Alternative investments	15	13
Cash and cash equivalents	1	1
<b>Total</b>	<b>100</b>	<b>100</b>

The asset class **debt instruments** comprises promissory notes and debentures (Pfandbriefe) in addition to corporate and government bonds. Government bonds primarily concern bonds from those countries enjoying the highest credit ratings, such as the United States, United Kingdom, Germany and Switzerland. Corporate bonds mainly comprise investment-grade bonds,

whereby particular high-yield bonds are also held to a limited extent. In connection with the ongoing monitoring of default risk based on a given risk budget and on the continuous observation of the development of the creditworthiness of issuers, an adjustment of plan asset allocation to a revised market assessment may be made, if necessary. **Alternative investments** largely comprise investments in private equity, absolute return funds and senior secured loans.

Almost all of the **equities** are priced on active markets. The category **debt instruments** includes promissory notes and debentures (Pfandbriefe), which were acquired through private placements with a market value in the amount of €1,072 million as of December 31, 2015, and €1,381 million as of December 31, 2014. For such securities, especially those held by domestic pension plans, there is no active market. The capital market compensates for this lack of fungibility with yield premiums depending on the maturity. With only a few exceptions, there is no active market for plan assets in **real estate** and **alternative investments**.

On December 31, 2015, plan assets contained securities issued by BASF Group companies with a market value of €11 million in 2015 and €10 million in 2014. The market value of the properties of legally independent pension funds rented to BASF Group companies amounted to €151 million on December 31, 2015, and €168 million on December 31, 2014.

Since 2010 there has been an agreement between BASF SE and BASF Pensionskasse about the granting of profit participation capital with a nominal value of €80 million, which is used to strengthen the financing of the BASF Pensionskasse. No material transactions beyond this took place between the legally independent pension funds and BASF Group companies in 2015.

The funding of the plans was as follows:

**Current funding situation of the pension plans as of December 31** (in million €)

	2015		2014	
	Defined benefit obligation	Plan assets	Defined benefit obligation	Plan assets
Unfunded pension plans	2,611	–	2,800	–
Funded pension plans	22,250	18,681	22,674	18,252
<b>Total</b>	<b>24,861</b>	<b>18,681</b>	<b>25,474</b>	<b>18,252</b>

## Defined contribution plans and government pensions

The contributions to defined-contribution plans contained in income from operations amounted to €273 million in 2015 and €274 million in 2014.


Contributions to government pension plans were €609 million in 2015 and €573 million in 2014.

## 23 Other provisions


Million €	December 31, 2015		December 31, 2014	
		Thereof current		Thereof current
Restoration obligations	1,266	72	1,428	84
Environmental protection and remediation costs	538	59	621	166
Employee obligations	1,569	1,150	1,744	1,333
Obligations from sales and purchase contracts	775	763	715	708
Restructuring measures	196	165	156	103
Litigation, damage claims, warranties and similar commitments	86	29	112	48
Other	1,479	302	1,570	402
<b>Total</b>	<b>5,909</b>	<b>2,540</b>	<b>6,346</b>	<b>2,844</b>

**Restoration obligations** primarily relate to the estimated costs for the filling of wells and the removal of production equipment after the end of production in the Oil & Gas segment. Provisions for restoration obligations decreased by €340 million as a result of the asset swap with Gazprom and the reclassification of Wintershall Noordzee B.V., Rijswijk, Netherlands, to the equity method.

Provisions for **environmental protection and remediation costs** cover expected costs for rehabilitating contaminated sites, recultivating landfills, removal of environmental contamination at existing production or storage sites and similar measures. The decrease in provisions was almost entirely attributable to the changed accounting for emission right certificates granted free of charge.

 For more information about the measurement of emission right certificates, see Note 1.2 on page 162

Provisions for **employee obligations** primarily include obligations for the granting of long-service bonuses and anniversary payments, variable compensation including associated social security contributions, as well as provisions for early retirement programs for employees nearing retirement. The decline was mainly attributable to lower accruals for variable compensation components.

 For more information on provisions for the long-term incentive program, see Note 30 from page 218 onward

**Obligations from sales and purchase contracts** largely include obligations arising from rebates granted and other price discounts in the Agricultural Solutions segment, warranties and product liability, sales commissions, expected losses on committed purchases and onerous contracts.

The **restructuring measures** provisions include severance payments to employees as well as expected costs for site closures, including the costs for demolition and similar measures. The increase in provisions resulted from higher accruals for restructuring measures in North America. On the balance sheet date, €115 million was attributable to provisions for severance payments.

Provisions for **litigation, damage claims, warranties and similar commitments** contain anticipated expenses from lawsuits in which BASF is the defendant party, as well as obligations under damage claims against BASF and fines.

**Other** largely includes noncurrent tax provisions.

The following table shows the development of other provisions by category. Other changes include changes in the scope of consolidation, acquisitions, divestitures, currency effects and the reclassification of obligations to liabilities when the amount and timing of these obligations became known.

**Development of other provisions in 2015** (in million €)

	Jan. 1, 2015	Additions	Unwinding of the discount	Utilization	Reversals	Other changes	Dec. 31, 2015
Restoration obligations	1,428	187	46	(70)	(4)	(321)	1,266
Environmental protection and remediation costs	621	63	7	(158)	(13)	18	538
Employee obligations	1,744	1,277	4	(1,365)	(75)	(16)	1,569
Obligations from sales and purchase contracts	715	640	–	(543)	(42)	5	775
Restructuring measures	156	129	–	(62)	(32)	5	196
Litigation, damage claims, warranties and similar commitments	112	48	–	(26)	(29)	(19)	86
Other	1,570	312	2	(281)	(157)	33	1,479
<b>Total</b>	<b>6,346</b>	<b>2,656</b>	<b>59</b>	<b>(2,505)</b>	<b>(352)</b>	<b>(295)</b>	<b>5,909</b>

## 24 Liabilities

**Financial indebtedness** (in million €)

				Carrying amounts based on effective interest method		
		Currency	Nominal value (million, currency of issue)	Effective interest rate	December 31, 2015	December 31, 2014
BASF SE						
Commercial paper		USD	1,869		1,714	124
4.5%	Bond 2006/2016	EUR	500	4.62%	500	499
Variable	Bond 2013/2016	EUR	200	variable	200	200
4.25%	Bond 2009/2016	EUR	200	4.40%	200	199
Variable	Bond 2014/2017	EUR	300	variable	300	300
5.875%	Bond 2009/2017	GBP	400	6.04%	544	512
4.625%	Bond 2009/2017	EUR	300	4.69%	300	300
1.375 %	Bond 2014/2017	GBP	250	1.46%	340	320
Variable	Bond 2013/2018	EUR	300	variable	300	300
1.5%	Bond 2012/2018	EUR	1,000	1.51%	1,000	1,000
1.375%	Bond 2014/2019	EUR	750	1.44%	749	748
Variable	Bond 2013/2020	EUR	300	variable	300	300
1.875%	Bond 2013/2021	EUR	700	1.94%	698	697
2%	Bond 2012/2022	EUR	1,250	1.93%	1,256	1,257
2.5%	Bond 2014/2024	EUR	500	2.60%	496	496
3.675%	Bond 2013/2025	NOK	1,450	3.70%	151	160
3%	Bond 2013/2033	EUR	500	3.15%	490	490
2.875%	Bond 2013/2033	EUR	200	3.09%	198	198
3.25%	Bond 2013/2043	EUR	200	3.27%	199	199
3.89%	US Private Placement Series A 2013/2025	USD	250	3.92%	229	205
4.09%	US Private Placement Series B 2013/2028	USD	700	4.11%	641	575
4.43%	US Private Placement Series C 2013/2034	USD	300	4.45%	275	246
BASF Finance Europe N.V.						
3.625%	Bond 2008/2015	CHF	200	3.77%	–	166
5.125%	Bond 2009/2015	EUR	2,000	5.07%	–	2,001
Ciba Specialty Chemicals Finance Luxembourg S.A.						
4.875%	Bond 2003/2018	EUR	477	4.88%	449	438
Other bonds					672	618
Bonds and other liabilities to the capital market					12,201	12,548
Liabilities to credit institutions					2,996	2,836
Financial indebtedness					15,197	15,384



**Breakdown of financial indebtedness by currency** (in million €)

	December 31, 2015	December 31, 2014
Euro	9,499	11,366
U.S. dollar	3,659	1,696
British pound	884	833
Brazilian real	268	326
Chinese renminbi	261	429
Argentinian peso	167	57
Norwegian krone	151	160
Indian rupee	81	100
Turkish lira	74	88
Ukrainian hryvnia	65	46
Swiss franc	–	166
Canadian dollar	–	39
Other currencies	88	78
<b>Total</b>	<b>15,197</b>	<b>15,384</b>

**Maturities of financial indebtedness** (in million €)

	December 31, 2015	December 31, 2014
Following year 1	4,074	3,545
Following year 2	1,625	981
Following year 3	1,865	1,526
Following year 4	2,099	1,790
Following year 5	303	2,170
Following year 6 and maturities beyond this year	5,231	5,372
<b>Total</b>	<b>15,197</b>	<b>15,384</b>

**Other bonds**

Other bonds consist primarily of industrial revenue and pollution control bonds of the BASF Corporation group that were used to finance investments in the United States. Both the weighted-average interest rate of these bonds as well as their weighted-average effective interest rate amounted to 1.5% in 2015 and 1.6% in 2014. The average residual term amounted to 210 months as of December 31, 2015 (December 31, 2014: 222 months).

**Liabilities to credit institutions**

In order to finance the natural gas trading and storage business, a €1,650 million loan was incurred with a 5-year term at an interest rate of 1.08% in the previous year.

As a result of higher volumes of loans in emerging countries, the weighted average interest rate on loans increased to 4.9% in 2015 compared with 4.0% in 2014.

**Unused credit lines**

BASF SE had committed and unused credit lines with variable interest rates amounting to €6,000 million as of December 31, 2015 and as of December 31, 2014.

**Other liabilities** (in million €)

	December 31, 2015		December 31, 2014	
	Current	Noncurrent	Current	Noncurrent
Derivative instruments with negative fair values	288	75	1,172	64
Liabilities from finance leases	22	60	19	71
Loans and interest liabilities	331	265	303	632
Miscellaneous liabilities	732	43	969	47
<b>Other liabilities which qualify as financial instruments</b>	<b>1,373</b>	<b>443</b>	<b>2,463</b>	<b>814</b>
Advances received on orders	447	–	374	–
Liabilities related to social security	73	95	148	23
Employee liabilities	218	147	240	171
Liabilities from precious metal trading positions	73	–	18	–
Deferred income	71	163	154	179
Miscellaneous liabilities	265	21	167	10
<b>Other liabilities which do not qualify as financial instruments</b>	<b>1,147</b>	<b>426</b>	<b>1,101</b>	<b>383</b>
<b>Other liabilities</b>	<b>2,520</b>	<b>869</b>	<b>3,564</b>	<b>1,197</b>

**Other liabilities**

The decline in **other liabilities** was primarily attributable to the asset swap with Gazprom and largely affected the current negative fair values arising from derivatives as well as non-current loans and interest liabilities. The appreciation of the U.S. dollar relative to the euro further led to a decrease in the negative fair values arising from derivatives.

For more information on financial risks and derivative financial instruments, see Note 27 from page 210 onward

For more information on liabilities arising from leasing contracts, see Note 28 from page 216 onward

**Secured liabilities** (in million €)

	Dec. 31, 2015	Dec. 31, 2014
Liabilities to credit institutions	26	24
Other liabilities	24	92
<b>Secured liabilities</b>	<b>50</b>	<b>116</b>

**Liabilities to credit institutions** were secured primarily with registered land charges. The decline in secured **other liabilities** compared with December 31, 2014, is primarily attributable to the disposal of WINGAS GmbH, Kassel, Germany, as part of the asset swap with Gazprom. As in the previous year, there were no secured contingent liabilities in 2015.

## 25 Other financial obligations

The figures listed below are stated at nominal value:

Million €	December 31, 2015	December 31, 2014
Bills of exchange	6	3
Guarantees	49	52
Warranties	87	58
Collateral granted on behalf of third-party liabilities	–	1
Initiated investment projects	4,672	6,955
Thereof purchase commitments	1,429	1,761
for the purchase of intangible assets	10	21
Payment and loan commitments and other financial obligations	80	79

The decline in **initiated investment projects** from €6,955 million as of December 31, 2014 to €4,672 million as

of December 31, 2015 was primarily attributable to the completion of several investment projects in 2015.

## Assets used under long-term leases

Assets used under long-term leases primarily concerned buildings and IT infrastructure.

For more information on liabilities arising from leasing contracts, see Note 28 from page 216 onward

### Obligations arising from long-term leases (excluding finance leases) (in million €)

2016	413
2017	284
2018	220
2019	157
2020	123
2021 and maturities beyond this year	357
<b>Total</b>	<b>1,554</b>

## Obligations arising from purchase contracts

Obligations arising from purchase contracts resulted primarily from long-term purchase obligations for raw materials. Firm purchase obligations as of December 31, 2015, were as follows:

### Obligations arising from purchase contracts (in million €)

2016	8,050
2017	5,146
2018	4,272
2019	3,623
2020	2,824
2021 and maturities beyond this year	10,225
<b>Total</b>	<b>34,140</b>

The year-on-year decrease of €97,711 million to €34,140 million in obligations arising from purchase contracts was mainly the result of the disposal of WINGAS GmbH, Kassel, Germany, and its purchase obligations from natural gas purchasing agreements.

## 26 Risks from litigation and claims

On August 12, 2014, Metrogas S.A., Chile, filed its Statement of Claim in the arbitration proceedings initiated in May 2013 against Wintershall Energía S.A., Argentina (WIAR), Total Austral S.A., Argentina, and Pan American Energy LLC, Argentina. The defendants, as sellers, concluded a natural gas supply contract with Metrogas in 1997. Metrogas claims damages valued in an amount of €220 million as a result of insufficient gas deliveries. WIAR's share of supply in the contract is 37.5%. The defendants submitted their response to the proof of claim on December 10, 2014. The first witness and expert hearing is scheduled for May 2016. The defendants are of the opinion that Metrogas does not have any claim for damages.

BASF Corporation has potential liability under the Comprehensive Response, Compensation and Liability Act of 1980, as amended, and related state laws for investigation and cleanup at certain sites. The Lower Passaic River Study Area (LPRSA) is one such site comprising the lower 17 miles of the Passaic River in New Jersey. BASF Corporation, along with more than 60 other companies (The Lower Passaic River Study Area Cooperating Parties Group, CPG), agreed with the U.S. Environmental Protection Agency (USEPA) to perform a remedial investigation and feasibility study of the LPRSA. Based on the remedy concept proposed by the CPG and BASF's estimates of its share of these costs, BASF now considers its portion to be immaterial. It is currently anticipated that the final decision on the remedy for the lower portion of the LPRSA will be taken in the course of the year 2016, with a decision for the upper portion thereafter.

Since November 2014, a putative class action lawsuit in the United States District Court of the Southern District of New York has been pending against BASF Metals Limited (BML), along with other defendants, alleging violations of antitrust and commodities laws stemming from the price discovery process for platinum and palladium. BASF Metals Limited, based in the United Kingdom, and the other three defendants are accused of improper conduct concerning the calculation of the market prices of platinum and palladium. Four additional lawsuits were filed between November 2014 and March 2015. All these matters were consolidated, and a Second Consolidated Amended Class Action Complaint was eventually filed in July 2015. This Complaint also names as a defendant, among others, BASF Corporation. On September 21, 2015, defendants filed a Joint Motion to Dismiss the Second Consolidated Amended Class Action Complaint, and BML and BASF Corporation filed individual motions to dismiss. In addition, a pro se complaint with similar allegations was filed in the same court in September 2015, and is currently on a separate schedule than the consolidated action. In spring 2015, the European Commission conducted investigations into the allegation of anticompetitive practices in precious metal spot trading within the E.U. and European Economic Area made toward BASF and various banks. This investigation has not yet returned results.

Furthermore, BASF SE and its affiliated companies are defendants in or parties to a variety of judicial, arbitral or regulatory proceedings on a recurring basis. To our current knowledge, none of these proceedings will have a material effect on the economic situation of BASF.

## 27 Supplementary information on financial instruments

### 27.1 Financial risks

#### Market risks

**Foreign currency risks:** Changes in exchange rates could lead to negative changes in the value of financial instruments and adverse changes in future cash flows from planned transactions. Foreign currency risks from financial instruments result from the translation at the closing rate of financial receivables, loans, securities, cash and financial liabilities into the functional currency of the respective Group company. Foreign currency contracts in a variety of currencies are used to hedge foreign exchange risks from primary financial instruments and planned transactions.

The foreign currency risk exposure corresponds to the net amount of the nominal volume of the primary and the derivative financial instruments which are exposed to currency risks. In addition, planned purchase and sales transactions of the respective following year are included, if they fall under the currency risk management system. Opposite positions in the same currency are offset against each other.

The sensitivity analysis is conducted by simulating a 10% appreciation of the respective functional currency against the other currencies. The effect on BASF's income before taxes and minority interests would have been minus €340 million as of December 31, 2015, and minus €351 million as of December 31, 2014. The effect from the items designated under hedge accounting would have increased the equity of the shareholders of BASF SE before income taxes by €52 million on December 31, 2015 (2014: increase of €48 million). After the completion of the asset swap with Gazprom, this only refers to transactions in U.S. dollars. The currency exposure amounted to €2,201 million on December 31, 2015 (December 31, 2014: €2,009 million).

#### Exposure and sensitivity by currency (in million €)

	Exposure Dec. 31, 2015	Sensitivity Dec. 31, 2015	Exposure Dec. 31, 2014	Sensitivity Dec. 31, 2014
USD	2,057	(260)	1,767	(261)
Other	144	(28)	242	(42)
<b>Total</b>	<b>2,201</b>	<b>(288)</b>	<b>2,009</b>	<b>(303)</b>

Due to the use of options to hedge currency risks, the sensitivity analysis is not a linear function of the assumed changes in exchange rates.

**Interest rate risks:** Interest rate risks result from changes in prevailing market interest rates, which can cause a change in the fair value of fixed-rate instruments, and changes in the interest payments of variable-rate instruments. To hedge these risks, interest rate swaps and combined interest rate and currency derivatives are used. While these risks are relevant to the financing activities of BASF, they are not of material significance for BASF's operating activities.

The variable interest exposure, which also includes fixed rate bonds set to mature in the following year, amounted to minus €2,786 million as of December 31, 2015, compared with minus €3,343 million as of December 31, 2014. An increase in all relevant interest rates by one percentage point would have raised income before taxes and minority interests by €7 million as of December 31, 2015, and raised income before taxes and minority interests by €12 million as of December 31, 2014. The effect from the items designated under hedge accounting would have increased equity before income taxes by €20 million on December 31, 2015 (2014: increase of €30 million).

#### Carrying amount of nonderivative interest-bearing financial instruments (in million €)

	December 31, 2015		December 31, 2014	
	Fixed interest rate	Variable interest rate	Fixed interest rate	Variable interest rate
Loans	258	744	264	760
Securities	69	58	33	42
Financial indebtedness	11,114	4,083	11,673	3,711

#### Nominal and fair values of interest rate swaps and combined interest and cross-currency swaps (in million €)

	December 31, 2015		December 31, 2014	
	Nominal value	Fair value	Nominal value	Fair value
<b>Interest rate swaps</b>	<b>1,900</b>	<b>(31)</b>	<b>1,900</b>	<b>(31)</b>
Thereof payer swaps	1,900	(31)	1,900	(31)
<b>Combined interest and cross-currency swaps</b>	<b>2,047</b>	<b>315</b>	<b>1,979</b>	<b>142</b>
Thereof fixed rate	1,856	297	1,979	142

**Commodity price risks:** Some of BASF's divisions are exposed to strong fluctuations in raw material prices. These result primarily from raw materials (for example, naphtha, propylene, benzene, lauric oils, titanium dioxide, cyclohexane, methanol, natural gas, butadiene, LPG condensate and ammonia) as well as from precious metals. BASF takes the following measures to reduce price risks associated with the purchase of raw materials:

- BASF uses commodity derivatives to hedge the risks from the volatility of raw material prices. These are primarily options and swaps on crude oil, oil products and natural gas.
- In order to secure margins, the Oil & Gas segment used commodity derivatives, primarily swaps on oil products, up to the completion of the asset swap with Gazprom. Risks to margins arise in volatile markets when purchase and sales contracts are priced differently.
- The Catalysts division enters into both short-term and long-term purchase contracts with precious metal producers. It also buys precious metals on spot markets from a variety of business partners. The price risk from precious metals purchased to be sold on to third parties, or for use in the production of catalysts, is hedged using derivative instruments. This is mainly done using forward contracts which are settled by either entering into offsetting contracts or by delivering the precious metals.
- In the Crop Protection division, the sales prices of products are sometimes coupled to the price of certain agricultural commodities. To hedge the resulting risks, derivatives on agricultural commodities are concluded.

In addition, BASF holds limited unhedged precious metal and oil product positions, which can also include derivatives, for trading on its own account. The value of these positions is exposed to market price volatility and is subject to constant monitoring.

In connection with CO<sub>2</sub> emissions trading, various types of CO<sub>2</sub> certificates are purchased and sold using forward contracts. The goal of these transactions is to benefit from market price differences. These deals are settled by physical delivery. As of December 31, 2015 as well as of December 31, 2014, there were no deals outstanding. BASF utilizes emission certificate derivatives on a limited scale.

By holding commodity derivatives and precious metal trading positions, BASF is exposed to price risks. The valuation of commodity derivatives and precious metal trading positions at fair value means that adverse changes in market prices could negatively affect the earnings and equity of BASF.

BASF performs value-at-risk analyses for all commodity derivatives and precious metals trading positions. Using the value-at-risk analysis, we continually quantify market risk and forecast the maximum possible loss within a given confidence interval over a defined period. The value-at-risk calculation is based on a confidence interval of 95% and a holding period of one day. The value-at-risk calculation for precious metals is based on a confidence interval of 99%. BASF uses the variance-covariance approach.

BASF uses value at risk as a supplement to other risk management tools. Besides value at risk, BASF sets volume-based limits as well as exposure and stop-loss limits.

#### Exposure to commodity derivatives (in million €)

	December 31, 2015		December 31, 2014	
	Exposure	Value at risk	Exposure	Value at risk
Crude oil, oil products and natural gas	58	2	959	22
Precious metals	23	1	61	1
Emission certificates	10	1	14	1
Agricultural commodities	0	0	120	0
<b>Total</b>	<b>91</b>	<b>4</b>	<b>1,154</b>	<b>24</b>

The exposure corresponds to the net amount of all long and short positions of the respective commodity category.

For more information regarding financial risks and BASF's risk management, see the chapter "Opportunities and risks report" in the Management's Report from page 113 onward

#### Default and credit risk

Default and credit risks arise when counterparties do not fulfill their contractual obligations. BASF regularly analyzes the creditworthiness of each significant debtor and grants credit limits on the basis of this analysis. Due to the global activities and diversified customer structure of the BASF Group, there is no significant concentration of default risk. The carrying amount of all receivables, loans and interest-bearing securities plus the nominal value of other financial obligations subject to default risk represents the maximum default risk for BASF.

For more information on credit risks, see Note 18 from page 196 onward

#### Liquidity risks

BASF promptly recognizes any risks from cash flow fluctuations as part of the liquidity planning. BASF has ready access to sufficient liquid funds from our ongoing commercial paper program and confirmed lines of credit from banks.

## 27.2 Maturity analysis

The interest and principal payments as well as other payments for derivative financial instruments are relevant for the presentation of the maturities of the contractual cash flows from financial liabilities. Future cash flows are not discounted here.

Derivatives are included using their net cash flows, provided they have a negative fair value and therefore represent a liability. Derivatives with positive fair values are assets and are therefore not considered.

Trade accounts payable are generally interest-free and due within one year. Therefore the carrying amount of trade accounts payable equals the sum of future cash flows.

**Maturities of contractual cash flows from financial liabilities as of December 31, 2015** (in million €)

	Bonds and other liabilities to the capital market	Liabilities to credit institutions	Liabilities resulting from derivative financial instruments	Miscellaneous liabilities	Total
2016	2,979	1,414	339	1,258	5,990
2017	1,738	145	8	47	1,938
2018	2,001	119	13	28	2,161
2019	910	1,351	8	18	2,287
2020	449	3	14	14	480
2021 and thereafter	6,497	8	43	315	6,863
<b>Total</b>	<b>14,574</b>	<b>3,040</b>	<b>425</b>	<b>1,680</b>	<b>19,719</b>

**Maturities of contractual cash flows from financial liabilities as of December 31, 2014** (in million €)

	Bonds and other liabilities to the capital market	Liabilities to credit institutions	Liabilities resulting from derivative financial instruments	Miscellaneous liabilities	Total
2015	2,748	1,197	821	877	5,643
2016	1,178	57	33	40	1,308
2017	1,680	24	6	37	1,747
2018	1,995	3	12	12	2,022
2019	905	1,572	3	11	2,491
2020 and thereafter	6,484	8	44	624	7,160
<b>Total</b>	<b>14,990</b>	<b>2,861</b>	<b>919</b>	<b>1,601</b>	<b>20,371</b>

## 27.3 Classes and categories of financial instruments

For trade accounts receivable, other receivables and miscellaneous assets, loans, cash and cash equivalents, as well as trade accounts payable and other liabilities, the carrying amount approximates the fair value. Shareholdings which are not traded on an active market and whose fair value could not be reliably determined are recognized at amortized cost and are reported under other financial assets.

The fair value of financial indebtedness is determined on the basis of interbank interest rates. The difference between carrying amounts and fair values results primarily from changes in market interest rates.



## Carrying amounts and fair values of financial instruments as of December 31, 2015 (in million €)

	Carrying amount	Total carrying amount within scope of application of IFRS 7	Valuation category in accordance with IAS 39 <sup>2</sup>	Fair value	Thereof fair value level 1 <sup>3</sup>	Thereof fair value level 2 <sup>4</sup>	Thereof fair value level 3 <sup>5</sup>
Shareholdings <sup>1</sup>	420	420	Afs	0	0	–	–
Receivables from finance leases	41	41	n/a	41	–	–	–
Accounts receivable, trade	9,516	9,516	LaR	9,516	–	–	–
Derivatives – no hedge accounting	650	650	aFVtPL	650	42	608	–
Derivatives – with hedge accounting	208	208	n/a	208	–	208	–
Other receivables and other assets <sup>6</sup>	3,916	1,508	LaR	1,508	–	–	–
Securities	127	127	Afs	127	127	–	–
Cash and cash equivalents	2,241	2,241	LaR	2,241	2,241	–	–
<b>Total assets</b>	<b>17,119</b>	<b>14,711</b>		<b>14,291</b>	<b>2,410</b>	<b>816</b>	<b>–</b>
Bonds	10,487	10,487	AmC	11,109	–	–	–
Commercial paper	1,714	1,714	AmC	1,714	–	–	–
Liabilities to credit institutions	2,996	2,996	AmC	2,996	–	–	–
Liabilities from finance leases	82	82	n/a	82	–	–	–
Accounts payable, trade	4,020	4,020	AmC	4,020	–	–	–
Derivatives – no hedge accounting	334	334	aFVtPL	334	22	312	–
Derivatives – with hedge accounting	29	29	n/a	29	–	29	–
Other liabilities <sup>6</sup>	2,944	1,371	AmC	1,371	–	–	–
<b>Total liabilities</b>	<b>22,606</b>	<b>21,033</b>		<b>21,655</b>	<b>22</b>	<b>341</b>	<b>–</b>

## Carrying amounts and fair values of financial instruments as of December 31, 2014 (in million €)

	Carrying amount	Total carrying amount within scope of application of IFRS 7	Valuation category in accordance with IAS 39 <sup>2</sup>	Fair value	Thereof fair value level 1 <sup>3</sup>	Thereof fair value level 2 <sup>4</sup>	Thereof fair value level 3 <sup>5</sup>
Shareholdings <sup>1</sup>	462	462	Afs	0	0	–	–
Receivables from finance leases	43	43	n/a	43	–	–	–
Accounts receivable, trade	10,385	10,385	LaR	10,385	–	–	–
Derivatives – no hedge accounting	772	772	aFVtPL	772	23	749	–
Derivatives – with hedge accounting	61	61	n/a	61	–	61	–
Other receivables and other assets <sup>6</sup>	4,654	1,965	LaR	1,965	–	–	–
Securities	97	97	Afs	97	97	–	–
Cash and cash equivalents	1,718	1,718	LaR	1,718	1,718	–	–
<b>Total assets</b>	<b>18,192</b>	<b>15,503</b>		<b>15,041</b>	<b>1,838</b>	<b>810</b>	<b>–</b>
Bonds	12,424	12,424	AmC	13,234	–	–	–
Commercial paper	124	124	AmC	124	–	–	–
Liabilities to credit institutions	2,836	2,836	AmC	2,836	–	–	–
Liabilities from finance leases	90	90	n/a	90	–	–	–
Accounts payable, trade	4,861	4,861	AmC	4,861	–	–	–
Derivatives – no hedge accounting	622	622	aFVtPL	622	13	609	–
Derivatives – with hedge accounting	614	614	n/a	614	–	614	–
Other liabilities <sup>6</sup>	3,435	1,952	AmC	1,952	–	–	–
<b>Total liabilities</b>	<b>25,006</b>	<b>23,523</b>		<b>24,333</b>	<b>13</b>	<b>1,223</b>	<b>–</b>

<sup>1</sup> The difference between carrying amount and fair value results from shareholdings measured at acquisition cost, for which the fair value could not be reliably determined (2015: €420 million; 2014: €462 million).

<sup>2</sup> Afs: available-for-sale (category: available-for-sale financial assets); LaR: loans and receivables (category: loans and receivables); aFVtPL: at-fair-value-through-profit-or-loss (category: financial assets and liabilities at fair value recognized in the income statement); AmC: amortized cost (category: financial liabilities which are not derivatives); a more detailed description of the categories can be found in Note 1 from page 162 onward.

<sup>3</sup> Determination of the fair value based on quoted, unadjusted prices on active markets

<sup>4</sup> Determination of the fair value based on parameters for which directly or indirectly quoted prices on active markets are available

<sup>5</sup> Determination of the fair value based on parameters for which there is no observable market data

<sup>6</sup> Not including separately shown derivatives as well as receivables and liabilities from finance leases

**Offsetting of financial assets and financial liabilities as of December 31, 2015** (in million €)

	Amounts which can be offset			Amounts which cannot be offset		Potential net amount
	Gross amount	Amount offset	Net amount	Due to global netting agreements	Relating to financial collateral	
Derivatives with positive fair values	710	(22)	688	(134)	(296)	258
Derivatives with negative fair values	348	(22)	326	(134)	(7)	185

**Offsetting of financial assets and financial liabilities as of December 31, 2014** (in million €)

	Amounts which can be offset			Amounts which cannot be offset		Potential net amount
	Gross amount	Amount offset	Net amount	Due to global netting agreements	Relating to financial collateral	
Derivatives with positive fair values	788	(4)	784	(293)	(6)	485
Derivatives with negative fair values	1,201	(4)	1,197	(297)	(77)	823

The table “Offsetting of financial assets and financial liabilities” shows the extent to which financial assets and financial liabilities are offset in the balance sheet, as well as potential effects from the offsetting of instruments subject to a legally enforceable global netting agreement or similar agreement. For positive fair values from combined interest and cross-currency swaps, the respective counterparties provided cash collaterals in the amount of the outstanding fair values.


Deviations from the derivatives with positive and negative fair values reported in other receivables and other liabilities at the end of 2015 and 2014 arose mainly from embedded derivatives as well as derivatives not subject to any netting agreements and therefore are not included in the table above.

Net gains and losses from financial instruments comprise the results of valuations, the amortization of discounts, the recognition and reversal of impairments, results from the translation of foreign currencies as well as interest, dividends and all other effects on the earnings resulting from financial instruments. The line item financial instruments at fair value through profit or loss contains only those gains and losses from instruments which are not designated as hedging instruments as defined by IAS 39. Net gains or net losses from available-for-sale financial assets contain income and expenses from write-downs/write-ups, interest, dividends and the reclassification of valuation effects from equity on the sale of the securities and shareholdings.

**Net gains and losses from financial instruments** (in million €)

	2015	2014
Loans and receivables	(31)	389
Thereof interest result	105	105
Available-for-sale financial assets	10	224
Thereof interest result	0	1
Financial liabilities measured at amortized cost	(1,127)	(1,056)
Thereof interest result	(375)	(421)
Financial instruments at fair value through profit or loss	595	(19)

The net losses from loans and receivables as well as from financial liabilities measured at amortized cost primarily relates to the results from the translation of foreign currencies. Contrasting this were higher net gains from hedging transactions as compared with the previous year.

 The gains and losses from the valuation of securities and shareholdings recognized in the equity of the shareholders of BASF SE are shown in the Statement of income and expense recognized in equity on page 158.

## 27.4 Derivative instruments and hedge accounting

### The use of derivative instruments

BASF is exposed to foreign-currency, interest-rate and commodity-price risks during the normal course of business. These risks are hedged through a centrally determined strategy employing derivative instruments. Hedging is only employed for underlying positions from the operating business, cash investments, and financing as well as for planned sales, raw material purchases and capital measures. The risks from the underlying transactions and the derivatives are constantly

monitored. Where derivatives have a positive market value, BASF is exposed to credit risks from derivative transactions in the event of nonperformance of the other party. To minimize the default risk on derivatives with positive market values, transactions are exclusively conducted with creditworthy banks and partners and are subject to predefined credit limits.

To ensure effective risk management, risk positions are centralized at BASF SE and certain Group companies. The contracting and execution of derivative financial instruments for hedging purposes are conducted according to internal guidelines, and subject to strict control mechanisms.

The fair values of derivative financial instruments are calculated using valuation models which use input parameters observable on the market. Exceptions to this are some commodity derivatives, whose valuation is based directly on market prices.

#### Fair value of derivative instruments (in million €)

	December 31, 2015	December 31, 2014
Foreign currency forward contracts	56	(104)
Foreign currency options	53	80
<b>Foreign currency derivatives</b>	<b>109</b>	<b>(24)</b>
Thereof designated hedging instruments as defined by IAS 39 (hedge accounting)	8	(45)
Interest rate swaps	(31)	(31)
Thereof designated hedging instruments as defined by IAS 39 (hedge accounting)	(27)	(30)
Combined interest and cross-currency swaps	315	142
Thereof designated hedging instruments as defined by IAS 39 (hedge accounting)	197	39
<b>Interest derivatives</b>	<b>284</b>	<b>111</b>
<b>Commodity derivatives</b>	<b>102</b>	<b>(490)</b>
Thereof designated hedging instruments as defined by IAS 39 (hedge accounting)	1	(517)
<b>Derivative financial instruments</b>	<b>495</b>	<b>(403)</b>

### Cash flow hedge accounting

Some of the planned purchases of naphtha are hedged using swaps and options on oil and oil products. Some of these hedges were shown in the Consolidated Financial Statements of the BASF Group by means of cash flow hedge accounting, where gains and losses from hedges were initially recognized directly in equity. Gains and losses from hedges are included in cost of sales at the point in time at which the hedged item is recognized in the consolidated statement of income.

Furthermore, cash flow hedge accounting is used to a minor extent for natural gas purchases.

Cash flow hedge accounting was applied in the Natural Gas Trading business sector for crude oil swaps concluded in order to hedge price risks from purchase and sales contracts for natural gas to the completion of the asset swap with Gazprom. These contracts had variable prices and the price formula was coupled with the oil price.

The planned transactions and their effect on earnings occur in the year following the balance sheet date. In 2015, effective changes in the fair value of hedging instruments of €35 million (2014: minus €322 million) was recognized in the equity of the shareholders of BASF SE. In 2015, effective changes in the fair value of hedging instruments of €174 million were derecognized from the equity of shareholders of BASF SE and recorded as an expense in cost of sales. In 2014, there was an expense of €19 million in this regard. The ineffective part in the change in value of the hedge amounted to minus €2 million in 2015 and minus €4 million in 2014. This amount was reported in the income statement in cost of sales, in other operating income and in other operating expenses.

BASF used cash flow hedge accounting for derivatives used to hedge foreign currency risks from gas purchase and sales contracts to the completion of the asset swap with Gazprom. In 2015 up to the completion date, the effective change in values of the hedges was minus €150 million (2014: minus €110 million), which was recognized in the equity of the shareholders of BASF SE. There were no ineffective parts. The amounts derecognized from the equity of shareholders of BASF SE increased cost of sales by €161 million to the completion date (2014: €101 million).

BASF also uses cash flow hedge accounting for some foreign currency derivatives to hedge planned sales denominated in U.S. dollars. The impact on earnings from the underlying transactions will occur in 2016. In 2015, the effective change in values of the hedges was minus €23 million (2014: minus €66 million), which was recognized in the equity of the shareholders of BASF SE. A total of €29 million (2014: €37 million) was derecognized from the equity of shareholders of BASF SE and was booked in expenses from foreign currency transactions. The hedge was entirely effective.

The interest rate risk of the floating rate notes issued by BASF SE in 2014 (€300 million variable-rate bond 2014/2017) as well as the floating rate notes issued in 2013 were hedged using interest rate swaps. The bonds and the interest rate swaps were designated in a hedging relationship. In 2015, the effective change in the fair value of the hedging instruments was €3 million (2014: minus €22 million) and was recognized in the equity of the shareholders of BASF SE. There were no ineffective parts.

Furthermore, BASF SE's fixed-rate U.S. private placement of \$1.25 billion, issued in 2013, was converted into euros using currency swaps. This hedge was designated as a cash flow hedge. The hedge was entirely effective. In 2015, the change in values recognized in the equity of the shareholders of BASF SE amounted to €157 million (2014: €38 million). In 2015, €119 million was derecognized from other comprehensive income and recorded as income in the financial result (2014: €110 million income in financial result).

## 28 Leasing

### Leased assets

Property, plant and equipment include those assets which are considered to be economically owned through a finance lease. They primarily concern the following items:

#### Leased assets (in million €)

	December 31, 2015		December 31, 2014	
	Acquisition cost	Net book value	Acquisition cost	Net book value
Land, land rights and buildings	45	25	43	30
Machinery and technical equipment	117	31	118	32
Miscellaneous equipment and fixtures	44	13	44	14
<b>Total</b>	<b>206</b>	<b>69</b>	<b>205</b>	<b>76</b>

#### Liabilities from finance leases (in million €)

	December 31, 2015			December 31, 2014		
	Minimum lease payments	Interest portion	Leasing liability	Minimum lease payments	Interest portion	Leasing liability
Following year 1	28	5	23	26	6	20
Following year 2	21	5	16	24	4	20
Following year 3	16	3	13	18	4	14
Following year 4	11	3	8	13	3	10
Following year 5	10	3	7	10	3	7
More than 5 years	31	13	18	38	15	23
<b>Total</b>	<b>117</b>	<b>32</b>	<b>85</b>	<b>129</b>	<b>35</b>	<b>94</b>

In 2015 and in 2014, no additional lease payments exceeding minimum lease payments due to contractual conditions for finance leases were recognized in the income statement. In 2015 and 2014, leasing liabilities were not offset by any significant future minimum lease payments from subleases.

In addition, BASF is a lessee under operating lease contracts. The lease commitments totaling €1,554 million in 2015 (2014: €1,587 million) are due in the following years:

**Commitments from operating lease contracts** (in million €)

	Nominal value of the future minimum lease payments	
	Dec. 31, 2015	Dec. 31, 2014
Less than 1 year	413	397
1-5 years	784	779
More than 5 years	357	411
<b>Total</b>	<b>1,554</b>	<b>1,587</b>

Future minimum lease payments from subleasing contracts based on existing agreements amounted to €11 million in 2015 (2014: €11 million).

In 2015, minimum lease payments of €474 million (2014: €384 million) were included in income from operations. In 2015, conditional lease payments of €1 million were also included in income from operations (2014: €1 million). Furthermore, €4 million from sublease payments was included in income from operations in 2015 (2014: €4 million).

**BASF as lessor**

BASF acts as a lessor for finance leases to a minor extent only. Receivables on finance leases were €41 million in 2015 (2014: €43 million).

In 2015, claims arising from operating leases amounted to €83 million (2014: €100 million).

**Future minimum lease payments to BASF from operating lease contracts** (in million €)

	Nominal value of the future minimum lease payments	
	Dec. 31, 2015	Dec. 31, 2014
Less than 1 year	17	20
1-5 years	43	51
More than 5 years	23	29
<b>Total</b>	<b>83</b>	<b>100</b>

## 29 Statement of cash flows and capital structure management

### Statement of cash flows

Cash provided by operating activities contained the following payments:

Million €	2015	2014
Income tax payments	1,550	1,231
Interest payments	458	490
Dividends received	219	244

Interest payments comprised interest payments received of €194 million (2014: €187 million) and interest paid of €652 million (2014: €677 million).

Cash provided by operating activities also included €248 million in benefits paid (2014: €47 million), which are covered by a contractual trust arrangement.

Cash used in investing activities included €215 million in payments made for acquisitions (2014: €963 million), especially for the acquisition of a 66% share in a company into which TODA KOGYO CORP., Hiroshima, Japan, contributed its business with cathode materials for lithium-ion batteries, patents and production capacities in Japan. In the previous year, payments had been made for such purchases as shares in producing oil and gas fields as well as exploration licenses from Statoil Petroleum AS, Stavanger, Norway, and Tullow Oil Norge AS, Oslo, Norway.

Payments of €651 million were received for divestitures (2014: €1,336 million) in relation to transactions such as the sale of portions of the pharmaceutical ingredients and services business to Siegfried Holding AG, Zofingen, Switzerland. In the previous year, payments had been received particularly from the sale of the 50% share in Styrolution Holding GmbH, Frankfurt am Main, Germany, to the INEOS Group; this also gave rise to payments received in 2015.

The payments for property, plant and equipment, and intangible assets in the amount of €5,812 million included investments for 2015, to the extent that they already had an effect on cash.

Cash and cash equivalents were not subject to any utilization restrictions, as in the previous year.

For more information on cash flow from acquisitions and divestitures, see Note 2.4 from page 175 onward

### Capital structure management

The aim of capital structure management is to maintain the financial flexibility needed to further develop BASF's business portfolio and take advantage of strategic opportunities. The objectives of the Company's financing policy are to secure solvency, limit financial risks and optimize the cost of capital.

Capital structure management focuses on meeting the requirements needed to ensure unrestricted access to capital markets and a solid A rating. BASF's capital structure is managed using selected financial ratios, such as dynamic debt ratios, as part of the company's financial planning. The equity of the BASF Group as reported in the balance sheet amounted to €31,545 million as of December 31, 2015 (December 31, 2014: €28,195 million); the equity ratio was 44.5% on December 31, 2015 (December 31, 2014: 39.5%).

BASF prefers to access external financing on the capital markets. A commercial paper program is used for short-term financing, while corporate bonds are used for financing in the medium and long term. These are issued in euros and other currencies with different maturities. The goal is to create a balanced maturity profile and diverse range of investors, and to optimize our debt capital financing conditions.

As a part of risk management, activities in countries with transfer restrictions are continuously monitored. This includes, for example, regular analysis of the macroeconomic and legal environment, shareholders' equity and the business models of the operating units. The chief aim is the reduction of counterparty, transfer and currency risks for the BASF Group.

Currently, BASF has the following ratings:

	Dec. 31, 2015		Dec. 31, 2014	
	Moody's	Standard & Poor's	Moody's	Standard & Poor's
Long-term financial indebtedness	A1	A+	A1	A+
Short-term financial indebtedness	P-1	A-1	P-1	A-1
Outlook	stable	negative	stable	stable

Rating agency Moody's last confirmed their rating of "A1/P-1 outlook stable" on November 4, 2015. Standard & Poor's adjusted the outlook of their "A+/A-1" rating to "negative" on April 10, 2015. This was mainly due to an increase in pension provisions as a result of declining capital market interest rates.

BASF continues to strive for at least a solid A rating, which ensures unrestricted access to financial and capital markets.

For more information on financing policy and the Statement of Cash Flows, see the Management's Report from page 59 onward

## 30 Share-price-based compensation program and BASF incentive share program

### Share-price-based compensation program

In 2015, BASF continued its share-price-based compensation program known as the long-term incentive (LTI) program for senior executives of the BASF Group. This program has been in place since 1999. Approximately 1,200 senior executives, including the Board of Executive Directors, are currently entitled to participate in this program. This program provides for the granting of virtual options, which are settled in cash when exercised.

Participation in the LTI program is voluntary. In order to take part in the program, a participant must make a personal investment: A participant must hold BASF shares amounting to 10% to 30% of his or her individual variable compensation for a two-year period from the granting of the option (holding period). The number of shares to be held is determined by the amount of variable compensation and the volume-weighted average market price for BASF shares on the first business day after the Annual Shareholders' Meeting, which was €88.72 on May 4, 2015.

The participant receives four option rights per invested share. Each option consists of two parts, right A and right B, which may be exercised if defined thresholds have been met: The threshold of right A is met if the price of the BASF share has increased by more than 30% in comparison with the base price (absolute threshold). The value of right A will be the difference between the market price of BASF shares on the exercise date and the base price; it is limited to 100% of the base price. Right B may be exercised if the cumulative percentage performance of BASF shares exceeds (relative

threshold) the percentage performance of the MSCI World Chemicals Index<sup>SM</sup> (MSCI Chemicals). The value of right B will be the base price of the option multiplied by twice the percentage outperformance of BASF shares compared with the MSCI Chemicals Index on the exercise date. It is limited to the closing price on the date of exercise minus the computed nominal value of BASF shares. Beginning with the 2013 LTI program, right B is only valuable if the price of BASF shares at least corresponds with the base price. The options were granted on July 1, 2015, and may be exercised following a two-year vesting period, between July 1, 2017, and June 30, 2023. During the exercise period, there are certain times (closed periods) during which the options may not be exercised. Each option can only be exercised in full. This means that one of the performance targets must be surpassed. If the other performance target is not surpassed and the option is exercised, the other option right lapses. A participant's maximum gain from exercising an option is limited to five times the original individual investment starting with the 2013 LTI program. The maximum gain from exercising an option is limited to ten times the original individual investment for programs from previous years. Option rights are nontransferable and are forfeited if the option holders no longer work for BASF or have sold part of their individual investment before the expiry of the two-year vesting period. They remain valid in the case of retirement. For the members of the Board of Executive Directors, the long-term orientation of the program is significantly strengthened compared with the conditions applying to the other participants. The members of the Board of Executive Directors are required to participate in the LTI



program with at least 10% of their gross bonus. In view of this binding personal investment (in the form of BASF shares), an extended holding period of four years applies. Members of the Board of Executive Directors may only exercise their options at least four years after they have been granted (vesting period).

The 2008 to 2014 programs were structured in a similar way to the LTI program 2015.

The models used in the valuation of the option plans are based on the arbitrage-free valuation model according to Black-Scholes. The fair values of the options are determined using the binomial model.

#### Fair value of options and parameters used as of December 31, 2015

		LTI program of the year	
		2015	2014
Fair value	€	22.72	20.03
Dividend yield	%	3.96	3.96
Risk-free interest rate	%	0.35	0.20
Volatility BASF share	%	29.11	25.41
Volatility MSCI Chemicals	%	19.92	15.90
Correlation BASF share price: MSCI Chemicals	%	77.88	73.58

As of December 31, 2015, the fair values and the valuation parameters relate to the LTI programs 2015 and 2014. The fair value calculation was based on the assumption that options will be exercised in a manner dependent on their potential gains. For the programs from preceding years, corresponding fair values were computed and valuation parameters were used.

Volatility was determined on the basis of the monthly closing prices over a historical period corresponding to the remaining term of the options.

The number of options granted amounted to 1,807,532 in 2015 (2014: 1,870,440).

As a result of a resolution by the Board of Executive Directors in 2002 to settle options in cash, options outstanding from the programs 2008 to 2015 were valued with the fair value as of the balance sheet date December 31, 2015. A proportionate provision is recorded for programs in the vesting period. The LTI provision increased from €207 million as of December 31, 2014, to €222 million as of December 31, 2015, due to a higher number of outstanding options. The utilization of provisions amounted to €34 million in 2015 (2014: €106 million). Expenses arising from additions to the provision amounted to €49 million in 2015. The previous year had included income of €54 million.

The total intrinsic value of exercisable options amounted to €34 million as of December 31, 2015, and €41 million as of December 31, 2014.

#### BASF incentive share program

All employees are entitled to participate in the “plus” incentive share program, with the exception of those entitled to participate in the LTI program. The “plus” incentive share program was introduced in 1999 and is currently offered in Germany, other European countries and Mexico. Each participant must make an individual investment in BASF shares from his or her variable compensation. For every ten BASF shares purchased in the program, a participant receives one BASF share at no cost after one, three, five, seven and ten years of holding the BASF shares. As a rule, the first and second block of ten shares entitles the participant to receive one BASF share at no extra cost in each of the next ten years.

The right to receive free BASF shares lapses if a participant sells the individual investment in BASF shares, if the participant stops working for the Company or one year after retirement. The number of free shares to be granted has developed as follows:

#### Number of free shares to be granted

	2015	2014
<b>As of January 1</b>	<b>2,905,048</b>	<b>2,908,076</b>
Newly acquired entitlements	533,825	589,220
Bonus shares issued	(509,168)	(515,143)
Lapsed entitlements	(100,184)	(77,105)
<b>As of December 31</b>	<b>2,829,521</b>	<b>2,905,048</b>

The free shares to be provided by the Company are measured at the fair value on the grant date. Fair value is determined on the basis of the stock price of BASF shares, taking into account the present value of dividends, which are not paid during the term of the program. The weighted-average fair value on the grant date amounted to €71.55 for the 2015 program, and €64.73 for the 2014 program.

The fair value of the free shares to be granted is recognized as an expense with a corresponding increase in capital surplus over the term of the program.

Personnel expenses of €27 million were recorded in 2015 for the BASF incentive share program “plus” (2014: €26 million).

**31 Compensation for the Board of Executive Directors and Supervisory Board**

Million €	2015	2014
Performance-related and not performance-related cash compensation for the Board of Executive Directors	18.4	21.5
Fair value of options granted to the Board of Executive Directors in the fiscal year as of grant date	4.3	6.0
<b>Total compensation for the Board of Executive Directors</b>	<b>22.7</b>	<b>27.5</b>
Service costs for members of the Board of Executive Directors	3.8	4.2
Compensation for the Supervisory Board	3.0	3.0
Total compensation for former members of the Board of Executive Directors and their surviving dependents	10.4	6.5
Pension provisions for former members of the Board of Executive Directors and their surviving dependents	126.5	143.5
Guarantees assumed for members of the Board of Executive Directors and the Supervisory Board	–	–

Performance-related compensation for the Board of Executive Directors is based on the return on assets, as well as the performance of the entire Board. Return on assets corresponds to earnings before taxes plus borrowing costs as a percentage of average assets.

The members of the Board of Executive Directors were granted 173,064 options under the long-term incentive (LTI) program in 2015.

The market valuation of the options of active and former members of the Board resulted in expenses of €6.6 million in 2015. In 2014, the market valuation of the options resulted in income of €3.7 million.

For more information on the compensation of members of the Board of Executive Directors, see the “Compensation Report” from page 140 onward

For more information on the members of the Supervisory Board and Board of Executive Directors, including their memberships on other boards, see page 138 onward

**32 Related-party transactions**

A related party is a natural person or legal entity which can exert influence on the BASF Group or over which the BASF Group exercises control or joint control or a significant influence. In particular, this comprises nonconsolidated subsidiaries, joint ventures and associated companies.

The following tables show the volume of business with related parties that are included at amortized cost or accounted for using the equity method.

**Sales to related parties (in million €)**

	2015	2014
Nonconsolidated subsidiaries	389	504
Joint ventures	378	577
Associated companies	370	1,991

**Trade accounts receivable from / trade accounts payable to related parties (in million €)**

	Accounts receivable, trade		Accounts payable, trade	
	December 31, 2015	December 31, 2014	December 31, 2015	December 31, 2014
Nonconsolidated subsidiaries	139	141	60	62
Joint ventures	71	145	54	238
Associated companies	34	88	44	50

**Other receivables and liabilities with related parties (in million €)**

	Other receivables		Other liabilities	
	December 31, 2015	December 31, 2014	December 31, 2015	December 31, 2014
Nonconsolidated subsidiaries	161	204	180	120
Joint ventures	229	160	120	86
Associated companies	517	641	203	178

Sales and trade accounts receivable from and trade accounts payable to related parties mainly included business with own products and merchandise, agency and licensing businesses, and other operating business.

Other receivables and liabilities primarily arose from financing activities, outstanding dividend payments, profit-and-loss transfer agreements and other finance-related and operating activities and events.

The decline of €1,621 million in sales to associated companies in 2015 was mainly due to the fact that transactions with Styrolution Group companies were to be classified as transactions with associated companies only until the sale of Styrolution in November 2014.

The outstanding balances toward related parties were generally not secured and settled in cash. As in the previous year, there were no significant valuation allowances in 2015 for trade accounts receivable from related parties. Valuation allowances of €17 million were recognized as an expense for other receivables from nonconsolidated subsidiaries. The balance of valuation allowances for other receivables from nonconsolidated subsidiaries therefore rose from €22 million as of December 31, 2014, to €39 million as of December 31, 2015. In 2014, there had been no material expenses from valuation allowances for other receivables from related parties.

There were obligations from guarantees and other financial obligations at BASF in favor of nonconsolidated subsidiaries in the amount of €45 million in 2015 (2014: €8 million) and in favor of associated companies in the amount of €37 million in 2015 (2014: €27 million).

On December 31, 2015, obligations arising from purchase contracts with associated companies amounted to €29 million. There were no material obligations arising from purchase contracts with joint ventures on December 31, 2015. On December 31, 2014, purchase obligations with joint ventures arising from natural gas purchasing contracts amounted to €32,561 million. Their discontinuation is attributable to the disposal of Wintershall Erdgas Handelshaus GmbH & Co. KG, based in Kassel, Germany, which occurred on September 30, 2015, as part of the asset swap with Gazprom.

Effective December 31, 2015, the present value of the outstanding minimum rental payments for an office building including parking area payable by BASF SE to BASF Pensionskasse VVaG for the nonterminable basic rental period to 2029 amounted to €60 million.

There were no reportable related party transactions with members of the Board of Executive Directors or the Supervisory Board and their related parties in 2015.

For more information on subsidiaries, joint ventures and associated companies, see the "List of Shares Held of the BASF Group 2015" on page 179

For more information on defined benefit plans that share risks between the Group companies (including nonconsolidated subsidiaries), see "Provisions for pensions and similar obligations" from page 199 onward

For more information on the Board of Executive Directors and the Supervisory Board, see Management and Supervisory Boards and Compensation Report from page 138 onward

### 33 Services provided by the external auditor

BASF Group companies have used the following services from KPMG:

Million €	2015	2014
Annual audit	21.0	19.2
Thereof domestic	7.2	7.3
Audit-related services	0.4	0.4
Thereof domestic	0.2	0.1
Tax consultation services	0.1	0.2
Thereof domestic	–	0.1
Other services	0.7	0.6
Thereof domestic	0.7	0.2
<b>Total</b>	<b>22.2</b>	<b>20.4</b>

The line item annual audit related to expenses for the audit of the Consolidated Financial Statements of the BASF Group as well as the legally required financial statements of

BASF SE and its consolidated subsidiary companies and joint operations.


## **34 Declaration of Conformity with the German Corporate Governance Code**

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### **Declaration pursuant to Section 161 AktG (Stock Corporation Act)**

The annual Declaration of Conformity with the German Corporate Governance Code according to Section 161 of the

German Stock Corporation Act was signed by the Board of Executive Directors and the Supervisory Board of BASF SE in December 2015, and is published online.

 For more information, see [basf.com/en/governance](http://basf.com/en/governance)

## **35 Nonadjusting events after the reporting period**

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On February 17, 2016, BASF announced that a general agreement had been reached with AkzoNobel on the sale of the Coatings division's industrial coatings business for €475 million. The transaction would include technologies, patents and trademarks, as well as the transfer of two production sites in

England and in South Africa. It is subject to consultation with employee representatives and certain regulatory approvals. At BASF, the industrial coatings business generated around €300 million in sales in 2015. BASF and AkzoNobel intend to complete the transaction by the end of 2016.