

# Notes to the Consolidated Financial Statements

## General disclosures

Aurubis AG is a quoted corporate entity with a registered office in Germany.

As required by Regulation (EC) No. 1606/2002 of the European Parliament and the Council, dated July 19, 2002 on the application of international accounting standards, in conjunction with Section 315e (1) of the German Commercial Code (HGB), the accompanying consolidated financial statements as at September 30, 2018 are prepared in accordance with the International Financial Reporting Standards (IFRS) approved and published by the International Accounting Standards Board (IASB), as adopted by the European Union. The interpretations of the International Financial Reporting Interpretations Committee (IFRIC) have been taken into account.

The Supervisory Board released the consolidated financial statements for publication after they were approved on December 10, 2018.

The consolidated financial statements have been prepared in euros. If nothing to the contrary is indicated, all amounts are shown in thousands of currency units.

Current and non-current assets and liabilities are presented as separate categories in the statement of financial position. In this context, current assets and current liabilities are expected to be realized within twelve months of the balance sheet date or are held primarily for trading purposes.

As a general rule, assets and liabilities have been measured at amortized cost. Derivative financial instruments, investment property, and "available-for-sale" financial assets are measured at fair value.

The preparation of consolidated financial statements in accordance with IFRS furthermore requires the Executive Board and authorized employees to make estimates and assumptions in certain significant areas. These have an impact on the measurement and presentation of the assets and liabilities in the statement of financial position, and on related income and expenses.

Sectors that particularly require the application of estimates and assumptions are presented under [Q Significant estimates and assumptions, page 119](#).

This report may include slight deviations in disclosed totals due to rounding.

## Significant accounting principles

### SCOPE OF CONSOLIDATION

As in the previous fiscal year, in addition to the parent company, Aurubis AG, Hamburg, 22 further companies in which Aurubis AG, Hamburg, holds the majority of the voting rights either directly or indirectly, and thus has control, were included in the consolidated financial statements as at the reporting date by way of full consolidation. The reporting date for the consolidated financial statements corresponds to the balance sheet date of Aurubis AG, Hamburg, and all consolidated subsidiaries, with the exception of three consolidated companies. The balance sheet date of these subsidiaries is December 31. These companies prepared interim financial statements for consolidation purposes as at the reporting date of the consolidated financial statements.

Accordingly, the financial statements of all significant subsidiaries which Aurubis AG controls are included in these consolidated financial statements.

Pursuant to IFRS 11.24, in conjunction with IAS 28, Schwermetall Halbzeugwerk GmbH & Co. KG, Stolberg, a producer of pre-rolled strip, has been accounted for using the equity method. A 50 % investment is held in this entity, which is managed jointly with another partner (joint venture). This investment is classified as discontinued operations in the fiscal year.

### CONSOLIDATION PRINCIPLES

The separate financial statements of all companies included in the consolidation are prepared in accordance with the uniform accounting policies that are applied within the Aurubis Group. The financial statements of the main companies included in the consolidated financial statements have been audited by independent auditors.

Capital consolidation is performed as at the acquisition date using the acquisition method, whereby the acquisition cost of the acquired interest is offset against the fair values of acquired assets and liabilities of the subsidiary at that time. Any unallocated difference on the asset side is recognized as goodwill and tested at least annually for impairment. In accordance with IAS 36, goodwill is not amortized on a scheduled basis. Negative goodwill is recognized immediately in profit or loss following a reassessment of the fair values.

Receivables, liabilities, and contingent liabilities, as well as revenues, other income, and expenses between Group companies are eliminated. Profits resulting from transactions between Group companies are eliminated, if material.

In addition to eight German companies, 15 foreign companies are included in the consolidated financial statements. In accordance with the functional currency concept, the financial statements of subsidiaries prepared in foreign currencies were translated into euros, as the euro is Aurubis AG's reporting currency. Transactions in foreign currencies are converted into the functional currency at the exchange rate at the time of the transaction or, in the case of subsequent measurement, at the time of such measurement. Foreign currency transactions are conducted primarily in US dollars. The average US dollar exchange rate during fiscal year 2017/18 was 1.19014 US\$/€. The exchange rate as at September 30, 2018 was 1.15760 US\$/€. Gains and losses resulting from the fulfillment of such transactions, as well as from the conversion of monetary assets and liabilities designated in a foreign currency as at the reporting date, are recorded in profit and loss in the cost of materials unless they have to be accounted for in equity as qualified cash flow hedges or net investments in foreign business operations. In fiscal year 2017/18, foreign currency conversion differences totaling € -1.1 million (net) were recognized in profit or loss. In accordance with IAS 21, assets and liabilities in the statements of financial position of subsidiaries reporting in a foreign currency are translated at the mid-market rates applicable at the reporting date and the income statement is translated at the average rates for the fiscal year. Any resultant translation differences are recognized directly in equity until the possible disposal of the subsidiary.

Joint ventures are accounted for in accordance with IFRS 11 using the equity method. Profits deriving from upstream/downstream transactions with Group companies are eliminated proportionally.

## RECOGNITION OF REVENUES

Revenues are mainly generated from the sale of metals and copper products. The revenues are recognized when control and the significant risks and rewards of ownership of the goods are transferred to the customer, if the amount of revenues can be reliably determined and the economic benefit deriving from the transaction is probable. Bonuses granted in the fiscal year are deducted from revenues.

## FINANCIAL INSTRUMENTS

A **financial instrument** is a contract that simultaneously gives rise to a financial asset of one entity and a financial liability or equity instrument of another entity.

In this connection, financial assets particularly comprise cash and cash equivalents, equity instruments held in other entities (e.g., investments or share portfolios), trade accounts receivable, other loans and receivables granted, and primary and derivative financial instruments that are held for trading. Financial liabilities generally establish a contractual obligation to deliver cash or other financial assets. These include in particular bonds and other securitized liabilities, liabilities to banks, trade accounts payable, finance lease liabilities, and derivative financial instruments. Within the Group, regular way purchases and sales of primary financial instruments are generally recorded as at the settlement date, i.e., at the date of delivery and transfer of title. Derivative financial instruments are recognized as at the trade date. Financial assets and financial liabilities are generally reported gross (i.e., without being netted).

**Financial assets** are recognized if Aurubis has a contractual right to receive cash and cash equivalents or other financial assets from another company. Financial assets are always initially recognized at fair value. Thereby, in the case of financial assets that will not be measured subsequently at fair value through profit or loss, the transaction costs directly attributable to the purchase have to be taken into account. The fair values recognized in the statement of financial position represent the market prices of the financial assets to the extent that these can be determined directly by reference to an active market. Otherwise, they are measured using normal market procedures (valuation models), applying the market parameters specific to the instrument. Non-interest-bearing financial assets with a term exceeding one year are discounted. For financial assets with a residual term of less than one year, it is assumed that the fair value corresponds to the nominal value. Financial assets designated in foreign currency are measured on initial recognition with the valid rate applicable at the date of the transaction and as at the reporting date with the then applicable mid-market rate. Financial assets are derecognized if the contractual rights to payments from the financial assets no longer exist or all opportunities and risks are essentially transferred. Any financial assets sold without recourse were derecognized.

The non-current receivables reported as **"other financial fixed assets"** are assigned to the category "loans and receivables" and, if significant, are measured at amortized cost, applying the effective interest method.

On account of their short terms to maturity, **trade accounts receivable** are measured at nominal value, less allowances for doubtful debts. The allowances take adequate account of credit default risks, which are determined on the basis of past experience and individual assessments of the risks. Actual defaults result in derecognition of the receivables affected.

Impairment losses relating to trade accounts receivable are recorded in an allowance account. The decision as to whether a credit default risk is recorded using an allowance account or through direct reduction of the receivables depends on how reliable the assessment of the risk situation is.

**Financial assets held for trading** are measured at fair value. These include derivative financial instruments that are not included in an effective hedging relationship in accordance with IAS 39 and therefore have to be compulsorily classified as “held for trading.”

In addition, delivery contracts are concluded in the Aurubis Group for non-ferrous metals to cover the expected requirement for raw materials and also for the sale of finished products. In the process, physical delivery contracts may be terminated by making compensation payments due to changes in demand. Fixed-price metal delivery contracts are therefore also recognized as derivative financial instruments. Since these are not included in an effective hedging relationship in accordance with IAS 39, they are similarly classified as “held for trading.”

Gains or losses resulting from the subsequent measurement of “held for trading” financial assets are recognized in profit or loss.

**Other financial assets** are allocated to the category “loans and receivables” and, to the extent that they are non-current, are measured at amortized cost, applying the effective interest method.

**Cash and cash equivalents** have a remaining term on initial recognition of up to three months and are measured at nominal value.

Within the Aurubis Group, the “**available-for-sale**” category represents the residual amount of primary financial assets that fall under IAS 39 and are not assigned to another category. They include the interests in affiliated companies that are reported under financial fixed assets, other investments and securities classified as fixed assets. They are generally measured at fair value, which is derived from the stock market price, provided a price quoted in an active market is available. Subsequent gains and losses resulting from measurement at fair value are recognized in equity as a component of other comprehensive income. This does not apply if these are permanent or significant impairment losses, which are recognized in profit or loss. The accumulated gains or losses deriving from measurement at fair value that are recorded as a component of other comprehensive income are only recognized in profit or loss upon disposal of the financial assets. If the fair value of non-quoted equity instruments cannot be determined with sufficient reliability, the interests are measured at acquisition cost (net of impairment losses, if appropriate).

No financial instruments were reclassified into other measurement categories either in fiscal year 2017/18 or in fiscal year 2016/17.

Within the Aurubis Group, an impairment loss is recognized if the carrying amount of a financial asset is higher than the present value of the future cash flows. The test of whether impairment exists is carried out at every reporting date. Indications such as considerable financial problems on the part of the debtor are taken into account in order to determine objectively whether evidence of impairment exists.

In order to resolve the question of impairment, the existing credit relationships that are assigned to the category “loans and receivables” need to be analyzed and then measured subsequently at amortized cost. At every reporting date, an investigation is required in order to assess whether there are objective indications of impairment that should be recognized in the financial statements. The amount of the loss is calculated as the difference between the carrying amount of the asset and the present value of the expected future cash flows, discounted with the original effective interest rate of the financial instrument (recoverable amount). In this connection, for the sake of simplicity, cash flows from short-term receivables are not discounted. The carrying amount of the asset is reduced to the recoverable amount by means of a direct write-down or by using an allowance account and the reduction is recognized in profit or loss.

For equity instruments of the “available-for-sale” category, an impairment loss is recognized if there are considerable adverse changes in the issuer’s environment or the fair value is significantly lower than the original cost for a long period. The loss is determined as the difference between the current fair value and the carrying amount of the financial instrument. While reversals of impairment losses on debt instruments are to be recognized in profit or loss, in the case of equity instruments they may only be recognized in equity.

**Financial liabilities** are recognized if there is a contractual obligation to transfer cash and cash equivalents or other financial assets to another company. Financial liabilities are always initially recognized at fair value. The directly attributable transaction costs are also deducted for all financial liabilities that are not subsequently measured at fair value and are amortized over the term of the liability applying the effective interest method. Financial liabilities denominated in foreign currency are measured on initial recognition with the valid rate applicable at the date of the transaction and as at the reporting date with the then applicable mid-market rate.

**Primary financial liabilities**, which include borrowings, trade accounts payable, and other primary financial liabilities, are generally measured at amortized cost. If the interest effect is not insignificant, non-interest-bearing liabilities, or liabilities bearing

low interest rates, with a residual term exceeding one year, are discounted. In the case of liabilities with a residual term of less than a year, it is assumed that the fair value corresponds to the settlement amount.

**Liabilities under finance leases** are recognized on inception of the lease at the lower of the present value of the leasing payments and the fair value of the leased asset. In subsequent periods, the redemption portions included in the leasing payments reduce the corresponding liabilities.

**Derivative financial instruments** that are not included in effective hedging relationships must be classified as “**held-for-trading**” and therefore recognized at fair value through profit and loss. Negative amounts result in the recognition of a financial liability.

The Aurubis Group uses **derivative financial instruments** to hedge interest rate and foreign currency risks and to hedge commodity price risks.

Derivative financial instruments are measured at fair value. This represents the market value and can be both positive and negative. If the market value is not available, the fair value is calculated utilizing present value and option price models. As far as possible, relevant market prices and interest rates observed at the reporting date, which are derived from recognized sources, are used as the opening parameters for these models.

Changes in the fair values of derivative financial instruments are recognized either through profit or loss in the income statement or in equity as a component of other comprehensive income. The decisive factor hereby is whether or not the derivative financial instrument is included in an effective hedging relationship. If no **cash flow hedge accounting** relationship exists, the changes in fair values are to be recognized immediately in profit or loss. If, on the other hand, an effective cash flow hedging relationship exists, such changes will be recognized in equity as a component of other comprehensive income.

In order to avoid fluctuations in the income statement due to the different measurement of hedged items and hedging instruments, IAS 39 includes special regulations relating to hedge accounting. The aim of these hedge accounting regulations is to record gains and losses on hedging instruments and hedged items so that they compensate one another as far as possible.

In addition to documentation, as a prerequisite for the application of the regulations of hedge accounting, IAS 39 requires proof of an effective hedging relationship. Hedge effectiveness means that changes in fair value (for fair value hedges) or changes in cash flow

(for cash flow hedges) of the hedged items are compensated by changes in the opposite direction in the fair value or by changes in the cash flows of the hedging instruments, in each case relating to the hedged risk.

The purpose of derivatives that are used as hedging instruments in conjunction with a **cash flow hedge** is to hedge future cash flows. A risk with regard to the amount of future cash flows exists in particular for loans at floating interest rates and planned transactions that are highly likely to occur. Derivative financial instruments used in conjunction with cash flow hedge accounting are recognized at fair value. The gain or loss on measurement is split between an effective and an ineffective portion. The effective portion is the portion of the gain or loss on measurement that represents an effective hedge of the cash flow risk. This is recognized directly in equity under a special heading (cash flow hedge reserve), after taking deferred taxes into account. The ineffective portion deriving from measurement is recognized on the other hand in profit or loss in the income statement. The general accounting rules applicable to the transactions underlying the hedged cash flows remain unchanged. Following the termination of the hedging relationship, the amounts recorded in the reserve are always transferred to the income statement when gains or losses in connection with the hedged item are recognized in profit or loss or when the underlying transaction is not actually expected to occur anymore.

The Aurubis Group furthermore enters into hedging relationships that do not satisfy the strict requirements of IAS 39 and cannot therefore be accounted for in accordance with the hedge accounting regulations. Nevertheless, from an economic point of view, these hedging relationships comply with the principles of risk management. Moreover, hedge accounting is also not applied in the case of the monetary assets and liabilities recognized in connection with foreign currency hedging, because the foreign currency translation gains and losses on the hedged items that need to be realized in profit or loss in accordance with IAS 21 are accompanied by gains and losses on the derivative hedging instruments and more or less compensate one another in the income statement.

Financial assets and financial liabilities that fall under the scope of IAS 39 could under certain circumstances be allocated irrevocably to the subcategory “fair value option” upon initial recognition. The Aurubis Group has not made use of the fair value option either for financial assets or for financial liabilities.

The **fair value** of financial instruments is determined pursuant to the regulations of IFRS 13 covering measurement at fair value. The fair value of financial instruments quoted in active markets is calculated based on price quotations insofar as these are prices used in routine and current transactions. Where no prices quoted in active markets are available, the Aurubis Group uses measurement procedures to determine the fair value of financial instruments. Consequently, the input parameters applied in measurement procedures are based where possible on observable data derived from the prices of relevant financial instruments traded in active markets. The use of these measurement procedures requires estimates and assumptions on the part of the Aurubis Group, the scope of which depends on the price transparency of the financial instrument and its market, and the complexity of the instrument. Management regularly analyzes the methods and influencing factors used to determine the fair value to ensure that they are appropriate. Additional information about the main estimates and assumptions used to determine the fair value can be found in the section [Q Financial instruments, pages 113-116](#).

## INTANGIBLE ASSETS

If intangible assets are acquired, they are recognized at acquisition cost. Internally generated intangible assets that provide future economic benefits are recognized at their cost of generation if the criteria for their recognition as an asset are fulfilled. They are amortized on a scheduled, straight-line basis over their expected useful lives of between three and eight years. Scheduled amortization charges relating to investments made in connection with a long-term electricity supply contract are recorded under cost of materials over the term of the contract. With the exception of goodwill, the consolidated financial statements do not include any intangible assets with indefinite useful lives.

## PROPERTY, PLANT, AND EQUIPMENT

Items of property, plant, and equipment used in the business operations for more than one year are measured at cost less scheduled depreciation. Such assets also include spare parts and maintenance equipment used for more than one period. Technical minimum stocks are recognized as components of the respective technical equipment and machinery. These stocks are quantities of materials that contain metals and are necessary to establish and ensure a production facility's functionality for its intended use. Minimum stocks are not subject to scheduled depreciation, as they do not deteriorate or age.

Construction costs include all costs that can be directly attributed to the asset. Borrowing costs that can be directly allocated to the purchase, construction, or production of a qualifying asset are capitalized. Borrowing costs of € 288 thousand (previous year: € 27 thousand) were capitalized in the fiscal year reported, applying a financing cost rate of 1.7 % (previous year: 1.7 %). Scheduled depreciation is charged using the straight-line method. In this context, depreciation periods used correspond to the expected economic useful lives of the assets, as applicable within the Group. The following main useful lives are applied:

|                                   |                       |
|-----------------------------------|-----------------------|
| Buildings                         | 25 to 40 years        |
| Site installations                | 10 to 25 years        |
| Technical equipment and machinery | 5 to 20 years         |
| Technical minimum stock           | unlimited useful life |
| Factory and office equipment      | 3 to 20 years         |

General overhauls or maintenance measures resulting in the replacement of components are recognized as an asset if it is probable that future economic benefits will flow to the Group and the costs can be measured reliably.

## LEASING

Leased items of property, plant, and equipment that satisfy the criteria of IAS 17 for a finance lease are recognized as fixed assets. This is the case if all significant risks and rewards of economic ownership lie with the respective Group company. Such items of property, plant, and equipment are recognized at fair value or, if lower, at the present value of the minimum lease payments, and are depreciated using the straight-line method over the lease term or, if it is expected that ownership will be obtained at the end of the lease term, over the economic useful life of the respective assets. The future lease installment payment obligations are recognized as a liability at their present value or current market value. The lease installment is divided into an interest component and a redemption component, to ensure that the lease liability bears interest at a constant rate. The noncurrent part of the leasing obligation is recorded under non-current financial liabilities and the current part is recorded under current financial liabilities. The interest component of the leasing rate is recognized in the income statement, leading to a constant interest charge over the term of the leasing agreement.

## INVESTMENT PROPERTY

Investment property is property that is held for the purpose of earning rental income and/or increasing value, and not for producing or delivering goods, performing services, or carrying out administrative tasks, or that is held to be sold by the company in the course of its usual business activities.

Aurubis' investment property in the previous fiscal year reported concerned a property site consisting of land and buildings belonging to Aurubis Switzerland SA. The real estate was accounted for at its fair value [Q Investment property, page 134](#).

## IMPAIRMENT OF NON-FINANCIAL ASSETS

Intangible assets that have an indefinite useful life, such as goodwill, are not amortized on a scheduled basis but are subjected to an annual impairment test. Furthermore, an assessment is made at every reporting date to determine whether there are any indications that the asset could be impaired. In the same way, items of property, plant, and equipment are tested for impairment if there are any indications of such impairment.

Since the metals contained in the minimum stock can be recovered and the utilization potential of the minimum stock is not subject to wear and tear as it is not used in the production process, an unlimited useful life is assumed. The minimum stocks are therefore not amortized on a scheduled basis but are instead tested for impairment in conjunction with the respective production facilities if there are any indications of such impairment.

Assets that are amortized or depreciated on a scheduled basis are tested for impairment if events or changes in circumstances indicate that the carrying amount might not be recoverable. Impairment losses are recorded in the amount by which the carrying amount exceeds the recoverable amount. The recoverable amount is the higher of the fair value of the asset less costs to sell and its value in use. For impairment tests, assets are combined at the lowest level for which cash flows can be separately identified (cash-generating units). With the exception of goodwill, non-monetary assets on which impairment losses were recognized in the past are reviewed as at each reporting date to ascertain whether the impairment losses possibly need to be reversed.

## INVENTORIES

Inventories are measured at acquisition or production cost. Production cost includes all direct costs attributable to the production process, as well as a systematically allocated share of the production-related overheads.

The acquisition costs of copper concentrates and raw materials for recycling are determined by deducting the treatment and refining charges negotiated with the supplier from the purchase value of the metal. Treatment and refining charges are deductions that are made due to the processing of ore concentrates and raw materials for recycling into copper and precious metals.

In the smelters, work in process is measured by initially measuring the metal content. The equivalent cost of the processing that is still required for production of the fine metal is deducted from this figure. In this manner, the costs incurred during the production process are successively recognized as a component of the total production cost. This procedure applies to the production of copper, precious metals, and minor metals.

When it comes to the production of copper products, in addition to the metal components, the incurred costs of further processing copper into special formats such as wire rod, shapes, and rolled products are taken into consideration for the measurement of finished goods by way of a surcharge calculation.

Inventories are measured using the average cost method in accordance with IAS 2. This is recognized as at the reporting date at the lower of cost and net realizable value. Net realizable value is determined on the basis of quoted commodity exchange or market prices as at the reporting date.

## OTHER NON-FINANCIAL ASSETS

Other non-financial assets are recognized at amortized cost. Write-downs are made to the extent that the assets are at risk.

## INCOME TAXES

Income taxes are made up of current and deferred taxes. The tax expense and/or tax credit is recorded in profit or loss. If, however, the related source transactions are recognized directly in equity or in other comprehensive income, then the income taxes attributed to them are also directly accounted for in equity or in other comprehensive income.

The Aurubis Group companies are subject to income taxes in many countries around the world. The tax expense and/or tax credit is calculated by applying the tax regulations of the individual countries that are applicable as at the reporting date.

Deferred tax assets and liabilities result from temporary differences between the tax-based carrying amounts of assets and liabilities and those taken into account in the IFRS financial statements or from tax loss carryforwards and tax credits not yet utilized. The calculation of deferred taxes is based on the tax rates expected in the individual countries at the time of realization. These tax rates are generally based on legislation that is valid, or has been enacted, as at the reporting date.

Deferred tax assets deriving from temporary differences, tax loss carryforwards, and tax credits are recognized by the respective company entities to the extent that deferred tax liabilities exist. If deferred tax assets exceed deferred tax liabilities, they are recognized to the extent that it is probable that sufficient taxable income will be available in the future to ensure the utilization of these tax assets. The recoverability of the recognized deferred tax assets is reviewed on an individual basis each year.

Deferred tax liabilities that arise due to temporary differences in connection with investments in subsidiaries and associated companies are recognized unless the point in time for the reversal of the temporary differences can be determined by the Group and it is likely that the temporary differences will not reverse in the foreseeable future due to this determining influence.

Deferred tax assets and liabilities are offset against one another in cases where a legal right of set-off exists and if they relate to income taxes levied on the same company by the same taxation authority.

## **DISCONTINUED OPERATIONS AND ASSETS HELD FOR SALE**

Discontinued operations are recognized as soon as part of a company is classified as held for sale, the business area is a separate, significant line of business, and it is for sale as part of a coordinated overall plan.

In accordance with IFRS 5, assets held for sale are measured at the lower of their carrying amount and their fair value less costs to sell. No write-downs were made for impairment.

The consolidated net income from discontinued operations is reported in the consolidated income statement separately from expenditures and income from continuing operations; prior-year figures are shown on a comparable basis. In the consolidated cash flow statement, discontinued operations are included in the cash inflows/outflows from operating, investing, and financing activities; prior-year figures are shown on a comparable basis. Furthermore, assets and liabilities held for sale are disclosed in the consolidated statement of financial position in aggregated form.

To the extent that the disclosures in the notes to the financial statements are related to the consolidated income statement, they refer to continuing operations (with the exception of the section of the Notes entitled "Acquisitions and discontinued operations").

## **PROVISIONS**

Provisions for pensions and similar obligations are determined in accordance with the projected unit credit method prescribed by IAS 19, based on actuarial reports, applying the mortality tables "Richtafeln 2005 G" issued by Heubeck AG. In this connection, the demographic assumptions applied, as well as expected salary and pension trends and the interest rate to be used, are determined on the basis of current estimates as at the reporting date. Accordingly, actuarial gains and losses can result from deviations between the actual parameters as at the reporting date and the assumptions used for the calculation. These actuarial results – as well as revenues from plan assets that are not included in net interest – are recognized immediately and completely as they arise and are disclosed as generated Group earnings in equity. Past service cost is recognized immediately as an expense in profit or loss.

To determine the net obligation deriving from defined benefit retirement plans, the fair value of the plan assets is deducted from the present value of the pension obligations.

Other provisions are set up for all other uncertain obligations and risks of the Aurubis Group provided that a related obligation to third parties results from a past event, the settlement of which is expected to result in an outflow of cash resources, and the respective amount can be reliably estimated. If the effect of the time value of money is material, non-current provisions are recognized at their present value.

## **OTHER NON-FINANCIAL LIABILITIES**

Other non-financial assets are recognized at amortized cost.



## Significant estimates and assumptions

Accounting and measurement in the consolidated financial statements are influenced by a large number of estimates and assumptions that are based on past experience, as well as additional factors, including expectations about future events. All estimates and assessments are subject to continuous review and re-evaluation. The use of estimates and assumptions is especially necessary in the following areas:

### IMPAIRMENT OF GOODWILL

Goodwill is tested for impairment at least annually in line with the accounting policies. In this context, the recoverable amount is calculated on the basis of the value in use [Q Intangible assets, page 131](#). The calculation of the value in use in particular requires estimates of future cash flows on the basis of calculations made for planning purposes. The impairment test of the Aurubis Hamburg Copper Products cash-generating unit (CGU) resulted in no impairment of goodwill either in the current or past fiscal year. A 10 % reduction in the predicted cash flows or an increase of 0.5 percentage points in the WACC after taxes – from 6.1% to 6.6% – would also not result in the requirement to recognize any impairment losses.

### FAIR VALUES IN CONJUNCTION WITH BUSINESS COMBINATIONS

Acquired assets, liabilities, and contingent liabilities are recognized with their fair values when accounting for business combinations. Discounted cash flow (DCF)-based procedures, the results of which depend on assumed future cash flows and other assumptions, are often used in this context. The measurement of contingent liabilities depends significantly on the assumptions with respect to the future resource outflows and the probability of their occurrence.

### FAIR VALUES OF DERIVATIVES AND OTHER FINANCIAL INSTRUMENTS

The fair values of financial instruments for which there are no quoted prices in an active market are determined on the basis of financial calculation procedures and are influenced by assumptions specific to the instrument. Estimates have a particularly significant influence when the fair value needs to be determined for financial instruments for which at least one significant parameter is not based on observable market data (Level 3 of the fair value hierarchy). The selection and application of suitable parameters and assumptions require an assessment by management. Extrapolation and interpolation procedures have to be applied in particular when data are derived from uncommon market transactions. Detailed information can be found in the section [Q Financial instruments, pages 113-116](#).

### ACCOUNTING FOR INVENTORIES

Various estimates have to be made in connection with the accounting treatment of inventories. For example, individual estimation procedures are applied when quantifying inventories as well as in the determination of the metal yield content.

### PENSION PROVISIONS AND OTHER PROVISIONS

Within the Aurubis Group, retirement benefits for employees are provided on the basis of both defined benefit plans and defined contribution plans.

Obligations deriving from defined benefit pension plans are measured in accordance with actuarial procedures. These procedures are based on several actuarial assumptions, such as, for example, the assumed interest rate, expected salary and pension developments, employee fluctuations, and life expectancy. For the purposes of determining the assumed interest rate, high-quality corporate bonds with commensurate terms and currencies are used as a source of reference. Deviations of the actual development from the assumptions at the beginning of the reporting period lead to remeasurement of the net liability.

When recognizing other provisions, assumptions are made with regard to the probability of the occurrence and the amount and timing of the outflow of resources, which by their nature are subject to uncertainty.

Other significant estimates relate to the determination of the useful lives of intangible assets and items of property, plant, and equipment, the collectability of receivables, and the measurement of inventory risks within inventories.

### DISCONTINUED OPERATIONS AND ASSETS HELD FOR SALE

In accordance with IFRS 5, discontinued operations are measured at the lower of their carrying amount and their fair value less costs to sell. No write-downs were made for impairment.



## Changes in accounting and measurement methods due to new standards and interpretations

The following standards which affected the Group were applied for the first time in fiscal year 2017/18.

### Standards and interpretations compulsorily applied for the first time

|         | Standard/interpretation  | Compulsory application in the EU | Adoption by European Commission | Impact   |
|---------|--|----------------------------------|---------------------------------|--|
| IAS 7   | Amendments: Cash Flow Statement  | 1/1/2017                         | 11/6/2017                       | More detailed disclosures on changes in liabilities deriving from financing activities are presented in a reconciliation table. See also the notes to the cash flow statement. |
| IAS 12  | Recognition of Deferred Tax Assets for Unrealized Losses<br>Follow-up project from the Annual Improvements to IFRS (2012–14 cycle) | 1/1/2017                         | 11/6/2017                       | no impacts   |
| IFRS 12 | Annual Improvements to IFRS (2014–16 cycle)  | 1/1/2017                         | 2/7/2018                        | no impacts   |

The following standards are to be applied to all fiscal years beginning after October 1, 2017. They were not adopted early in the consolidated financial statements.

### Standards and interpretations not adopted early

|                | Standard/interpretation                                  | Compulsory application in the EU | Adoption by European Commission | Impact  |
|----------------|--|----------------------------------|---------------------------------|---|
| IFRS 9         | Financial Instruments – Classification and Measurement   | 1/1/2018                         | 11/22/2016                      | A detailed description of the impacts follows the overview in this table  |
| IFRS 15        | Revenue from Contracts with Customers                    | 1/1/2018                         | 9/22/2016                       | A detailed description of the impacts follows the overview in this table  |
| IFRS 15        | Amendments: Revenue from Contracts with Customers        | 1/1/2018                         | 10/31/2017                      | A detailed description of the impacts follows the overview in this table  |
| IFRS 1, IAS 28 | Annual Improvements to IFRS (2014–16 cycle)              | 1/1/2018                         | 2/7/2018                        | no impacts  |
| IFRS 2         | Amendments: Share-based Payment                          | 1/1/2018                         | 2/26/2018                       | no impacts  |
| IFRS 4         | Amendments: Insurance Contracts                          | 1/1/2018                         | 11/3/2017                       | no impacts  |
| IAS 40         | Amendments: Investment Property                          | 1/1/2018                         | 3/14/2018                       | no impacts  |
| IFRIC 22       | Foreign Currency Transactions and Advance Consideration  | 1/1/2018                         | 3/28/2018                       | Translation of advance consideration designated in a foreign currency into the functional currency at the spot exchange rate on the day of payment. Aurubis does not expect any material effects. |
| IFRIC 23       | Uncertainty over Income Tax Treatments                   | 1/1/2019                         | 10/23/2018                      | no impacts  |
| IFRS 16        | Leases   | 1/1/2019                         | 10/31/2017                      | A detailed description of the impacts follows the overview in this table  |
| IFRS 9         | Amendments: Financial instruments                        | 1/1/2019                         | 3/22/2018                       | A detailed description of the impacts follows the overview in this table  |
| IAS 19         | Amendments: Employee Benefits                            | 1/1/2019                         | open                            | no impacts  |
| IAS 28         | Amendments: Investments in Associates and Joint Ventures | 1/1/2019                         | open                            | no impacts  |

|           | Standard/interpretation                     | Compulsory application in the EU | Adoption by European Commission | Impact   |
|-----------|---|----------------------------------|---------------------------------|--|
| Various   | Annual Improvements to IFRS (2015–17 cycle) | 1/1/2019                         | open                            | no impacts   |
| Framework |   | 1/1/2020                         | open                            | Based on our current understanding, Aurubis does not expect any material effects.  |
| IFRS 17   | Insurance Contracts                         | 1/1/2021                         | open                            | The standard regulates the principles covering recognition, measurement, reporting, and disclosures for insurance contracts within the scope of the standard. IFRS 17 will replace the previously applicable IFRS 4. Based on our current understanding, Aurubis does not expect any material effects. |

## IFRS 9

IFRS 9 “Financial Instruments” amends the accounting requirements for the classification and measurement of financial assets, the impairment of financial assets, and for hedge accounting.

The classification and measurement of financial assets are determined on the basis of the business model in use and the structure of the cash flows. In this connection, a financial asset is initially classified as either measured “at amortized cost,” “at fair value through other comprehensive income,” or “at fair value through profit and loss.”

The classification is initially based on the allocation of financial assets according to the business model. For this purpose, Aurubis examined the financial assets and determined which of them were held for the purpose of collecting contractual cash and cash equivalents (“held to collect”), which were “held to collect and sell,” and which could not be allocated to any of the two categories (“other”).

Trade receivables held for sale within the context of factoring arrangements will be classified as “held to collect and sell.” Accordingly, these receivables will therefore be measured at market value.

For equity instruments that are not classified as “held for trading,” the measurement category “at fair value through OCI” (FVOCI) can be optionally selected. When these equity instruments are sold, the profits and losses deriving from these instruments that are unrealized up to this point are transferred to revenue reserves and are not disclosed in the income statement. Aurubis will allocate fixed asset securities to the FVOCI category.

In addition to the allocation based on the business model, an analysis was also carried out with regard to the characteristics of the contractual cash flows of the underlying financial assets on the basis of the so-called SPPI criteria (Solely Payment of Principal and Interest). In the case of financial assets, it was therefore examined whether the contractual cash flows solely represent payments of principal and interest on the principal amount outstanding.

The classification of financial liabilities under IFRS 9 is unchanged from the current accounting requirements that are applicable under IAS 39.

As far as the classification and measurement of financial assets is concerned, Aurubis expects a conversion effect of € 24.6 million to derive from the use of the option to measure investment securities at fair value through OCI.

The determination of any impairment and the creation of risk provisions changes from an incurred loss model to an expected credit loss model. The expected credit loss model is also applicable to all financial instruments that are either measured at amortized cost, such as bank balances, loans receivable, and other receivables, or at fair value through OCI. In this context, a risk provision is established for the entire term of the financial instrument at the time it is acquired. The general approach stipulates a three-stage process for determining risk provisions. Depending on the counterparty’s credit default risk, the model requires different levels of impairment assessment at these various stages. A simplified approach for the recognition of impairment losses is applied for trade receivables. In this approach, the expected credit losses are calculated using a so-called cohort model, which is based on the data of the past three fiscal years. Actual historical bad debt losses are applied to the outstanding receivables, taking into account forward-looking information.

Based on our investigations, there are no material effects deriving from the application of the expected credit loss model.

The designation option for risk components in non-financial underlying transactions is regulated within the scope of hedge accounting. In addition, IFRS 9 eliminates the quantitative limits for the effectiveness test. The requirements for documentation and disclosure are broadened.

Furthermore, there is an option to remove certain derivative components, such as the fair values of options, from the designation as being in a hedging relationship and to segregate the changes in fair values of these components by recognizing them directly in equity.

For Aurubis, there are no material affects for hedge accounting purposes.

The transition to IFRS 9 takes place retrospectively without a change in prior-year figures as at October 1, 2018. This does not apply to the segregation of certain, non-designated components of derivatives, through recognition of the related impacts directly in equity, which is carried out retroactively for the purpose of presenting comparative figures. The effects of the transition are recognized in equity when IFRS 9 is applied for the first time.

#### IFRS 15

IFRS 15 regulates the point in time and amount at which revenues from customer contracts are to be recognized and the extent of the required disclosures in the notes to the financial statements. The new standard does not differentiate between different types of contracts and activities performed, but establishes uniform criteria for when a performance obligation is to be recognized as revenue. Accordingly, revenue is recognized when the customer obtains control of the agreed goods and services and can derive benefit from them. Revenues are measured at the amount of consideration expected to be received by the company. In this context, the determination of revenues is based on a five-stage model that must be applied to all contracts with customers.

The impact analysis was concluded and the need for adjustments was determined in the past fiscal year.

The insights derived from this process with regard to a change in accounting under IFRS 15 mainly affect the point in time at which revenue is recognized, this being dependent on the point in time when control over, or respectively, when the authority to dispose of, the goods or services is transferred.

Revenues are generally recognized by Aurubis at the time they are generated, as the performance obligations entered into primarily relate to the transfer of goods. The point in time of recognition will be delayed slightly under the new standard.

Furthermore, the measurement effect deriving from price adjustments for contracts with customers that had not yet been fixed at the previous reporting date will be made as a separate disclosure within the notes to the financial statements.

No significant impact on the Aurubis Group's results of operations, assets, and financial position are expected to result from the implementation of IFRS 15.

The transition to IFRS 15 takes place retrospectively without a change in prior-year figures as at October 1, 2018. The conversion effects will therefore be cumulatively recognized at the time of first application. Receivables from customer contracts will decrease by a figure in the single-digit million range at this point in time. A compensating effect, taking into account related tax impacts, will result in changes in the amounts reported for inventories and equity.

#### IFRS 16

This standard regulates the accounting treatment for leases. IFRS 16 replaces the previously applicable IAS 17, as well as three leasing-related interpretations. The application of IFRS 16 is compulsory for all companies using IFRS and is valid for all leasing arrangements. IFRS 16 provides for a single accounting model for the lessee. Accordingly, right-of-use assets and liabilities deriving from leasing agreements must be recognized in the lessee's statement of financial position except for those with a term of 12 months (or less) or those that can be classified as low-value assets (optional). Aurubis will make use of this option.

For the lessor, the accounting model prescribed by IFRS 16 does not differ materially from the requirements of IAS 17. For accounting purposes, a distinction must still be made here between finance and operating leases.

Aurubis will first apply IFRS 16 in the fiscal year commencing October 1, 2019.

For purposes of the transition to IFRS 16, we currently expect to apply the modified retrospective method.

The impacts of the implementation of IFRS 16 on the Aurubis Group are currently being reviewed in detail. Based on current knowledge, an increase in total assets in the mid-double-digit million range and a slight change in the key control parameters EBT and ROCE are to be expected.

## Acquisitions and discontinued operations

### ACQUISITIONS

On January 19, 2018, Aurubis AG and Codelco Kupferhandel GmbH signed a purchase agreement covering Aurubis' acquisition of all shares of Deutsche Giessdraht GmbH in Emmerich am Rhein. On July 13, 2018, the German "Bundeskartellamt" (federal antitrust office) issued authorization for the planned acquisition of the outstanding shares (40%). The competition authority's consent was a prerequisite for completing the acquisition. The transaction was concluded as of July 31, 2018 (date of closing). The increase in Aurubis AG's ownership interest in Deutsche Giessdraht GmbH from 60% to 100% does not lead to a change in the control relationship. Pursuant to IFRS 10, the acquisition of the non-controlling interests was shown as a transaction between shareholders. The impacts are shown in the following breakdown:

| in € million   |            |
|--|------------|
| Carrying amount of acquired non-controlling interests                            | 2          |
| Purchase price paid to non-controlling interests, including incidental costs     | -19        |
| <b>Decrease in equity attributable to the shareholders of the parent company</b> | <b>-17</b> |

### DISCONTINUED OPERATIONS

The negotiations for the sale of Segment FRP to Wieland-Werke AG that started in Q1 2017/18 led to the signing of the term sheet, which covers key aspects of the intended sale, on February 12, 2018. From this date on, Segment FRP has been classified as discontinued operations pursuant to IFRS 5. The contract for the sale of Segment FRP was signed on March 29, 2018. The final execution of the sales contract is subject to approval by the antitrust authorities.

### Consolidated net income from discontinued operations

| in € million   | 12 months<br>2017/18 | 12 months<br>2016/17 |
|--|----------------------|----------------------|
| Revenues   | 1,270                | 1,160                |
| Changes in inventories of finished goods and work in process                                 | -1                   | 22                   |
| Expenses   | -1,224               | -1,134               |
| <b>Earnings before taxes (EBT)</b>   | <b>45</b>            | <b>48</b>            |
| Income taxes   | -16                  | -14                  |
| <b>Consolidated net income from discontinued operations</b>                                  | <b>29</b>            | <b>34</b>            |
| Consolidated net income attributable to Aurubis AG shareholders from discontinued operations | 29                   | 34                   |

Internal Group expenses and income are fully eliminated in the process of determining the consolidated result for both continuing and discontinued operations. The internal Group transactions are eliminated from an economic perspective, i.e., taking the Aurubis Group's future trading relationships into account. The Group will maintain existing supply relationships with the discontinued business division after the sale of Segment FRP. Revenues of Aurubis AG and its subsidiaries deriving from deliveries to the discontinued business division were therefore fully eliminated there.

### Carrying amounts of the main groups of assets held for sale and related liabilities

| in € million  | 9/30/2018  |
|---|------------|
| <b>Assets</b>   |            |
| Fixed assets  | 173        |
| Deferred tax assets                                   | 1          |
| Non-current receivables and other assets              | 2          |
| Inventories   | 274        |
| Current receivables and other assets                  | 122        |
| Cash and cash equivalents                             | 18         |
| <b>Assets held for sale</b>                           | <b>590</b> |
| <b>Equity and liabilities</b>                         |            |
| Deferred tax liabilities                              | 16         |
| Non-current provisions                                | 34         |
| Non-current liabilities                               | 1          |
| Current provisions                                    | 8          |
| Current liabilities                                   | 103        |
| <b>Liabilities deriving from assets held for sale</b> | <b>162</b> |

| in € million  | 12 months<br>2017/18 | 12 months<br>2016/17 |
|---|----------------------|----------------------|
| <b>Cash flows from discontinued operations</b>        |                      |                      |
| Cash inflow from operating activities (net cash flow) | 18                   | 13                   |
| Cash outflow from investing activities                | -16                  | -14                  |
| Cash outflow from financing activities                | -1                   | -1                   |

## Notes to the Income Statement

### 1. REVENUES

| Analysis by product group<br>in € thousand | 2017/18           | 2016/17          |
|--|-------------------|------------------|
| Wire rod                                   | 4,282,959         | 3,740,631        |
| Precious metals                            | 2,383,450         | 2,419,959        |
| Copper cathodes                            | 2,211,942         | 2,328,930        |
| Continuous cast products                   | 892,383           | 802,644          |
| Strip, profiles, and shapes                | 349,968           | 328,056          |
| Chemicals and other products               | 303,046           | 259,503          |
|  | <b>10,423,748</b> | <b>9,879,723</b> |

A further breakdown of Aurubis Group revenues by Group segments is provided in the context of segment reporting.

### 2. CHANGES IN INVENTORIES OF FINISHED GOODS AND WORK IN PROCESS

| in € thousand   | 2017/18    | 2016/17        |
|-----------------|------------|----------------|
| Finished goods  | -67,518    | -13,578        |
| Work in process | 67,958     | -2,959         |
|                 | <b>440</b> | <b>-16,537</b> |

The changes in inventories in the year reported were due to increased volumes of intermediate products, which were nearly compensated by volume counter-effects in finished products. The changes in inventories in the previous year were primarily due to decreased inventory volumes that were not fully compensated by price counter-effects.

### 3. OWN WORK CAPITALIZED

Own work capitalized of € 18,923 thousand (previous year: € 8,484 thousand) primarily includes production costs and purchased materials and is mainly related to the Industrial Heat and Future Complex Metallurgy projects.

### 4. OTHER OPERATING INCOME

| in € thousand   | 2017/18       | 2016/17       |
|---|---------------|---------------|
| Cost reimbursements                                   | 22,297        | 25,844        |
| Income from commissions and refunded freight expenses | 9,941         | 7,800         |
| Compensation and damages                              | 370           | 1,641         |
| Income deriving from the reversal of provisions       | 1,585         | 415           |
| Other income  | 9,205         | 11,581        |
|   | <b>43,398</b> | <b>47,281</b> |

### 5. COST OF MATERIALS

| in € thousand                            | 2017/18          | 2016/17          |
|--|------------------|------------------|
| Raw materials, supplies, and merchandise | 9,212,758        | 8,587,965        |
| Cost of purchased services               | 251,942          | 237,685          |
|  | <b>9,464,700</b> | <b>8,825,650</b> |

The cost of materials ratio, represented by the ratio of the cost of materials to revenues and changes in inventories, was 90.8% (previous year: 89.5%).

### 6. PERSONNEL EXPENSES

| in € thousand   | 2017/18        | 2016/17        |
|---|----------------|----------------|
| Wages and salaries  | 281,957        | 265,895        |
| Social security contributions, pension and other benefit expenses | 69,985         | 72,264         |
|   | <b>351,942</b> | <b>338,159</b> |

Pension expenses include allocations to the provisions for pensions.

The average number of employees in the Group during the year was as follows:

|              | 2017/18      | 2016/17      |
|--------------|--------------|--------------|
| Blue collar  | 4,096        | 4,057        |
| White collar | 2,219        | 2,159        |
| Apprentices  | 256          | 261          |
|              | <b>6,571</b> | <b>6,477</b> |

Continuing operations account for 4,803 employees (previous year: 4,730 employees) on average for the year. Total compensation of the Aurubis AG Executive Board members newly appointed in fiscal year 2017/18 includes, among other components, a share-based compensation component with a cash settlement.

The recognition and measurement standards of IFRS 2 are to be applied to this compensation component. The component relates to virtual deferred stock with a two-year, forward-looking assessment basis, whereby this assessment basis is dependent upon the achievement of targets for the operating EBT component and individual performance. The virtual deferred stock compensation plan does not include dividend payments, and the payout is limited to 150 % of the starting value. To determine the fair value of the limitation of the share price development, the value of a European call option is calculated using the Black Scholes formula.

The following parameters were taken as a basis for the calculation of the fair value of the virtual deferred stock compensation plan:

|  | 9/30/2018 |
|--|-----------|
| Share price (in €)   | 60.24     |
| Exercise price (in €)  | 90.59     |
| Expected volatility (weighed average, in %)                  | 27.00     |
| Expected term (weighed average, in years)                    | 2         |
| Expected dividend (in %)                                     | 2.41      |
| Risk-free interest rate<br>(based on government bonds, in %) | 0.50      |
| Fair value (in € thousand)                                   | 93        |

The expected volatility is based on an assessment of the historic volatility of the company's share price, especially in the period that corresponds to the expected term.

The personnel expenses deriving from the deferred stock compensation plan amounted to € 93 thousand (previous year: € 0 thousand) and are included in the same amount as provisions at the balance sheet date.

## 7. DEPRECIATION AND AMORTIZATION

Depreciation of property, plant, and equipment and amortization of intangible assets totaled € 119,470 thousand (previous year: € 120,715 thousand) for the Group. This comprises depreciation of € 117,279 thousand (previous year: € 118,750 thousand) on property, plant, and equipment and amortization of € 2,191 thousand (previous year: € 1,965 thousand) on intangible assets.

No impairment losses were recognized on intangible assets and property, plant, and equipment during the current or previous fiscal year.

The figure of € 124,677 thousand that is reported for depreciation of property, plant, and equipment and amortization of intangible assets in the table showing changes in assets includes depreciation on investments in connection with an electricity supply contract of € 5,207 thousand, which is disclosed under the cost of materials.

A breakdown of the depreciation of property, plant, and equipment and amortization of intangible assets is provided in the summary of changes in the Group's intangible assets and property, plant, and equipment [Q Intangible assets, page 129](#), and [Property, plant, and equipment, page 132](#).

## 8. OTHER OPERATING EXPENSES

| in € thousand             | 2017/18        | 2016/17        |
|---------------------------|----------------|----------------|
| Selling expenses          | 88,349         | 84,922         |
| Administrative expenses   | 71,021         | 70,037         |
| Other taxes               | 2,514          | 2,548          |
| Sundry operating expenses | 54,915         | 53,082         |
|                           | <b>216,799</b> | <b>210,589</b> |

The selling expenses mainly comprise freight costs.

## 9. INTEREST

| in € thousand    | 2017/18        | 2016/17        |
|------------------|----------------|----------------|
| Interest income  | 3,592          | 2,680          |
| Interest expense | -15,775        | -17,732        |
|                  | <b>-12,183</b> | <b>-15,052</b> |

The interest income mainly derives from interest-bearing customer receivables.

The interest expense primarily results from borrowings. Among other items, the interest expense includes the net interest deriving from defined benefit plans, amounting to € 3,647 thousand (previous year: € 3,080 thousand).

## 10. OTHER FINANCIAL RESULT

| in € thousand            | 2017/18    | 2016/17     |
|--------------------------|------------|-------------|
| Other financial income   | 689        | 219         |
| Other financial expenses | -51        | -720        |
|                          | <b>638</b> | <b>-501</b> |

As in the previous year, other financial income results primarily from securities.

## 11. INCOME TAXES

Income taxes comprise both current income taxes, as well as deferred taxes. Tax liabilities and receivables include obligations or claims from domestic and foreign income taxes from previous years and the current year. Income taxes consist of the following:

| in € thousand       | 2017/18       | 2016/17       |
|---------------------|---------------|---------------|
| Current taxes       | 64,168        | 71,664        |
| Deferred taxes      | -4,621        | 18,393        |
| <b>Income taxes</b> | <b>59,547</b> | <b>90,057</b> |

Prior-year figures have been adjusted due to IFRS 5.

Current taxes include tax credits of € 426 thousand (previous year: tax expenses of € 994 thousand) and deferred taxes include tax expenses of € 280 thousand (previous year: € 282 thousand) deriving from earlier fiscal years.

The difference between the deferred tax credit of € 4,621 thousand and deferred tax expense of € 18,393 thousand in the previous year mainly results from the change of the tax rate in Belgium and the change in temporary differences relating to the statement of financial position, as well as from tax loss carryforwards.

Applicable German tax legislation for fiscal year 2017/18 foresees a corporate income tax rate of 15 % (previous year: 15 %), plus a solidarity surcharge of 5.5 % (previous year: 5.5 %). The trade tax rate applicable for Aurubis AG amounts to 16.59 % (previous year: 16.59 %). For the other German Group companies, trade tax rates between 11.09 % and 16.45 % (previous year: 11.09 % and 16.45 %) are applicable. The foreign companies are subject to their respective national income tax rates, which vary between 10 % and 33.99 % (previous year: 10 % and 33.99 %).

Measurement is carried out using the tax rates that are in force as of the closing date or that apply shortly thereafter. Due to the adoption of the US tax reform on December 22, 2017, the tax rates for fiscal years that start after December 31, 2017 decrease from 35.98 % and 34 % to 23.37 % and 21 %, respectively. For 2017/18, a mixed tax rate of 26.52 % and 24.25 % was used. In Belgium, the tax rate for fiscal years that end on December 31, 2018 or later is 29.58 % (previously 33.99 %) and the tax rate for fiscal years that end on December 31, 2020 or later is 25 %. We therefore determined a rate of 33.99 % for the purpose of calculating current taxes, and respective rates of 29.58 % and 25 % for the purpose of calculating short-term and long-term deferred taxes. This measurement approach leads to one-time effects from the remeasurement of deferred tax assets and liabilities.

The Group taxes include tax effects from foreign subsidiaries to a significant degree. As a consequence, the tax rate of the German parent company of 32.41 % (previous year: 32.41 %) is not applied as the Group tax rate for calculation purposes, but a Group-wide mixed tax rate of 23.18 % (previous year: 21.73 %) is used instead. As in the prior year, the main contributions to earnings come from Aurubis AG and Aurubis Bulgaria AD.

The actual income taxes of € 59,547 thousand (previous year: € 90,057 thousand) were € 15,094 thousand lower (previous year: € 1,354 thousand higher) than the expected income tax expense of € 74,641 thousand (previous year: € 88,703 thousand). The difference between the expected and the actual income tax expense is due to the reasons outlined in the following tax reconciliation:

### Reconciliation

| in € thousand  | 2017/18        | 2016/17        |
|--|----------------|----------------|
| <b>Earnings before taxes</b>                                       | <b>322,053</b> | <b>408,285</b> |
| <b>Expected tax charge at 23.18 %<br/>(previous year: 21.73 %)</b> | <b>74,641</b>  | <b>88,703</b>  |
| <b>Changes in the expected<br/>tax charge due to:</b>              |                |                |
| – changes in tax rates   | -15,662        | -152           |
| – non-recognition and correction of<br>deferred taxes              | 137            | 495            |
| – taxes for previous years   | -146           | 1,276          |
| – non-deductible expenses  | 1,952          | 2,400          |
| – non-taxable income/<br>trade tax reductions                      | -733           | -217           |
| – notional interest deduction<br>(Belgium)                         | -585           | -2,763         |
| – outside basis differences  | -56            | 293            |
| – other  | -1             | 22             |
| <b>Income taxes</b>  | <b>59,547</b>  | <b>90,057</b>  |

Prior-year figures have been adjusted due to IFRS 5.

The effects deriving from changes in tax rates, amounting to € -15,662 thousand, mainly result from the change in the tax rate in Belgium used for calculating both short-term and long-term deferred taxes.

Effects deriving from the non-recognition of deferred taxes result from non-recognized loss carryforwards, amounting to € 126 thousand (previous year: € 393 thousand).



The “notional interest deduction” is a special feature to be observed under Belgian tax law, which results in a lower assessment basis for the current taxes of Aurubis Belgium NV/SA in the reporting period amounting to € 1,720 thousand (previous year: € 8,129 thousand).

The recognized deferred tax assets and deferred tax liabilities result from the following recognition and measurement differences in individual items in the statement of financial position, from tax loss carryforwards and from outside basis differences (OBD):

|  | 9/30/2018 <sup>1</sup> |                          | 9/30/2017           |                          |
|--|------------------------|--------------------------|---------------------|--------------------------|
| in € thousand  | Deferred tax assets    | Deferred tax liabilities | Deferred tax assets | Deferred tax liabilities |
| Intangible assets  | 5,918                  | 202                      | 7,896               | 204                      |
| Property, plant, and equipment                               | 1,029                  | 81,283                   | 974                 | 109,460                  |
| Financial fixed assets                                       | 0                      | 0                        | 2                   | 371                      |
| Financial fixed assets accounted for using the equity method | 0                      | 0                        | 105                 | 3,135                    |
| Inventories  | 7,182                  | 168,277                  | 23,257              | 188,989                  |
| Receivables and other assets                                 | 2,900                  | 29,309                   | 5,911               | 32,750                   |
| Pension provisions   | 43,220                 | 55                       | 61,962              | 3,647                    |
| Other provisions   | 5,662                  | 174                      | 8,875               | 579                      |
| Liabilities  | 32,021                 | 2,960                    | 31,912              | 5,960                    |
| Tax loss carryforwards                                       | 196                    | 0                        | 5,764               | 0                        |
| Outside basis differences                                    | 0                      | 894                      | 0                   | 950                      |
| Offsetting   | -95,386                | -95,386                  | -140,911            | -140,911                 |
| <b>Consolidated Statement of Financial Position</b>          | <b>2,742</b>           | <b>187,768</b>           | <b>5,747</b>        | <b>205,134</b>           |

<sup>1</sup> Only continuing operations.

€ 10,082 thousand (previous year: € 29,168 thousand) of the deferred tax assets and € 197,586 thousand (previous year: € 221,740 thousand) of the deferred tax liabilities will be realized within the next twelve months. Deferred tax assets of € 88,046 thousand (previous year: € 117,490 thousand) and deferred tax liabilities of € 85,568 thousand (previous year: € 124,305 thousand) will be realized after more than twelve months. These figures represent the amounts prior to offsetting.

The income taxes to be accounted for in equity (other comprehensive income) are distributed among the following areas:

|  | 9/30/2018 <sup>1</sup> |              | 9/30/2017 <sup>1</sup> | 9/30/2017    |                |
|--|------------------------|--------------|------------------------|--------------|----------------|
| in € thousand                            | Balance                | Change       | Adjusted balance       | Balance      | Change         |
| Deferred taxes                           |                        |              |                        |              |                |
| Derivatives                              | 1,620                  | 6,283        | -4,663                 | -4,663       | -6,314         |
| Pension provisions                       | 10,732                 | -3,769       | 14,501                 | 12,281       | -26,484        |
| <b>Total</b>                             | <b>12,352</b>          | <b>2,514</b> | <b>9,838</b>           | <b>7,618</b> | <b>-32,798</b> |
| Also included: exchange rate differences | 0                      | 0            | 0                      | -619         | -26            |
| Current taxes                            | -1,880                 | -189         | -1,691                 | -1,691       | 204            |

<sup>1</sup> Only continuing operations.

The realization of deferred tax assets is considered to be sufficiently probable after taking the Group's forecast development plans and the profit expectations of the subsidiaries into account.

Loss carryforwards existed totaling € 35,474 thousand (previous year: € 45,415 thousand). Deferred tax assets of € 196 thousand (previous year: € 523 thousand) were recognized in respect of income tax losses of € 882 thousand (previous year: € 2,383 thousand) to the extent that deferred tax liabilities were available or if the companies concerned had positive future earnings forecasts.

No deferred tax assets were set up with respect to loss carryforwards of € 34,567 thousand (previous year: € 43,032 thousand), as the possibility of utilizing them is believed to be unlikely from a current perspective. The tax loss carryforwards deemed not to be utilizable can be carried forward without limitation.

Deferred tax liabilities of € 894 thousand (previous year: € 950 thousand) were set up with respect to the differences between the proportional equity of subsidiaries recognized in the consolidated statement of financial position and the investment carrying amounts for these subsidiaries shown in the tax-based records of the respective parent company (so-called outside basis differences) as at the reporting date. No deferred tax liabilities were set up for outside basis differences deriving from undistributed earnings of subsidiaries amounting to € 15,722 thousand (previous year: € 16,114 thousand), since the reversal of these differences is unlikely in the foreseeable future.

## 12. CONSOLIDATED NET INCOME ATTRIBUTABLE TO NON-CONTROLLING INTERESTS

Of the reported consolidated net income for 2017/18 of € 291,414 thousand (previous year: € 352,384 thousand), a share of income of € 1,161 thousand (previous year: € 1,501 thousand) is attributable to shareholders other than the shareholders of Aurubis AG, Hamburg.

On the one hand, this relates to the non-controlling interests in Aurubis Bulgaria AD, Pirdop, and, on the other hand, to the non-controlling interests in the results generated by Deutsche Giessdraht GmbH, Emmerich, up until the point in time that the Group increased its interest in this company.

## 13. EARNINGS PER SHARE

Basic earnings per share are calculated by dividing the consolidated net earnings excluding the non-controlling interests by the weighted average number of shares outstanding during the fiscal year.

|  | 2017/18     | 2016/17     |
|--|-------------|-------------|
| Consolidated net income attributable to Aurubis AG shareholders from continuing operations (in € thousand) | 261,345     | 316,727     |
| Weighted average number of shares (in thousand units)  | 44,957      | 44,957      |
| <b>Basic earnings per share from continuing operations (in €)</b>  | <b>5.81</b> | <b>7.04</b> |
| <b>Diluted earnings per share from continuing operations (in €)</b>  | <b>5.81</b> | <b>7.04</b> |

Diluted earnings per share are determined by augmenting the average number of the shares outstanding during the fiscal year to include the maximum number of shares that could have been issued if all conversion rights on convertible bonds had been exercised. Where applicable, the consolidated net income is increased at the same time by the interest expense incurred on convertible bonds less the corresponding taxes.

Since conversion rights on convertible bonds existed neither in the reporting year nor in the prior year, the diluted earnings per share for the Aurubis Group correspond to the basic earnings per share.

## Notes to the Statement of Financial Position

### 14. INTANGIBLE ASSETS

The development of the costs of acquisition or generation and the accumulated amortization and impairment-related write-downs of the intangible assets are as follows:

#### Costs of acquisition or generation

| in € thousand  | 10/1/2017      | Discontinued operations | Additions    | Disposals     | Transfers | 9/30/2018      |
|--|----------------|-------------------------|--------------|---------------|-----------|----------------|
| <b>Intangible assets</b>                             |                |                         |              |               |           |                |
| Franchises, industrial property rights, and licenses | 155,750        | -4,326                  | 1,741        | -7,781        | 654       | 146,038        |
| Goodwill   | 43,170         | 0                       | 0            | 0             | 0         | 43,170         |
| Payments on account for intangible assets            | 4,312          | 0                       | 5,147        | 0             | -654      | 8,805          |
|  | <b>203,232</b> | <b>-4,326</b>           | <b>6,888</b> | <b>-7,781</b> | <b>0</b>  | <b>198,013</b> |

#### Amortization and impairment losses

| in € thousand  | 10/1/2017      | Discontinued operations | Amortization and impairment losses for the fiscal year | Disposals    | Transfers | 9/30/2018      |
|--|----------------|-------------------------|--|--------------|-----------|----------------|
| <b>Intangible assets</b>                             |                |                         |  |              |           |                |
| Franchises, industrial property rights, and licenses | -47,092        | 2,866                   | -7,398   | 1,182        | 0         | -50,442        |
| Goodwill   | -24,522        | 0                       | 0  | 0            | 0         | -24,522        |
| Payments on account for intangible assets            | 0              | 0                       | 0  | 0            | 0         | 0              |
|  | <b>-71,614</b> | <b>2,866</b>            | <b>-7,398</b>  | <b>1,182</b> | <b>0</b>  | <b>-74,964</b> |

#### Carrying amount

| in € thousand  | 9/30/2018      | 9/30/2017      |
|--|----------------|----------------|
| <b>Intangible assets</b>                             |                |                |
| Franchises, industrial property rights, and licenses | 95,596         | 108,658        |
| Goodwill   | 18,648         | 18,648         |
| Payments on account for intangible assets            | 8,805          | 4,312          |
|  | <b>123,049</b> | <b>131,618</b> |

## Costs of acquisition or generation

| in € thousand  | 10/1/2016      | Additions     | Disposals   | Transfers | 9/30/2017      |
|--|----------------|---------------|-------------|-----------|----------------|
| <b>Intangible assets</b>                             |                |               |             |           |                |
| Franchises, industrial property rights, and licenses | 105,802        | 49,521        | -885        | 1,312     | 155,750        |
| Goodwill   | 43,170         | 0             | 0           | 0         | 43,170         |
| Payments on account for intangible assets            | 1,594          | 4,031         | 0           | -1,312    | 4,312          |
|  | <b>150,566</b> | <b>53,552</b> | <b>-885</b> | <b>0</b>  | <b>203,232</b> |

## Amortization and impairment losses

| in € thousand  | 10/1/2016      | Amortization and impairment losses for the fiscal year | Disposals  | Transfers | 9/30/2017      |
|--|----------------|--|------------|-----------|----------------|
| <b>Intangible assets</b>                             |                |  |            |           |                |
| Franchises, industrial property rights, and licenses | -41,304        | -6,674   | 885        | 0         | -47,092        |
| Goodwill   | -24,522        | 0  | 0          | 0         | -24,522        |
| Payments on account for intangible assets            | 0              | 0  | 0          | 0         | 0              |
|  | <b>-65,826</b> | <b>-6,674</b>  | <b>885</b> | <b>0</b>  | <b>-71,614</b> |

## Carrying amount

| in € thousand  | 9/30/2017      | 9/30/2016     |
|--|----------------|---------------|
| <b>Intangible assets</b>                             |                |               |
| Franchises, industrial property rights, and licenses | 108,658        | 64,498        |
| Goodwill   | 18,648         | 18,648        |
| Payments on account for intangible assets            | 4,312          | 1,594         |
|  | <b>131,618</b> | <b>84,740</b> |

Intangible assets comprise licenses acquired for a consideration, primarily in connection with a long-term electricity supply contract, as well as goodwill on consolidation arising in the Aurubis Group.

The additions in the previous year included a large individual investment (€ 46,981 thousand) related to our long-term electricity supply agreement.

As in the prior year, most of the goodwill (€ 17,439 thousand) is attributable to the Aurubis Hamburg Copper Products cash-generating unit (CGU).

Aurubis carries out an impairment test on goodwill at least annually. For the impairment test on goodwill, the goodwill acquired in conjunction with a business combination is allocated to the CGU that is expected to benefit from the synergies of the business combination. If the carrying amount of the CGU to which the goodwill was allocated exceeds its recoverable amount, a commensurate impairment loss is recognized on the allocated goodwill.

As in the prior year, there was no requirement to recognize an impairment loss for the Aurubis Hamburg Copper Products CGU.

The recoverable amount is the higher of the fair value less costs to sell and value in use. Aurubis determines the recoverable amount on the basis of the value in use. The value in use is determined by means of discounting future cash flows after taxes with a risk-adjusted discount rate (WACC) after taxes (discounted cash flow method). Due to the calculated cash flows after taxes, a cost of capital after taxes is used as well.

The cash flow estimates cover a planning horizon of four years before transferring to perpetuity. The cash flows were established within the scope of a qualified planning process including use of internal company values based on past experience and extensive market knowledge, and they take into consideration management's assessment and estimates regarding the future development of the regional market.

In addition to the weighted capital costs, the significant assumptions used to calculate the value in use are the forecast earnings trend and the sustainable growth rate of the terminal value at a level of 1%. The growth rate was derived from future expectations and does not exceed the long-term average growth rates of the respective markets.

The WACC used for discounting purposes amounted to 6.1% after taxes or 8.6% before taxes as at September 30, 2018 (previous year: 5.1% after taxes or 7.2% before taxes).

As in the prior year, there was no requirement to recognize impairment losses on intangible assets with a limited useful life.

Capitalized development costs of € 673 thousand were recognized during the fiscal year (previous year: € 381 thousand). Research costs are recognized in profit or loss for the respective periods [Q Research and development, page 162](#).

## 15. PROPERTY, PLANT, AND EQUIPMENT

The costs of acquisition or construction and the accumulated depreciation and impairment losses on property, plant, and equipment are as follows:

### Costs of acquisition or construction

| in € thousand                                     | 10/1/2017        | Discontinued operations | Exchange rate differences | Additions      | Disposals      | Transfers | 9/30/2018        |
|---|------------------|-------------------------|---------------------------|----------------|----------------|-----------|------------------|
| <b>Property, plant, and equipment</b>             |                  |                         |                           |                |                |           |                  |
| Land and buildings                                | 662,485          | -42,581                 | -469                      | 4,959          | -3,419         | 7,281     | 628,256          |
| Technical equipment and machinery                 | 2,115,720        | -220,228                | -579                      | 29,495         | -38,252        | 32,527    | 1,918,683        |
| Other equipment, factory, and office equipment    | 92,455           | -14,916                 | -25                       | 6,307          | -3,958         | 2,141     | 82,004           |
| Leased assets *                                   | 43,999           | -348                    | 0                         | 13,748         | 0              | 0         | 57,399           |
| Payments on account for assets under construction | 62,740           | -6,236                  | -29                       | 104,454        | -184           | -41,949   | 118,796          |
|   | <b>2,977,399</b> | <b>-284,309</b>         | <b>-1,102</b>             | <b>158,963</b> | <b>-45,813</b> | <b>0</b>  | <b>2,805,138</b> |

### Depreciation and impairment losses

| in € thousand                                     | 10/1/2017         | Discontinued operations | Exchange rate differences | Depreciation and impairment losses for the fiscal year | Disposals     | Transfers | 9/30/2018         |
|---|-------------------|-------------------------|---------------------------|--|---------------|-----------|-------------------|
| <b>Property, plant, and equipment</b>             |                   |                         |                           |  |               |           |                   |
| Land and buildings                                | -372,588          | 11,851                  | 395                       | -17,261  | 3,268         | 0         | -374,335          |
| Technical equipment and machinery                 | -1,250,734        | 148,141                 | 576                       | -90,618  | 37,433        | 928       | -1,154,274        |
| Other equipment, factory and office equipment     | -64,805           | 11,843                  | 25                        | -6,256   | 3,837         | 0         | -55,356           |
| Leased assets *                                   | -19,015           | 348                     | 0                         | -3,144   | 0             | 0         | -21,811           |
| Payments on account for assets under construction | -421              | 0                       | 29                        | 0  | 0             | -928      | -1,320            |
|   | <b>-1,707,563</b> | <b>172,183</b>          | <b>1,025</b>              | <b>-117,279</b>  | <b>44,538</b> | <b>0</b>  | <b>-1,607,096</b> |

### Carrying amount

| in € thousand                                     | 9/30/2018        | 9/30/2017        |
|---|------------------|------------------|
| <b>Property, plant, and equipment</b>             |                  |                  |
| Land and buildings                                | 253,921          | 289,897          |
| Technical equipment and machinery                 | 764,409          | 864,986          |
| Other equipment, factory and office equipment     | 26,648           | 27,650           |
| Leased assets *                                   | 35,588           | 24,984           |
| Payments on account for assets under construction | 117,476          | 62,319           |
|   | <b>1,198,042</b> | <b>1,269,836</b> |

\* Leased assets primarily comprise buildings, as well as technical equipment and machinery.

## Costs of acquisition or construction

| in € thousand                                     | 10/1/2016        | Exchange rate differences | Additions      | Disposals      | Transfers | 9/30/2017        |
|---|------------------|---------------------------|----------------|----------------|-----------|------------------|
| <b>Property, plant, and equipment</b>             |                  |                           |                |                |           |                  |
| Land and buildings                                | 650,508          | -536                      | 10,015         | -4,570         | 7,068     | 662,485          |
| Technical equipment and machinery                 | 2,057,740        | -3,453                    | 32,431         | -28,777        | 57,779    | 2,115,720        |
| Other equipment, factory and office equipment     | 90,880           | -363                      | 6,719          | -5,776         | 995       | 92,455           |
| Leased assets *                                   | 34,678           | 0                         | 9,600          | -279           | 0         | 43,999           |
| Payments on account for assets under construction | 66,593           | -220                      | 62,209         | 0              | -65,842   | 62,740           |
|   | <b>2,900,398</b> | <b>-4,572</b>             | <b>120,974</b> | <b>-39,402</b> | <b>0</b>  | <b>2,977,399</b> |

## Depreciation and impairment losses

| in € thousand                                     | 10/1/2016         | Exchange rate differences | Depreciation and impairment losses for the fiscal year | Disposals     | Transfers | 9/30/2017         |
|---|-------------------|---------------------------|--|---------------|-----------|-------------------|
| <b>Property, plant, and equipment</b>             |                   |                           |  |               |           |                   |
| Land and buildings                                | -357,174          | 74                        | -19,591  | 4,103         | 0         | -372,588          |
| Technical equipment and machinery                 | -1,174,399        | 1,644                     | -103,657   | 25,678        | 0         | -1,250,734        |
| Other equipment, factory and office equipment     | -63,212           | 329                       | -7,516   | 5,594         | 0         | -64,805           |
| Leased assets *                                   | -17,037           | 0                         | -2,257   | 279           | 0         | -19,015           |
| Payments on account for assets under construction | -422              | 1                         | 0  | 0             | 0         | -421              |
|   | <b>-1,612,244</b> | <b>2,048</b>              | <b>-133,021</b>  | <b>35,654</b> | <b>0</b>  | <b>-1,707,563</b> |

## Carrying amount

| in € thousand                                     | 9/30/2017        | 9/30/2016        |
|---|------------------|------------------|
| <b>Property, plant, and equipment</b>             |                  |                  |
| Land and buildings                                | 289,897          | 293,334          |
| Technical equipment and machinery                 | 864,986          | 883,341          |
| Other equipment, factory and office equipment     | 27,650           | 27,668           |
| Leased assets *                                   | 24,984           | 17,641           |
| Payments on account for assets under construction | 62,319           | 66,171           |
|   | <b>1,269,836</b> | <b>1,288,155</b> |

\* Leased assets primarily comprise buildings, as well as technical equipment and machinery.



Depreciation in the current fiscal year does not include any impairment losses.

Rented or leased items of property, plant, and equipment recognized as fixed assets totaled € 35,588 thousand (previous year: € 24,984 thousand).

The addition of € 13,748 thousand in the fiscal year resulted from new leased facilities in connection with the storage and transshipment of copper concentrates in Bulgaria. The carrying amount of the leased facilities was € 21,388 thousand as at September 30, 2018. The terms of these contracts provide for fixed installment payments over fixed periods. No collateral has been provided.

Furthermore, the carrying amount of the leased facilities includes carrying amounts of € 4,747 thousand (previous year: € 5,268 thousand) for ships used for transporting copper concentrates and sulfuric acid, and carrying amounts of € 3,654 thousand (previous year: € 4,097 thousand) for the warehouse used for storing copper concentrates in Brunsbüttel. Some of the lease payments are adjusted annually based on the indexed price trend for industrial products. The lease agreements are mainly based on fixed rental arrangements. Collateral has not been provided for them.

No property, plant, and equipment was pledged as security for loans within the Group as at September 30, 2018 and September 30, 2017. Purchase commitments for fixed assets amounted to € 105,554 thousand as at September 30, 2018 (previous year: € 69,335 thousand).

Minimum stocks are recognized in technical equipment and machinery as components of the respective technical equipment and machinery. Minimum stocks are quantities of materials that are necessary to establish and ensure a production facility's continuing functionality for its intended use. A total of € 291,359 thousand was attributable to the technical minimum stock as at September 30, 2018 (previous year: € 291,381 thousand).

## 16. INVESTMENT PROPERTY

The investment property held in the previous fiscal year by Aurubis Switzerland SA was sold during the fiscal year reported.

The fair value of the property was € 7,955 thousand as at September 30, 2017. Due to the limited availability of market data and/or data and measurement parameters that are not directly observable on the market (such as market rents and rates of return), the fair value measurement of the investment property was classified as Level 3 in the measurement hierarchy according to IFRS 13.

The following table shows the development in the carrying amount of investment property:

| in € thousand                           | 9/30/2018 | 9/30/2017    |
|---|-----------|--------------|
| Balance as at October 1                 | 7,955     | 8,515        |
| Disposal due to the sale                | -7,842    | 0            |
| Loss/gain from the change in fair value | 0         | -135         |
| Exchange rate impacts                   | -113      | -425         |
| <b>Balance as at September 30</b>       | <b>0</b>  | <b>7,955</b> |

## 17. FINANCIAL FIXED ASSETS

| in € thousand                     | 9/30/2018     | 9/30/2017     |
|-----------------------------------|---------------|---------------|
| Interests in affiliated companies | 1,321         | 1,419         |
| Investments                       | 115           | 174           |
| Other financial fixed assets      | 31,493        | 28,087        |
|                                   | <b>32,929</b> | <b>29,680</b> |

The interests in affiliated companies and investments included in the financial fixed assets in the amount of € 1,436 thousand (previous year: € 1,593 thousand) are classified as "available for sale." In the fiscal year reported, all interests in affiliated companies were measured at amortized cost since it would only be possible to ascertain the market value reliably within the context of concrete sales negotiations. These interests are not quoted and there is no active market. There is no current intention to sell the interests.

An overview of the investments included in the financial assets of Aurubis AG, Hamburg, is presented at the end of this report.

Other financial fixed assets primarily include fixed asset securities, which mainly comprise investments in Salzgitter AG, Salzgitter, and are classified as "available for sale."

## 18. INVESTMENTS ACCOUNTED FOR USING THE EQUITY METHOD

Schwermetall Halbzeugwerk GmbH & Co. KG, Stolberg, is a joint venture in which Aurubis holds a 50% interest. It is operated as a joint venture with a partner and is assigned to Segment FRP. The business objective of the company is the fabrication and marketing of pre-rolled strip made of copper and copper alloys. Pursuant to IFRS 11.24, in conjunction with IAS 28, Schwermetall Halbzeugwerk GmbH & Co. KG is accounted for using the equity method. The shares are categorized as discontinued operations and are accounted for as assets held for sale.

The following table provides a reconciliation of the net assets of Schwermetall Halbzeugwerk GmbH & Co. KG to the investment carrying amount.

### Reconciliation of the combined financial information

| in € thousand  | 2017/18  | 2016/17       |
|--|----------|---------------|
| Net assets as at October 1                                       | 100,976  | 89,007        |
| Profit/loss of the period (5 months in the fiscal year reported) | 7,395    | 23,317        |
| Other comprehensive income                                       | 0        | 552           |
| Distribution   | -11,376  | -11,900       |
| Net assets as at September 30                                    | 96,995   | 100,976       |
| Share of joint ventures (50 %)                                   | 48,498   | 50,489        |
| Elimination of unrealized intra-Group profits                    | 149      | 149           |
| Effects deriving from income taxes                               | -415     | -415          |
| Reclassification as assets held for sale                         | -48,232  | 0             |
| <b>Carrying amount</b>   | <b>0</b> | <b>50,223</b> |

## 19. INVENTORIES

| in € thousand                      | 9/30/2018        | 9/30/2017        |
|------------------------------------|------------------|------------------|
| Raw materials and supplies         | 812,866          | 702,605          |
| Work in process                    | 605,346          | 642,922          |
| Finished goods, merchandise        | 262,216          | 405,363          |
| Payments on account of inventories | 270              | 1,382            |
|                                    | <b>1,680,698</b> | <b>1,752,272</b> |

As at the reporting date, write-downs of € 29,920 thousand were recorded against inventories (previous year: € 10,248 thousand).

## 20. TRADE ACCOUNTS RECEIVABLE

The trade accounts receivable as at September 30, 2018 and as at September 30, 2017 were due within one year.

The age structure of the trade accounts receivable is as follows:

| in € thousand             | Carrying amount | of which: neither written down as at the reporting date nor overdue | of which: not written down as at the reporting date and overdue in the following time spans |                         |                    |
|---------------------------|-----------------|---|---|-------------------------|--------------------|
|                           |                 |   | less than 30 days   | between 30 and 180 days | more than 180 days |
| as at September 30, 2018  |                 |   |   |                         |                    |
| Trade accounts receivable | 274,501         | 230,928   | 39,209  | 1,480                   | 2,884              |
| as at September 30, 2017  |                 |   |   |                         |                    |
| Trade accounts receivable | 357,403         | 304,694   | 42,460  | 6,695                   | 3,554              |

Movements on the allowances for trade accounts receivable that were not covered by commercial credit insurance were as follows:

| in € thousand                           | 9/30/2018    | 9/30/2017    |
|---|--------------|--------------|
| <b>Specific allowances</b>              |              |              |
| <b>Balance as at October 1</b>          | <b>3,048</b> | <b>2,946</b> |
| Discontinued operations                 | -1,228       | 0            |
| Changes in allowances during the period | -28          | 102          |
| Additions                               | 57           | 105          |
| Reversals                               | -71          | 0            |
| Exchange rate impacts                   | -14          | -3           |
| <b>Balance as at September 30</b>       | <b>1,792</b> | <b>3,048</b> |

All expenses and income deriving from allowances and write-offs of trade accounts receivable are shown respectively under other operating expenses or other operating income.

As regards the balances of trade accounts receivable that are neither impaired nor overdue, there is no indication as at the reporting date that the debtors will not fulfill their payment obligations.

Credit risks from trade accounts receivable were largely secured through commercial credit insurance.

**21. OTHER RECEIVABLES AND OTHER ASSETS**

Other receivables and other assets comprise both other financial and other non-financial assets.

Non-current receivables and other assets are made up as follows as at the reporting date:

| in € thousand   | 9/30/2018     | 9/30/2017     |
|---|---------------|---------------|
| <b>Non-current (with a residual term of more than 1 year)</b>                                   |               |               |
| Derivative financial instruments of the held-for-trading category                               | 14,530        | 5,195         |
| Derivative financial instruments held as hedging instruments in the context of hedge accounting | 0             | 3,459         |
| Other non-current financial assets  | 13,400        | 21,440        |
| <b>Non-current financial assets</b>   | <b>27,930</b> | <b>30,094</b> |
| Other non-current non-financial assets  | 764           | 2,226         |
| <b>Other non-current non-financial assets</b>   | <b>764</b>    | <b>2,226</b>  |

Current receivables and other assets are made up as follows as at the balance sheet date:

| in € thousand   | 9/30/2018     | 9/30/2017      |
|---|---------------|----------------|
| <b>Current (with a residual term of less than 1 year)</b>                                       |               |                |
| Derivative financial instruments of the held-for-trading category                               | 40,727        | 28,089         |
| Derivative financial instruments held as hedging instruments in the context of hedge accounting | 2,145         | 18,878         |
| Receivables from related parties  | 2,096         | 19,187         |
| Sundry other current financial assets   | 26,451        | 33,942         |
| <b>Other current financial assets</b>   | <b>71,419</b> | <b>100,096</b> |
| Income tax receivables  | 2,492         | 6,842          |
| Sundry other current non-financial assets   | 37,358        | 46,458         |
| <b>Other current non-financial assets</b>   | <b>39,850</b> | <b>53,300</b>  |

The sundry other current non-financial assets mainly comprise VAT receivables of Aurubis Bulgaria AD, Pirdop.

The receivables from related parties disclosed in the previous year primarily comprise receivables from Schwermetall Halbzeugwerk GmbH & Co. KG, Stolberg. The decrease resulted in part from the classification of the company as a discontinued operation.

The sundry other current financial assets include a continuing involvement arising from del credere risks with factoring companies and late payment and currency risks deriving from current trade

accounts receivable in the amount of € 13,358 thousand (previous year: € 22,210 thousand). The level of continuing involvement corresponds to the maximum risk of loss, mainly based on the assumption that all receivables open on the reporting date that were sold remain outstanding for the entire period for which Aurubis can be held responsible for the late payment risk.

A liability of € 13,372 thousand was reported in connection with the continuing involvement (previous year: € 23,719 thousand). All trade accounts receivable sold to factoring companies have a term of less than one year, meaning that the fair value of the continuing

involvement and the associated liability each correspond to the carrying amount.

All of the receivables covered by two factoring contracts for which the main opportunities and risks were transferred to the purchaser of the receivables were completely derecognized.

For one of the contracts, which has been classified to discontinued operations, the maximum loss Aurubis has to bear from credit risks is limited to a purchase price reduction. This is retained by the buyer at the time of sale of the receivables and is ultimately repaid in the amount of the unused portion. The purchase price reduction for the sold and derecognized receivables (nominal volume: € 12,664 thousand) amounted to € 1,500 thousand in the previous year and is included in sundry other financial assets. In the previous year, a total of € 434 thousand was recorded as an expense deriving from the sale of the receivables.

In total, outstanding receivables of € 285,807 thousand (previous year: € 252,863 thousand) had been sold to factoring companies as at the reporting date.

With the exception of interest derivatives, there is no interest rate fluctuation risk deriving from any receivable or other asset. Further information on the interest derivatives is provided in [Q Financial instruments, pages 149-154](#).

There were no allowances on other financial assets in the fiscal year reported (previous year: € 1,089 thousand).

As regards other financial assets that are neither impaired nor overdue, there is no indication as at the reporting date that the debtors will not fulfill their payment obligations.

## 22. CASH AND CASH EQUIVALENTS

Cash and cash equivalents consist of current account balances with banks, cash in hand, and checks. Cash at banks mainly comprises euro balances.

## 23. EQUITY

The share capital amounted to € 115,089,210.88 and is divided into 44,956,723 no-par-value shares, each with a notional amount of € 2.56. The share capital is fully paid in.

The Executive Board is authorized, subject to the approval of the Supervisory Board, to increase the share capital by February 23, 2021, by up to € 57,544,604.16 once or in several installments.

The share capital has been conditionally increased by up to € 57,544,604.16 by issuing up to 22,478,361 new no-par-value shares with a proportionate notional amount per share of € 2.56 of the share capital (conditional capital increase). It will be used to grant shares to the holders or creditors of conversion and/or option rights from convertible bonds, bonds with warrants, profit participation rights, or participating bonds (or combinations of these instruments) that can be issued by March 1, 2022.

Generated Group equity comprises consolidated net income, the revenue reserves of all Group companies, the accumulated unappropriated earnings of the subsidiaries since their initial consolidation, and the accumulated amounts resulting from consolidation adjustments recognized in profit or loss. In addition, the effects deriving from the remeasurement of the net liability resulting from the defined benefit pension plans (after taxes), which are recorded directly in equity, are also included.

The legal reserve of € 6,391 thousand, which is not available for distribution, is also included in this amount. The change in generated Group equity from € 1,870,573 thousand as at September 30, 2017, to € 2,090,677 thousand as at September 30, 2018, includes the dividend payment of € 65,187 thousand, the acquisition of non-controlling interests of € 16,912 thousand, positive effects of € 11,950 thousand (after taxes) recognized in equity deriving from the remeasurement of the net liability resulting from the defined benefit pension plans, and the consolidated net income for fiscal year 2017/18 of € 290,253 thousand.

Changes in accumulated other comprehensive income totaling € -16,981 thousand (previous year: € 24,490 thousand) mainly comprise gains and losses of € -26,795 thousand (previous year: € 25,688 thousand) deriving from the measurement of hedges and was partially compensated for by income taxes and the measurement at market of financial investments.

An amount of € 17,201 thousand (previous year: € -10,677 thousand) was transferred during the period from other comprehensive income to the consolidated income statement in conjunction with cash flow hedge accounting, which is primarily reflected in the cost of materials.

The non-controlling interests amounting to € 556 thousand (previous year: € 3,097 thousand) comprise the interests of non-Group shareholders in the equity of one company (two in the previous year) that is fully consolidated by Aurubis AG. This only applies to Aurubis Bulgaria AD, Pirdop, as at September 30, 2018. Aurubis' interest in Deutsche Giessdraht GmbH, Emmerich, increased from 60 % to 100 % [Q Acquisitions and discontinued operations, page 123](#).

The change in non-controlling interests includes a proportional share of the dividend payment, amounting to € 1,370 thousand, and the acquisition of non-controlling interests in the amount of € 2,332 thousand. The consolidated result of € 1,161 thousand in fiscal year 2017/18 had an opposite effect.

Changes in equity are presented in detail in the consolidated statement of changes in equity.

### PROPOSED APPROPRIATION OF EARNINGS

The separate financial statements of Aurubis AG, Hamburg, have been prepared in accordance with German accounting principles (HGB – German Commercial Code).

|   |                         |
|---|-------------------------|
| <b>Net income for the year of Aurubis AG</b>        | <b>€ 119,660,056.48</b> |
| Retained profit brought forward from the prior year | € 74,967,948.39         |
| Allocations to other revenue reserves               | € 59,800,000.00         |
| <b>Unappropriated earnings</b>                      | <b>€ 134,828,004.87</b> |

A proposal will be made to the Annual General Meeting that Aurubis AG's unappropriated earnings of € 134,828,004.87 are used to pay a dividend of € 1.55 per no-par-value share (= € 69,682,920.65) and that € 65,145,084.22 be carried forward.

The company currently does not hold any own shares. If the number of no-par-value shares changes until the Annual General Meeting, an accordingly adjusted proposal on the distribution of profits will be presented at the Annual General Meeting, with an unchanged proposal for the appropriation of the profit of € 1.55 per no-par-value share with a dividend entitlement.

A dividend of € 1.45 per share was paid in fiscal year 2017/18, totaling € 65,187,248.35.

### ADDITIONAL INFORMATION ON CAPITAL MANAGEMENT

The main purpose of management control is to increase the corporate value of the Aurubis Group, in that a positive contribution to the enterprise as a whole is generated beyond the capital costs. The Group's liquidity sourcing is secured through a combination of the Group's cash flow, borrowings, as well as lines of credit available from our banks. Existing credit facilities and lines of credit can compensate for fluctuations in the cash flow development at any time. The objective is to keep the Group's debt structure in equilibrium in the long term. Control and monitoring are carried out on the basis of defined key ratios. Net debt and liquidity are controlled in the medium and short term by means of regular cash flow forecasts.

One of the main key ratios used to determine and compare profitability is ROCE (return on capital employed), which reflects the yield on the capital that is utilized in the operating business or for investments. ROCE is defined as the ratio of EBIT (earnings before interest and taxes) to capital employed as at the reporting date. Capital employed comprises equity and interest-bearing liabilities, less cash and cash equivalents.

The Aurubis Group's operating ROCE decreased slightly from 15.1 % in the previous year to 14.8 % in the current fiscal year. This is primarily due to the increase in capital employed.

All external requirements under financial covenants were fulfilled in the fiscal year reported.

### 24. DEFERRED TAXES

The breakdown of the deferred tax liabilities is presented in [Q Income taxes, pages 126-128](#).

### 25. PENSION PROVISIONS AND SIMILAR OBLIGATIONS

Within the Aurubis Group, retirement benefits for eligible employees are provided on the basis of both defined benefit plans and defined contribution plans.

The majority of defined benefit plan obligations in the Aurubis Group relate to Germany and the US. On the one hand, these represent individual contractual direct obligations. On the other hand, the Group provides benefits in the form of defined benefit obligations within collective plans. Both funded and unfunded plans exist. The subsidiaries in the US were classified as discontinued operations, so the obligations from these pension plans as at the balance sheet date are no longer recognized as pension provisions

but as liabilities deriving from assets held for sale. In the following reconciliations, the reclassification effect is included in the line "Discontinued operations."

In Germany, the Group provides eligible employees with pension benefits as well as disability and surviving dependent benefits. These are provided to a great extent through pension and support funds, the assets of which may solely be utilized to satisfy the Aurubis Group's pension obligations.

Generally, the amount of the pension benefit per qualified year of service is determined as a percentage of a pensionable salary. In Germany, pensions are reviewed every three years and adjusted, where necessary, in a manner corresponding to the price index development.

In Germany, the company pension plan arrangements for new employees hired after September 29, 2003, were converted to the form of defined contribution plans. Processing is carried out by an external pension fund and an insurance company.

Furthermore, a subsidiary in the US grants employees pension, health care, and life insurance benefits for the period after retirement under specific conditions related to age and duration of employment with the company. These retirement benefits are based on collective agreements that only apply to unionized employees. These represent lifelong pension benefits whose level depends on the duration of employment. The amount of the benefits does not depend on the salary. Health care benefits are provided after the employee leaves the company until an established minimum age. While the pension commitments are mainly financed through the specific assets of a separate pension fund, there is no separate fund for the health care and life insurance benefits provided in the US.

Within the Group, actuarial reports were obtained for all pension obligations. The reports take uniform Group-wide accounting policies into consideration, while nevertheless reflecting special country-specific circumstances.

The company has refrained from using the new "Richttafeln 2018 G" mortality tables published by Heubeck AG on October 4, 2018 as at the reporting date of September 30, 2018, as the final validation and implementation of the new mortality tables was not yet completed at the time the annual financial statements were being prepared. The company continues to apply the "Richttafeln 2005 G" mortality tables.

In addition, the following market discount rates, salary, and pension trends were used as a basis to calculate the pension obligations:

|                              | 9/30/2018 | 9/30/2017 |
|------------------------------|-----------|-----------|
| Discount rate                | 1.70 %    | 1.80 %    |
| Expected income development  | 2.75 %    | 2.75 %    |
| Expected pension development | 1.60 %    | 1.60 %    |

A discount rate of 3.67 % was taken as a basis for the measurement of the pension provision of Aurubis Buffalo, Inc., Buffalo, in the previous year. Salary and pension trends are not relevant for the calculation of the pension obligations of the US subsidiary. Aurubis Buffalo Inc., Buffalo, is classified as a discontinued operation in the fiscal year reported. A discount rate of 4.11 % was used for the measurement of the pension provision included in the liabilities deriving from the assets held for sale.

The net pension provision for defined benefit obligations disclosed in the consolidated statement of financial position as at September 30, 2018 and September 30, 2017 is as follows:

| in € thousand                              | 9/30/2018      | 9/30/2017      |
|--|----------------|----------------|
| Present value of pension obligations       | 509,158        | 570,537        |
| of which funded                            | 409,156        | 442,188        |
| – Fair value of plan assets                | 310,152        | 326,855        |
| <b>Net carrying amount on September 30</b> | <b>199,006</b> | <b>243,682</b> |
| of which disclosed as assets               | 0              | 0              |
| of which disclosed as liabilities          | 199,006        | 243,682        |

The net liability for benefit obligations, taking into account separate reconciliations for the present value of the defined benefit obligation as well as the plan assets, is derived as follows:



## Development of the present value of the pension obligations

| in € thousand  | 9/30/2018      | 9/30/2017      |
|--|----------------|----------------|
| Present value of unfunded benefit obligations                        | 128,349        | 141,999        |
| Present value of funded benefit obligations                          | 442,188        | 496,440        |
| <b>Present value of the pension obligations as at October 1</b>      | <b>570,537</b> | <b>638,439</b> |
| Discontinued operations  | -68,758        | 0              |
| Current service cost   | 8,618          | 13,794         |
| Past service cost  | 0              | 377            |
| Loss from plan settlements   | 64             | 20             |
| Interest cost on the pension obligations                             | 8,778          | 8,202          |
| Remeasurements   | 7,977          | -62,616        |
| Actuarial gains/losses from demographic assumptions                  | 0              | 0              |
| Actuarial gains/losses from financial assumptions                    | 8,159          | -67,676        |
| Actuarial gains/losses from adjustments based on experience          | -182           | 5,060          |
| Benefits paid  | -18,058        | -19,708        |
| Payments for settlements   | 0              | -4,837         |
| Exchange rate difference   | 0              | -3,136         |
| <b>= Present value of the pension obligations as at September 30</b> | <b>509,158</b> | <b>570,537</b> |

In the previous year, the present value of the defined benefit pension obligation included € 54,473 thousand in obligations for a US subsidiary, € 16,517 thousand of which related to health care and life insurance benefits.

## Development of the plan assets

| in € thousand   | 2017/18        | 2016/17        |
|---|----------------|----------------|
| <b>Fair value of the plan assets as at October 1</b>    | <b>326,855</b> | <b>316,439</b> |
| Discontinued operations                                 | -36,147        | 0              |
| Interest income   | 5,131          | 4,238          |
| Remeasurement effects                                   | 19,594         | 19,623         |
| Benefits paid   | -12,619        | -12,983        |
| Payments for plan settlements                           | 0              | -4,837         |
| Contributions made by employer                          | 7,338          | 6,309          |
| Exchange rate difference                                | 0              | -1,934         |
| <b>Fair value of the plan assets as at September 30</b> | <b>310,152</b> | <b>326,855</b> |

## Development of the net liability

| in € thousand                           | 2017/18        | 2016/17        |
|---|----------------|----------------|
| <b>Net liability as at October 1</b>    | <b>243,682</b> | <b>322,000</b> |
| Discontinued operations                 | -32,611        | 0              |
| Current service cost                    | 8,618          | 13,794         |
| Past service cost                       | 0              | 377            |
| Loss from plan settlements              | 64             | 20             |
| Net interest result                     | 3,647          | 3,964          |
| Remeasurement effects                   | -11,617        | -82,239        |
| Benefits paid                           | -5,439         | -6,725         |
| Employer contributions to the plan      | -7,338         | -6,309         |
| Exchange rate difference                | 0              | -1,200         |
| <b>Net liability as at September 30</b> | <b>199,006</b> | <b>243,682</b> |

The remeasurement effects are directly recorded in other comprehensive income and are disclosed under generated Group equity. The net interest result is disclosed under interest expense. In contrast, the other components of the pension expenses (current and past service cost and the loss deriving from plan settlements) are recorded in personnel expenses.

In Germany, the defined benefit plans are primarily administered through processes in operation within the pension fund and the benefit fund. In this context, the pension fund is overseen by the German Federal Financial Supervisory Authority (BaFin).

Regulations related to the pension fund's capital investment portfolio are established by the "Ordinance on the Investment of Restricted Assets of Insurance Undertakings (Investment Ordinance)." The Investment Ordinance regulates the permitted quantitative distribution and mix of capital investments for the pension fund. A large portion of the pension fund's assets are invested in a segmented special fund. The contributions are calculated in accordance with the respectively valid technical business plan.

The risk capital investments (equity instruments and debt instruments with a rating lower than investment grade) may account for a maximum of 35% of the carrying amount of the coverage assets. The real estate rate is a maximum of 25% of the coverage assets' carrying amount. Derivatives are primarily used for hedging purposes. The risk of longevity is taken into account by the actuary, after performing a review, by adjusting the biometric parameters where necessary.

The benefit fund is also oriented to the Investment Ordinance with respect to permitted capital investments. The contributions are within the range of the tax-related possibilities.

The plan assets in the Group are made up as follows:

| in € thousand             | 9/30/2018      | 9/30/2017      |
|---------------------------|----------------|----------------|
| Cash and cash equivalents | 4,592          | 3,173          |
| Equity instruments        | 37,997         | 71,193         |
| Debt instruments          | 108,375        | 115,527        |
| Real estate               | 148,839        | 126,782        |
| Reinsurance policies      | 4,509          | 3,857          |
| Other current net assets  | 5,840          | 6,323          |
| <b>Total plan assets</b>  | <b>310,152</b> | <b>326,855</b> |

The plan assets include neither internal financial instruments nor real estate used internally. The equity and debt instruments held via security funds are allocated to their corresponding investment classes in the overview.

Market prices are generally available for the equity instruments as a result of their respective quotations on an active market. The fair value in the previous year included € 20,117 thousand in plan assets of a US subsidiary.

The debt instruments are also regularly traded on an active market. The fair value in the previous year included € 13,129 thousand in plan assets of a US subsidiary.

Real estate is held directly and is located exclusively in Germany. There is no active market from which market prices can be derived. Appraisals were obtained for all of the real estate in the plan assets.

The company is subject to various risks in connection with the defined benefit plans. The company is subject to general actuarial risks in particular, such as the risk of longevity, the risk of interest rate changes, the market price risk, and, to a small extent, a risk of inflation.

#### SENSITIVITY ANALYSIS

The following sensitivity analysis shows the effect of changes in the parameters on the present value of the defined benefit obligations. Each change in a significant actuarial assumption was analyzed separately, i.e., if one parameter varied, the other parameters remained constant. Possible correlation effects between the individual assumptions are not taken into consideration:

| in € thousand                | Change in parameter | Effect on the obligation |          |           |          |
|------------------------------|---------------------|--------------------------|----------|-----------|----------|
|                              |                     | 9/30/2018                |          | 9/30/2017 |          |
|                              |                     | Increase                 | Decrease | Increase  | Decrease |
| Actuarial interest rate      | ± 50 basis points   | -39,124                  | 44,649   | -43,905   | 48,699   |
| Expected income development  | ± 50 basis points   | 9,493                    | -8,998   | 9,224     | -9,902   |
| Expected pension development | ± 50 basis points   | 30,708                   | -32,859  | 30,307    | -28,863  |
| Life expectancy              | ± 1 year            | 23,605                   | -23,625  | 24,270    | -25,558  |

The undiscounted pension payments are expected to fall due within the following time bands:

| in € thousand         | 9/30/2018      | 9/30/2017      |
|-----------------------|----------------|----------------|
| Less than 1 year      | 19,055         | 21,145         |
| Between 1 and 5 years | 79,086         | 92,586         |
| More than 5 years     | 586,785        | 701,948        |
| <b>Total</b>          | <b>684,926</b> | <b>815,679</b> |

The weighted average duration of obligations from defined benefit plans as at September 30, 2018 is 16.6 years (previous year: 16.5 years).

The expense for defined contribution pension plans amounted to € 20,179 thousand in the year reported (previous year: € 19,140 thousand). These include both voluntary commitments and the employer's contribution made by the Group to statutory pension schemes.

## 26. OTHER PROVISIONS

|                                  | Non-current   |               | Current       |               | Total         |                |
|----------------------------------|---------------|---------------|---------------|---------------|---------------|----------------|
| in € thousand                    | 9/30/2018     | 9/30/2017     | 9/30/2018     | 9/30/2017     | 9/30/2018     | 9/30/2017      |
| Personnel provisions             | 41,803        | 45,539        | 19,915        | 24,469        | 61,718        | 70,008         |
| Provisions for onerous contracts | 0             | 0             | 3,213         | 3,777         | 3,213         | 3,777          |
| Environmental provisions         | 11,966        | 16,470        | 603           | 2,181         | 12,569        | 18,651         |
| Sundry provisions                | 1,806         | 1,669         | 10,045        | 8,586         | 11,851        | 10,255         |
|                                  | <b>55,575</b> | <b>63,678</b> | <b>33,776</b> | <b>39,013</b> | <b>89,351</b> | <b>102,691</b> |

The individual classes of provisions developed as follows during the fiscal year reported:

| in € thousand                    | Balance as at<br>10/1/2017 | Discontinued<br>operations | Used           | Released      | Allocated     | Interest effect | Exchange rate<br>difference | Balance as at<br>9/30/2018 |
|----------------------------------|----------------------------|----------------------------|----------------|---------------|---------------|-----------------|-----------------------------|----------------------------|
| Personnel provisions             | 70,008                     | -9,436                     | -18,722        | -64           | 19,637        | 328             | -33                         | 61,718                     |
| Provisions for onerous contracts | 3,777                      | 0                          | -3,772         | 0             | 3,208         | 0               | 0                           | 3,213                      |
| Environmental provisions         | 18,651                     | -6,819                     | -1,918         | -1,300        | 3,930         | 87              | -62                         | 12,569                     |
| Sundry provisions                | 10,255                     | -1,377                     | -4,803         | -221          | 7,997         | 0               | 0                           | 11,851                     |
|                                  | <b>102,691</b>             | <b>-17,632</b>             | <b>-29,215</b> | <b>-1,585</b> | <b>34,772</b> | <b>415</b>      | <b>-95</b>                  | <b>89,351</b>              |

The personnel provisions consisted mainly of obligations to employees relating to anniversary bonuses, temporary assistance benefits, and those deriving from early retirement agreements. Provisions for environmental risks primarily relate to clean-up measures at the Lünen site. The provisions have terms of up to 23 years. The probable costs were determined taking into account past experience in comparable cases, existing appraisals, and the clean-up methods that will be used on the basis of present knowledge.

The increase in sundry provisions is mainly due to higher provisions for lawsuits.

## 27. LIABILITIES

Financial liabilities as at the reporting date are as follows:

| in € thousand   | 9/30/2018      | 9/30/2017        |
|---|----------------|------------------|
| <b>Non-current (with a residual term of more than 1 year)</b>                                   |                |                  |
| Bank borrowings   | 247,540        | 317,297          |
| Liabilities under finance leases  | 33,324         | 22,969           |
| <b>Non-current borrowings</b>   | <b>280,864</b> | <b>340,266</b>   |
| Derivative financial instruments of the held-for-trading category                               | 68             | 1,007            |
| Liabilities to related parties  | 0              | 950              |
| Derivative financial instruments held as hedging instruments in the context of hedge accounting | 0              | 795              |
| <b>Other non-current financial liabilities</b>  | <b>68</b>      | <b>2,752</b>     |
| <b>Non-current financial liabilities</b>  | <b>280,932</b> | <b>343,018</b>   |
| <b>Current (with a residual term of less than 1 year)</b>                                       |                |                  |
| Trade accounts payable  | 836,748        | 905,083          |
| <b>Trade accounts payable</b>   | <b>836,748</b> | <b>905,083</b>   |
| Bank borrowings   | 29,767         | 8,467            |
| Liabilities under finance leases  | 3,045          | 2,601            |
| <b>Current borrowings</b>   | <b>32,812</b>  | <b>11,068</b>    |
| Derivative financial instruments of the held-for-trading category                               | 27,111         | 32,368           |
| Liabilities to related parties  | 1,136          | 1,139            |
| Derivative financial instruments held as hedging instruments in the context of hedge accounting | 9,065          | 0                |
| Sundry other current financial liabilities  | 76,638         | 96,222           |
| <b>Other current financial liabilities</b>  | <b>113,950</b> | <b>129,729</b>   |
| <b>Current financial liabilities</b>  | <b>983,510</b> | <b>1,045,880</b> |

Sundry other current financial liabilities include personnel obligations such as Christmas bonus payments, outstanding vacation entitlements, and success-based bonus payments.

The liabilities under finance leases represent the present value of the lease installments and the contractually guaranteed residual values at the end of the lease term. Payments are due as follows:

| in € thousand           | 9/30/2018           |                 |                      |        | 9/30/2017           |                 |                      |        |
|-------------------------|---------------------|-----------------|----------------------|--------|---------------------|-----------------|----------------------|--------|
|                         | less than<br>1 year | 1 to<br>5 years | more than<br>5 years | Total  | less than<br>1 year | 1 to<br>5 years | more than<br>5 years | Total  |
| Expected lease payments | 5,051               | 18,276          | 30,194               | 53,521 | 3,752               | 13,377          | 16,668               | 33,797 |
| Interest portion        | 2,006               | 6,705           | 8,441                | 17,152 | 1,151               | 3,696           | 3,380                | 8,227  |
| Redemption portion      | 3,045               | 11,571          | 21,753               | 36,369 | 2,601               | 9,681           | 13,288               | 25,570 |

The finance leasing agreements include both extension and purchase options, as well as price adjustment clauses.

The following table shows the Aurubis Group's contractually agreed undiscounted interest and redemption payments for non-derivative financial liabilities and the discounted net cash flows of the derivative financial instruments with negative fair values.

Payments in the amount of € 328,229 thousand (previous year: € 378,819 thousand) deriving from forward foreign exchange transactions with a negative fair value are matched by receipts of € 317,716 thousand as at September 30, 2018 (previous year: € 373,340 thousand). Derivatives with positive fair values qualify as assets and are therefore not included here.

| in € thousand   | Payments                              |                     |                 |                      |
|---|---------------------------------------|---------------------|-----------------|----------------------|
|   | Carrying<br>amount as at<br>9/30/2018 | less than<br>1 year | 1 to<br>5 years | more than<br>5 years |
| Bank borrowings   | 277,307                               | 29,767              | 243,840         | 3,700                |
| Liabilities under finance leases  | 36,369                                | 3,045               | 11,571          | 21,753               |
| Trade accounts payable  | 836,748                               | 836,748             | 0               | 0                    |
| Liabilities to related parties  | 1,136                                 | 1,136               | 0               | 0                    |
| Derivatives of the held-for-trading category                                | 27,179                                | 27,111              | 68              | 0                    |
| Derivatives designated as hedging instruments for hedge accounting purposes | 9,065                                 | 9,065               | 0               | 0                    |
| Sundry other financial liabilities  | 76,638                                | 76,638              | 0               | 0                    |
| <b>Total</b>  | <b>1,264,442</b>                      | <b>983,510</b>      | <b>255,479</b>  | <b>25,453</b>        |



| in € thousand   | Carrying<br>amount as at<br>9/30/2017 | Payments            |                 |                      |
|---|---------------------------------------|---------------------|-----------------|----------------------|
|   |                                       | less than<br>1 year | 1 to<br>5 years | more than<br>5 years |
| Bank borrowings   | 325,764                               | 8,467               | 317,297         | 0                    |
| Liabilities under finance leases  | 25,570                                | 2,601               | 9,681           | 13,288               |
| Trade accounts payable  | 905,083                               | 905,083             | 0               | 0                    |
| Liabilities to related parties  | 2,089                                 | 1,139               | 950             | 0                    |
| Derivatives of the held-for-trading category                                | 33,375                                | 32,368              | 1,007           | 0                    |
| Derivatives designated as hedging instruments for hedge accounting purposes | 795                                   | 0                   | 795             | 0                    |
| Sundry other financial liabilities  | 96,222                                | 96,222              | 0               | 0                    |
| <b>Total</b>  | <b>1,388,898</b>                      | <b>1,045,880</b>    | <b>329,730</b>  | <b>13,288</b>        |

The presentation above shows the financial instruments that were held as at September 30, 2018 and September 30, 2017 respectively, and for which contractual agreements on the payments existed. Foreign currency amounts are translated at the closing rate.

Aurubis had no bank borrowings secured by mortgages and fixed assets. Financial assets have not been pledged as collateral for bank borrowings.

Non-financial liabilities as at the reporting date are as follows:

| in € thousand   | 9/30/2018     | 9/30/2017     |
|---|---------------|---------------|
| <b>Non-current (with a residual term of more than 1 year)</b> |               |               |
| Non-current non-financial liabilities                         | 0             | 1,213         |
| <b>Non-current non-financial liabilities</b>                  | <b>0</b>      | <b>1,213</b>  |
| <b>Current (with a residual term of less than 1 year)</b>     |               |               |
| Income tax liabilities  | 9,662         | 19,959        |
| <b>Income tax liabilities</b>                                 | <b>9,662</b>  | <b>19,959</b> |
| Other tax liabilities   | 4,941         | 13,289        |
| Social security obligations                                   | 9,163         | 8,526         |
| Advance payments received on orders                           | 5,252         | 4,884         |
| Sundry other current non-financial liabilities                | 4,484         | 6,998         |
| <b>Other current non-financial liabilities</b>                | <b>23,840</b> | <b>33,697</b> |
| <b>Current non-financial liabilities</b>                      | <b>33,502</b> | <b>53,656</b> |

Other tax liabilities mainly comprise VAT liabilities.

## 28. OTHER FINANCIAL COMMITMENTS AND CONTINGENT LIABILITIES

| in € thousand  | 9/30/2018      | 9/30/2017      |
|--|----------------|----------------|
| Capital expenditure commitments                      | 105,554        | 69,335         |
| Obligations under long-term contracts                | 200,862        | 237,331        |
| Warranty obligations                                 | 1,184          | 1,285          |
| Commitments relating to discounted bills of exchange | 1,324          | 1,341          |
|  | <b>308,924</b> | <b>309,292</b> |

The capital expenditure commitments mainly relate to property, plant, and equipment.

Obligations under long-term contracts are mainly related to the provision of transport and handling services by various service providers.

Furthermore, an agreement is in place with an energy utility for the cost-based procurement of one billion kilowatt hours of electricity per annum over a term of 30 years commencing in 2010.

In addition, there is a long-term Group agreement for the supply of oxygen for different sites.

### FINANCIAL COMMITMENTS UNDER LEASES

As at September 30, 2018, commitments under operating leases amounted to € 27,780 thousand (previous year: € 31,305 thousand). These are due as follows:

| in € thousand                      | less than<br>1 year | 1 to<br>5 years | more<br>than<br>5 years | Total         |
|------------------------------------|---------------------|-----------------|-------------------------|---------------|
| <b>9/30/2018</b>                   |                     |                 |                         |               |
| Commitments under operating leases | 8,543               | 14,887          | 4,350                   | <b>27,780</b> |
| <b>9/30/2017</b>                   |                     |                 |                         |               |
| Commitments under operating leases | 9,165               | 15,252          | 6,888                   | <b>31,305</b> |

Lease payments in fiscal year 2017/18 recognized as expenses amounted to € 7,170 thousand (previous year: € 8,078 thousand).

As at September 30, 2018, contingent liabilities of € 1,683 thousand (previous year: € 0 thousand) result from tax risks.

## 29. FINANCIAL INSTRUMENTS

The Aurubis Group is exposed to market risks, liquidity risks, and default risks as a result of the deployment of financial instruments.

### MARKET RISKS

Market risks arise as a result of a possible change in risk factors that lead to a decrease in the market value of the transactions affected by these risk factors. The following groups of general risk factors are relevant for the Aurubis Group: currency exchange rate risks, interest rate risks, and other price risks.

### CURRENCY EXCHANGE RATE RISKS

As a result of its business operations, the Aurubis Group is exposed to currency exchange rate fluctuations. Changes in exchange rates can lead to losses in the value of financial instruments. Foreign currency forward and option contracts are concluded to limit currency risks. These mainly relate to the US dollar. For this purpose, the daily foreign currency positions from underlying transactions are offset against each other each day and any remaining open positions are squared by means of foreign exchange derivatives. Aurubis works exclusively with business partners with good credit standing on all foreign exchange hedge transactions.

Furthermore, foreign currency forward and option contracts were concluded in the past fiscal year to hedge future receipts. Provided the criteria for cash flow hedges were fulfilled, the results of these hedge transactions are recognized in the accompanying financial statements initially in other comprehensive income in the amount of the effective part of the hedge transaction.

These results are recognized in profit or loss as soon as the underlying hedged transaction is recognized in profit or loss. Fundamental shifts in currency relationships, in particular between the euro and the US dollar, can, however, only be hedged for a limited time.

Information on the management of exchange rate risks is provided in the Risk Report in the Management Report.

The foreign currency risk constitutes a cash flow risk and represents the risk position for the following period. This corresponds to the net amount of the nominal volume of the non-derivative and derivative financial instruments held, which are exposed to exchange rate risks. In addition, planned revenue transactions of the following periods are included to the extent that these are taken into account for currency risk management purposes to show the risk position for the following period.

## Foreign currency risk

|   | EUR/USD        |                |
|---|----------------|----------------|
| in € thousand                                       | 9/30/2018      | 9/30/2017      |
| Risk position deriving from recognized transactions | -756,824       | -845,444       |
| Budgeted revenues                                   | 453,640        | 539,182        |
| Forward foreign exchange contracts                  | 499,927        | 601,500        |
| Put option transactions                             | -30,883        | -132,136       |
| <b>Net exposure</b>                                 | <b>165,860</b> | <b>163,102</b> |

IFRS 7 requires a sensitivity analysis to be performed for each type of risk to indicate the market risks. The use of sensitivity analyses determines the potential impacts on profit or loss and on equity, as at the reporting date, of a change in the respective risk variable for each type of risk. The impacts for the periods are determined by relating the hypothetical changes in the risk variables to the amount reported as at the reporting date. In doing so, it is assumed that the amount reported as at the reporting date is representative for the entire year.

In order to determine the exchange rate risk, a sensitivity analysis is performed for the foreign currencies that pose a significant risk for the business; in this instance, the US dollar. For the purpose of the sensitivity analysis for the currencies, it was assumed that the exchange rate of the euro compared with the US dollar would change by  $\pm 10\%$ , respectively.

If the euro had been 10% stronger or weaker against the US dollar on September 30, 2018 or September 30, 2017 as compared to the closing rate prevailing on the reporting date, then – from a foreign currency risk perspective – equity and net income for the year would have changed to the extent shown in the following table. All relevant recognized foreign currency items have been included in the calculation, as well as the budgeted revenues of the following period that were considered in the foreign currency risk exposure assessment.

## Currency sensitivity

|   | EUR/USD       |               |
|---|---------------|---------------|
| in € thousand                             | 9/30/2018     | 9/30/2017     |
| Closing rate                              | 1.1576        | 1.1806        |
| <b>Devaluated rate (EUR against USD)</b>  | <b>1.0418</b> | <b>1.0625</b> |
| Effect on earnings                        | 50,162        | 57,466        |
| of which budgeted revenues                | 50,404        | 59,909        |
| of which non-derivative transactions      | 22,248        | 27,258        |
| of which derivative transactions          | -22,490       | -29,701       |
| Effect on equity                          | -22,601       | -22,030       |
| <b>Appreciated rate (EUR against USD)</b> | <b>1.2734</b> | <b>1.2987</b> |
| Effect on earnings                        | -40,199       | -49,101       |
| of which budgeted revenues                | -41,240       | -49,017       |
| of which non-derivative transactions      | -17,360       | -24,385       |
| of which derivative transactions          | 18,401        | 24,301        |
| Effect on equity                          | 18,058        | 23,021        |

## INTEREST RATE FLUCTUATION RISKS

Interest rate fluctuation risks arise due to potential changes in market interest rates and can result in a change in the fair value of fixed-interest financial instruments and interest payment fluctuations for variable interest rate financial instruments. Any interest rate risks that arise are hedged by interest rate swaps. Interest rate fluctuation risks are of significant importance in the financial sector. Provided the criteria for cash flow hedges are fulfilled for the hedging of variable interest payments, the results of these hedge transactions are initially recognized in other comprehensive income in the amount of the effective portion of the hedge transaction. They are recognized in profit or loss as soon as the underlying hedged transaction is recognized in profit or loss in the respective fiscal year. During the fiscal year reported, financial liabilities bearing variable interest were redeemed prematurely, resulting in the cancellation of the related interest swap.

Details of how interest rate fluctuation risks are managed are provided in the Risk Report in the Management Report.

The table below shows the net exposure for variable interest-bearing risk positions.

## Variable interest-bearing risk positions

|  | Total amount   |                | less than 1 year |                | 1 to 5 years |           | more than 5 years |           |
|--|----------------|----------------|------------------|----------------|--------------|-----------|-------------------|-----------|
| in € thousand                                  | 9/30/2018      | 9/30/2017      | 9/30/2018        | 9/30/2017      | 9/30/2018    | 9/30/2017 | 9/30/2018         | 9/30/2017 |
| Loans/time deposits                            | 424,429        | 526,309        | 424,429          | 526,309        | 0            | 0         | 0                 | 0         |
| Other risk positions                           | -269,014       | -299,050       | -269,014         | -228,050       | 0            | -71,000   | 0                 | 0         |
| of which hedged against the interest rate risk | 0              | 71,000         | 0                | 0              | 0            | 71,000    | 0                 | 0         |
| <b>Net exposure</b>                            | <b>155,415</b> | <b>298,259</b> | <b>155,415</b>   | <b>298,259</b> | <b>0</b>     | <b>0</b>  | <b>0</b>          | <b>0</b>  |

In accordance with IFRS 7, interest rate fluctuation risks are presented in a sensitivity analysis, which reflects the effects of a change in market interest rates on interest income, interest expenses and equity.

In the event of an increase (decrease) in all relevant interest rates by 100 basis points (50 basis points), equity and earnings for the year as at September 30, 2018 and September 30, 2017, respectively, would change, as shown by the following table. The same items have been included in the calculation as were considered for the determination of the net exposure presented above.

## Interest rate sensitivities

|                    | 9/30/2018 |        | 9/30/2017 |        |
|--------------------|-----------|--------|-----------|--------|
| in € thousand      | +100 BP   | -50 BP | +100 BP   | -50 BP |
| Effect on earnings | 2,478     | -2,019 | 3,758     | -2,533 |
| Effect on equity   | 0         | 0      | 1,286     | -660   |

## OTHER PRICE RISKS

As a result of its business operations, the Aurubis Group is exposed to commodity price risks. Among other measures, non-ferrous metals futures contracts are entered into in order to mitigate these price risks. The contracts are mainly focused on the hedging of the copper price. For this purpose, incoming and outgoing metal quantities from underlying transactions are offset against each other each day and remaining open positions are squared by means of metal exchange transactions. We work exclusively with business partners with good credit standing on all metal hedge transactions.

If price-fixed metal delivery agreements for non-ferrous metals, which are contracted to cover the expected raw material requirement or the expected sale of finished products, are accounted for as derivative financial instruments, then market value changes in these are recognized in profit or loss. Gains

and losses from the contrary development of the fair value of the hedged items and the hedge transactions are therefore recognized directly in profit or loss.

Details of metal price risk management processes are provided in the Risk Report in the Management Report.

The Aurubis Group has secured its electricity consumption by concluding a long-term agreement with an energy utility. Aurubis is exposed to an electricity price risk from the measurement of part of this agreement.

The nominal volumes of the derivative financial instruments covering copper, silver, gold, as well as electricity, coal, and CO<sub>2</sub>, which result from the gross total of the nominal amounts of the individual purchasing and sales contracts, are as follows.

### Nominal volumes of the derivatives

| in € thousand                      | 9/30/2018        | 9/30/2017        |
|------------------------------------|------------------|------------------|
| Copper                             | 1,323,799        | 1,186,467        |
| Silver                             | 82,665           | 91,615           |
| Gold                               | 274,114          | 368,403          |
| Electricity, coal, CO <sub>2</sub> | 111,723          | 82,869           |
|                                    | <b>1,792,301</b> | <b>1,729,354</b> |

In accordance with IFRS 7, commodity price risks are shown in the form of a sensitivity analysis, which reflects the effects of a change in the commodity prices on the net income for the period.

In the event of a 10 % increase (decrease) in all relevant commodity prices, earnings for the year would be changed as at September 30, 2018 and September 30, 2017, respectively, as shown in the following table. The calculation includes all derivatives for copper, silver, gold, as well as electricity, coal, and CO<sub>2</sub> as at the balance sheet date.

### Commodity price sensitivity

|                       | Copper    |           | Silver    |           | Gold      |           | Electricity, coal, CO <sub>2</sub> |           |
|-----------------------|-----------|-----------|-----------|-----------|-----------|-----------|------------------------------------|-----------|
| in € thousand         | 9/30/2018 | 9/30/2017 | 9/30/2018 | 9/30/2017 | 9/30/2018 | 9/30/2017 | 9/30/2018                          | 9/30/2017 |
| <b>Price increase</b> |           |           |           |           |           |           |                                    |           |
| Effect on earnings    | 36,662    | 37,720    | 6,085     | 6,367     | 19,180    | 25,232    | 4,434                              | 3,876     |
| <b>Price decrease</b> |           |           |           |           |           |           |                                    |           |
| Effect on earnings    | -36,662   | -37,720   | -6,085    | -6,367    | -19,180   | -25,232   | -4,434                             | -3,876    |

The effects on earnings shown in the commodity price sensitivity table for metals are partially or completely compensated through the measurement of the purchase or sales contracts that are not yet fixed, since these positions are provisionally measured at the respective price on the reporting date.

### DERIVATIVE FINANCIAL INSTRUMENTS

The Aurubis Group uses derivative financial instruments to hedge exchange rate, interest rate, and other price risks. Provided the criteria for the application of hedge accounting are fulfilled, these are reflected by cash flow hedges.

## Financial derivatives

|   | Assets          |                |                 |                | Liabilities     |                |                 |                |
|---|-----------------|----------------|-----------------|----------------|-----------------|----------------|-----------------|----------------|
|   | 9/30/2018       |                | 9/30/2017       |                | 9/30/2018       |                | 9/30/2017       |                |
|   | Carrying amount | Nominal volume | Carrying amount | Nominal volume | Carrying amount | Nominal volume | Carrying amount | Nominal volume |
| in € thousand                             |                 |                |                 |                |                 |                |                 |                |
| <b>Interest rate swaps</b>                |                 |                |                 |                |                 |                |                 |                |
| without a hedging relationship            | 0               | 0              | 0               | 0              | 0               | 0              | 0               | 0              |
| as cash flow hedges                       | 0               | 0              | 0               | 0              | 0               | 0              | 795             | 71,000         |
| <b>Foreign exchange forward contracts</b> |                 |                |                 |                |                 |                |                 |                |
| without a hedging relationship            | 9,802           | 845,222        | 5,229           | 572,747        | 1,448           | 130,537        | 5,479           | 378,628        |
| as cash flow hedges                       | 2,014           | 58,053         | 20,123          | 260,325        | 9,065           | 187,397        | 0               | 0              |
| <b>Foreign currency options</b>           |                 |                |                 |                |                 |                |                 |                |
| without a hedging relationship            | 0               | 0              | 0               | 0              | 0               | 0              | 0               | 0              |
| as cash flow hedges                       | 131             | 27,918         | 2,214           | 140,390        | 0               | 0              | 0               | 0              |
| <b>Metal futures contracts</b>            |                 |                |                 |                |                 |                |                 |                |
| without a hedging relationship            | 30,754          | 900,503        | 23,010          | 725,486        | 25,279          | 838,578        | 27,818          | 1,002,548      |
| as cash flow hedges                       | 0               | 0              | 0               | 0              | 0               | 0              | 0               | 0              |
| <b>Other transactions</b>                 |                 |                |                 |                |                 |                |                 |                |
| without a hedging relationship            | 14,701          | 231,950        | 5,045           | 79,357         | 452             | 837            | 78              | 3,536          |
| as cash-flow hedges                       | 0               | 0              | 0               | 0              | 0               | 0              | 0               | 0              |

The nominal volume of the derivative financial instruments is the sum of the nominal amounts of the individual purchase and sales contracts. By contrast, the fair value is based on the measurement of all contracts at the prices applicable on the measurement date. It indicates the potential impact on income of the prompt settlement of all derivatives as at the balance sheet date, without considering the hedged transactions.

The impact on earnings of changes in the fair value of financial derivatives that relate to a cash flow hedge is recognized in equity through other comprehensive income in the amount of the effective portion.

The effective portion of the changes in the value of derivative financial instruments, which was recognized in equity through other comprehensive income in the period reported, amounted to

€ -9,594 thousand (previous year: € 15,010 thousand). The amount that was transferred during the period from equity into the income statement in the context of cash flow hedge accounting was € 17,201 thousand (previous year: € -10,677 thousand) and is mainly included in the income statement item "Cost of materials."

The ineffective portion of the fair value change is, by contrast, recognized directly in profit or loss.

As was the case in the previous year, no ineffective portions of the change in fair value of the hedge instruments were identified that had to be recognized during the fiscal year reported.

The following two tables show when the cash flows from cash flow hedges will occur and when they will influence the income statement:

### Cash flow hedges as at September 30, 2018

| Occurrence and impact on income statement<br>in € thousand | Carrying<br>amount | Nominal<br>volume | less than<br>1 year | 1 to<br>5 years | more than 5<br>years |
|--|--------------------|-------------------|---------------------|-----------------|----------------------|
| <b>Interest rate swaps</b>                                 |                    |                   |                     |                 |                      |
| Assets   | 0                  | 0                 | 0                   | 0               | 0                    |
| Liabilities  | 0                  | 0                 | 0                   | 0               | 0                    |
| <b>Foreign exchange forward contracts</b>                  |                    |                   |                     |                 |                      |
| Assets   | 2,014              | 58,053            | 58,053              | 0               | 0                    |
| Liabilities  | 9,065              | 187,397           | 187,397             | 0               | 0                    |
| <b>Foreign currency options</b>                            |                    |                   |                     |                 |                      |
| Assets   | 131                | 27,918            | 27,918              | 0               | 0                    |
| Liabilities  | 0                  | 0                 | 0                   | 0               | 0                    |

### Cash flow hedges as at September 30, 2017

| Occurrence and impact on income statement<br>in € thousand | Carrying<br>amount | Nominal<br>volume | less than<br>1 year | 1 to<br>5 years | more than 5<br>years |
|--|--------------------|-------------------|---------------------|-----------------|----------------------|
| <b>Interest rate swaps</b>                                 |                    |                   |                     |                 |                      |
| Assets   | 0                  | 0                 | 0                   | 0               | 0                    |
| Liabilities  | 795                | 71,000            | 0                   | 71,000          | 0                    |
| <b>Foreign exchange forward contracts</b>                  |                    |                   |                     |                 |                      |
| Assets   | 20,123             | 260,325           | 217,609             | 42,716          | 0                    |
| Liabilities  | 0                  | 0                 | 0                   | 0               | 0                    |
| <b>Foreign currency options</b>                            |                    |                   |                     |                 |                      |
| Assets   | 2,214              | 140,390           | 140,390             | 0               | 0                    |
| Liabilities  | 0                  | 0                 | 0                   | 0               | 0                    |

## LIQUIDITY RISKS

Liquidity risks represent the risk that the business cannot meet its own liability obligations. The contractually agreed undiscounted interest and redemption payments of the financial liabilities are shown in [Q Liabilities, pages 147-148](#).

The adequate sourcing of the Group with cash and cash equivalents is ensured not only by the Group's cash flow but also by the existing short-term and long-term credit lines with our banks. Fluctuations in cash flow can therefore be cushioned. An autonomous executive committee monitors the development of Aurubis' liquidity position on a timely and regular basis and reports to the Executive Board. Further management measures taken regarding liquidity risks are described in the Risk Report in the Management Report.

## DEFAULT RISKS

Default risks exist for all classes of financial instruments, in particular for trade accounts receivable. The concentration of the credit risk is limited due to the wide-ranging and heterogeneous customer base. The largest individual customer account receivable balances are regularly controlled. The credit risk arising from derivative financial instruments is limited since the corresponding contracts are only concluded with contractual parties and banks that have a good credit standing.

The customers were classified by their credit rating within the context of the credit risk management process and each customer was given a specific credit limit.

The carrying amounts of the financial assets in the statement of financial position, less any write-downs, represent the maximum potential default risk without taking into account the value of any securities received or other risk-mitigating agreements.

Furthermore, to minimize default risks as far as possible, we monitor the receivables from our business associates on a regular basis. Apart from instruments that are customary within the market, such as letters of credit and guarantees, we also make particular use of commercial credit insurance to safeguard against potential bad debts. If receivables are sold under factoring agreements, this is done without recourse.



## Additional disclosures for financial instruments

|   |                                   | 2017/18   |                |                                 |   |
|---|-----------------------------------|---|----------------|---------------------------------|---|
|   |                                   | Measurement in the statement of financial position under IAS 39 |                |                                 |   |
| Carrying amounts, valuations, and fair values by measurement category in € thousand | Measurement category under IAS 39 | Carrying amount 9/30/2018                                       | Amortized cost | Fair value recognized in equity | Fair value recognized in profit or loss |
| <b>Assets</b>   |                                   |   |                |                                 |   |
| Interests in affiliated companies   | AfS                               | 1,321   | 1,321          | 0                               | 0                                       |
| Investments   | AfS                               | 115   | 115            | 0                               | 0                                       |
| Fixed asset securities  | AfS                               | 31,448  | 0              | 31,448                          | 0                                       |
| Other financial fixed assets  |                                   |   |                |                                 |   |
| Other loans   | LaR                               | 45  | 45             | 0                               | 0                                       |
| Trade accounts receivable   | LaR                               | 274,501   | 274,501        | 0                               | 0                                       |
| Other receivables and financial assets  |                                   |   |                |                                 |   |
| Receivables from related parties  | LaR                               | 2,096   | 2,096          | 0                               | 0                                       |
| Other financial assets  | LaR                               | 39,851  | 39,851         | 0                               | 0                                       |
| Derivative financial assets   |                                   |   |                |                                 |   |
| Derivatives without a hedging relationship  | FAHfT                             | 55,257  | 0              | 0                               | 55,257                                  |
| Derivatives with a hedging relationship (hedge accounting)                          | n/a                               | 2,145   | 0              | 2,145                           | 0                                       |
| Cash and cash equivalents   | LaR                               | 461,045   | 461,045        | 0                               | 0                                       |
| <b>Liabilities</b>  |                                   |   |                |                                 |   |
| Bank borrowings   | FLAC                              | 277,307   | 277,307        | 0                               | 0                                       |
| Liabilities under finance leases  | n/a                               | 36,369  | 0              | 0                               | 0                                       |
| Trade accounts payable  | FLAC                              | 836,748   | 836,748        | 0                               | 0                                       |
| Liabilities to related parties  | FLAC                              | 1,136   | 1,136          | 0                               | 0                                       |
| Other non-derivative financial liabilities  | FLAC                              | 76,638  | 76,638         | 0                               | 0                                       |
| Derivative financial liabilities  |                                   |   |                |                                 |   |
| Derivatives without a hedging relationship  | FLHfT                             | 27,179  | 0              | 0                               | 27,179                                  |
| Derivatives with a hedging relationship (hedge accounting)                          | n/a                               | 9,065   | 0              | 9,065                           | 0                                       |
| of which aggregated by measurement categories in accordance with IAS 39             |                                   |   |                |                                 |   |
| Loans and receivables (LaR)   |                                   | 777,538   | 777,538        | 0                               | 0                                       |
| Available-for-sale (AfS)  |                                   | 32,884  | 1,436          | 31,448                          | 0                                       |
| Financial assets held for trading (FAHfT)   |                                   | 55,257  | 0              | 0                               | 55,257                                  |
| Financial liabilities at amortized cost (FLAC)                                      |                                   | 1,191,829   | 1,191,829      | 0                               | 0                                       |
| Financial liabilities held for trading (FLHfT)                                      |                                   | 27,179  | 0              | 0                               | 27,179                                  |

2016/17

| Measurement<br>in the statement<br>of financial<br>position under<br>IAS 17 | Fair value<br>9/30/2018 | Measurement in the statement of<br>financial position under IAS 39 |                   |                                       |   | Measurement<br>in the statement<br>of financial<br>position under<br>IAS 17 | Fair value<br>9/30/2017 |
|---|-------------------------|--|-------------------|---------------------------------------|---|---|-------------------------|
|   |                         | Carrying<br>amount<br>9/30/2017                                    | Amortized<br>cost | Fair value<br>recognized<br>in equity | Fair value<br>recognized in<br>profit or loss |   |                         |
| 0   | n/a                     | 1,419  | 1,419             | 0                                     | 0   | 0   | n/a                     |
| 0   | n/a                     | 174  | 174               | 0                                     | 0   | 0   | n/a                     |
| 0   | 31,448                  | 28,039   | 0                 | 28,039                                | 0   | 0   | 28,039                  |
| 0   | 45                      | 48   | 48                | 0                                     | 0   | 0   | 48                      |
| 0   | 274,501                 | 357,403  | 357,403           | 0                                     | 0   | 0   | 357,403                 |
| 0   | 2,096                   | 19,187   | 19,187            | 0                                     | 0   | 0   | 19,187                  |
| 0   | 39,851                  | 55,382   | 55,382            | 0                                     | 0   | 0   | 55,382                  |
| 0   | 55,257                  | 33,284   | 0                 | 0                                     | 33,284  | 0   | 33,284                  |
| 0   | 2,145                   | 22,337   | 0                 | 22,337                                | 0   | 0   | 22,337                  |
| 0   | 461,045                 | 570,569  | 570,569           | 0                                     | 0   | 0   | 570,569                 |
| 0   | 285,969                 | 325,764  | 325,764           | 0                                     | 0   | 0   | 335,898                 |
| 36,369  | 36,369                  | 25,570   | 0                 | 0                                     | 0   | 25,570  | 25,570                  |
| 0   | 836,748                 | 905,083  | 905,083           | 0                                     | 0   | 0   | 905,083                 |
| 0   | 1,136                   | 2,089  | 2,089             | 0                                     | 0   | 0   | 2,089                   |
| 0   | 76,638                  | 96,221   | 96,221            | 0                                     | 0   | 0   | 96,221                  |
| 0   | 27,179                  | 33,375   | 0                 | 0                                     | 33,375  | 0   | 33,375                  |
| 0   | 9,065                   | 795  | 0                 | 795                                   | 0   | 0   | 795                     |
| 0   | 777,538                 | 1,002,589  | 1,002,589         | 0                                     | 0   | 0   | 1,002,589               |
| 0   | 31,448                  | 29,632   | 1,593             | 28,039                                | 0   | 0   | 28,039                  |
| 0   | 55,257                  | 33,284   | 0                 | 0                                     | 33,284  | 0   | 33,284                  |
| 0   | 1,200,491               | 1,329,157  | 1,329,157         | 0                                     | 0   | 0   | 1,339,291               |
| 0   | 27,179                  | 33,375   | 0                 | 0                                     | 33,375  | 0   | 33,375                  |

The market value of financial instruments to be recognized at fair value is as a general rule determined on the basis of quotations on the relevant exchanges. If no such quotations are available, measurement is carried out applying a process that is customary for the market (measurement methods), based on instrument-specific market parameters and interest rates drawn from recognized sources.

If observable input parameters are not available or only partially available, the fair value is calculated on the basis of appropriate measurement methods. In the Aurubis Group, this applies in particular to the extrapolation of market data for electricity and coal, with due regard to market information about price determination and liquidity considerations. If insufficient market information is available, management's best estimate for a certain input parameter is used to determine the value. Thus, if observable input parameters are not available or are only partially available on the market, the measurement process is significantly influenced by the use of estimates and assumptions.

Due to the predominantly short-term nature of cash and cash equivalents, trade accounts receivable and payable, other receivables of the category "loans and receivables," payables to related parties, and other non-derivative financial liabilities, an assumption is made that the fair values correspond to the carrying amounts.

An assumption has been made for investments in non-corporate entities and non-quoted corporate entities that the carrying amount corresponds to the market value. It would only be possible to reliably determine the market value in conjunction with specific sales negotiations.

Pursuant to IFRS 13, the following tables show the measurement methods used to determine the fair value for Level 1, Level 2, and Level 3, as well as the main non-observable parameters that were used for measurement.

In this connection, the individual levels are defined in accordance with IFRS 13 as follows:

- » Level 1: quoted prices (unadjusted) in active markets for identical assets or liabilities.
- » Level 2: procedures under which all input parameters with a significant effect on the fair value are observable either directly or indirectly in the market.
- » Level 3: procedures that use input parameters that have a significant influence on the fair value and are not based on observable market data.

#### Financial instruments from Level 1 measured at fair value

| Type                   | Measurement method  |
|------------------------|---------------------|
| Fixed asset securities | Exchange quotations |

**Financial instruments from Level 2 measured at fair value**

| Type                               | Measurement method and applied input parameters  |
|------------------------------------|--|
| Foreign exchange forward contracts | Par method, taking into account actively traded forward rates and the currently valid interest rate for discounting purposes as at the reporting date  |
| Foreign currency options           | Black-Scholes model. Calculation based on the exchange rates as at the reporting date, taking into account the expected volatility of the respective exchange rate during the term of the option and customary market interest rates |
| Interest rate swaps                | Discounted cash flow method. This adds together the present value of the expected future cash flows and discounts them, utilizing a market-conform interest rate   |
| Metal futures contracts            | Discounted cash flow method, taking into account actively traded metal forward rates and customary market interest rates for discounting purposes as at the reporting date   |
| Other transactions                 | Discounted cash flow method. Discounting of the expected future cash flows over the remaining term of the contracts, based on use of current market interest rates   |

**Financial instruments from Level 2 not measured at fair value**

| Type       | Measurement method and applied input parameters   |
|------------|---|
| Borrowings | Discounted cash flow method. Discounting of expected future cash flows with currently applicable interest rates for financial liabilities with comparable conditions and residual terms |

**Financial instruments from Level 3 measured at fair value**

| Type                   | Measurement method          | Significant non-observable measurement parameters     | Interdependence between significant non-observable parameters and fair value  |
|------------------------|-----------------------------|---|---|
| Energy supply contract | Discounted cash flow method | Extrapolation of market data for electricity and coal | The fair value would be higher (lower) if:<br>– the price for electricity increased more (less) than expected<br>– the price for coal increased more (less) than expected |

If the parameters used for measurement fall into different levels of the measurement hierarchy, the fair value measurement is fully classified as belonging to the lowest level to which an input parameter is attributed, where this parameter significantly influences the entire fair value.

If there are any reclassifications to other levels in the measurement hierarchy, the Aurubis Group accounts for these as at the beginning of the relevant fiscal year.

The following overview shows the main measurement parameters that provide the basis for those financial instruments that are accounted for at fair value and presented in the Notes to the Consolidated Financial Statements.

#### Hierarchical classification of fair values of financial instruments in accordance with IFRS 7 as at September 30, 2018

| Aggregated by classes<br>in € thousand     | Fair value<br>9/30/2018 | Level 1       | Level 2        | Level 3       |
|--|-------------------------|---------------|----------------|---------------|
| <b>Fixed asset securities</b>              | <b>31,448</b>           | <b>31,448</b> | <b>0</b>       | <b>0</b>      |
| <b>Derivative financial assets</b>         |                         |               |                |               |
| Derivatives without a hedging relationship | 55,257                  | 0             | 41,987         | 13,270        |
| Derivatives with a hedging relationship    | 2,145                   | 0             | 2,145          | 0             |
| <b>Assets</b>                              | <b>88,850</b>           | <b>31,448</b> | <b>44,132</b>  | <b>13,270</b> |
| <b>Bank borrowings</b>                     | <b>285,969</b>          | <b>0</b>      | <b>285,969</b> | <b>0</b>      |
| <b>Derivative financial liabilities</b>    |                         |               |                |               |
| Derivatives without a hedging relationship | 27,179                  | 0             | 27,179         | 0             |
| Derivatives with a hedging relationship    | 9,065                   | 0             | 9,065          | 0             |
| <b>Liabilities</b>                         | <b>322,213</b>          | <b>0</b>      | <b>322,213</b> | <b>0</b>      |

#### Hierarchical classification of fair values of financial instruments in accordance with IFRS 7 as at September 30, 2017

| Aggregated by classes<br>in € thousand     | Fair value<br>9/30/2017 | Level 1       | Level 2        | Level 3      |
|--|-------------------------|---------------|----------------|--------------|
| <b>Fixed asset securities</b>              | <b>28,039</b>           | <b>28,039</b> | <b>0</b>       | <b>0</b>     |
| <b>Derivative financial assets</b>         |                         |               |                |              |
| Derivatives without a hedging relationship | 33,284                  | 0             | 29,088         | 4,196        |
| Derivatives with a hedging relationship    | 22,337                  | 0             | 22,337         | 0            |
| <b>Assets</b>                              | <b>83,660</b>           | <b>28,039</b> | <b>51,425</b>  | <b>4,196</b> |
| <b>Bank borrowings</b>                     | <b>335,898</b>          | <b>0</b>      | <b>335,898</b> | <b>0</b>     |
| <b>Derivative financial liabilities</b>    |                         |               |                |              |
| Derivatives without a hedging relationship | 33,375                  | 0             | 33,375         | 0            |
| Derivatives with a hedging relationship    | 795                     | 0             | 795            | 0            |
| <b>Liabilities</b>                         | <b>370,068</b>          | <b>0</b>      | <b>370,068</b> | <b>0</b>     |

There were no reclassifications between the individual levels in fiscal year 2017/18 or in the previous year.

The following overview shows a reconciliation of the financial instruments measured at fair value and classified in Level 3:

#### Reconciliation of financial instruments in Level 3 as at September 30, 2018

| Aggregated by classes<br>in € thousand           | Balance as at<br>10/1/2017 | Sales/<br>purchases | Gains (+)/<br>losses (-)<br>recorded in<br>the income<br>statement | Balance as at<br>9/30/2018 | Gains (+)/<br>losses (-)<br>for derivatives<br>held at the<br>reporting date |
|--|----------------------------|---------------------|--|----------------------------|--|
| Derivative assets without a hedging relationship | 4,196                      | 6,222               | 2,852  | 13,270                     | 2,852  |

#### Reconciliation of financial instruments in Level 3 as at September 30, 2017

| Aggregated by classes<br>in € thousand                | Balance as at<br>10/1/2016 | Sales/<br>purchases | Gains (+)/<br>losses (-)<br>recorded in<br>the income<br>statement | Balance as at<br>9/30/2017 | Gains (+)/<br>losses (-)<br>for derivatives<br>held at the<br>reporting date |
|---|----------------------------|---------------------|--|----------------------------|--|
| Derivative liabilities without a hedging relationship | -16,776                    | 14,135              | 2,641  | 0                          | 0  |
| Derivative assets without a hedging relationship      | 0                          | 1,598               | 2,598  | 4,196                      | 2,598  |

Gains and losses deriving from derivative financial instruments classified as Level 3 relate to part of an energy supply contract and are recognized in the income statement under "Cost of materials." A new derivative instrument was acquired in connection with our agreement for the long-term procurement of electricity.

The fair value of these financial instruments is partially based on non-observable input parameters, which are largely related to the price of electricity and coal. If the Aurubis Group had taken other possible suitable alternative measurement parameters as a basis for measuring the relevant financial instruments on September 30, 2018, the recorded fair value would have been € 10,728 thousand (previous year: € 7,056 thousand) higher in the case of an increase in the electricity price and a decrease in the coal price by 20%, respectively, at the end of the term or € 7,179 thousand (previous year: € 5,866 thousand) lower in the case of a decrease in the electricity price and an increase in the coal price by 20%, respectively, at the end of the term. In order to calculate the maximum impacts which can arise from the relative uncertainty in the determination of the fair values of financial instruments whose measurement is based on non-observable parameters,

the Aurubis Group remeasures such financial instruments by incorporating parameters that are at the outer limits of the range of reasonably possible alternatives for non-observable input data. Since it is nevertheless unlikely that a scenario will arise in which all of the non-observable parameters are at the outer limits of the range of reasonably possible alternatives at the same time, the estimated values previously mentioned should exceed the actual uncertainty factors when determining the fair value as at the reporting date. Thus, the disclosures shown do not represent a prediction or an indication of any future changes in the fair value.

#### OFFSETTING OPTIONS FOR DERIVATIVE FINANCIAL ASSETS AND LIABILITIES

The financial instruments that Aurubis enters into are subject to netting agreements with financial institutions that include a mutual right of offset. However, these agreements do not fulfill the criteria for offsetting in the statement of financial position, as the netting right can only be utilized if one of the contracting parties defaults.

The following table shows the financial assets and liabilities in the Aurubis Group that are subject to offsetting options.

## Offsetting options for derivative financial assets and liabilities

| in € thousand  | 2017/18        | 2016/17        |
|--|----------------|----------------|
| <b>Financial assets</b>  |                |                |
| Gross amount of financial assets in the statement of financial position                  | 57,402         | 55,621         |
| Financial instruments that qualify for offsetting in the statement of financial position | 0              | 0              |
| Net value of financial assets in the statement of financial position                     | 57,402         | 55,621         |
| Offsettable due to framework agreements  | -18,262        | -13,192        |
| <b>Total net value of financial assets</b>   | <b>39,140</b>  | <b>42,429</b>  |
| <b>Financial liabilities</b>   |                |                |
| Gross amount of financial liabilities in the statement of financial position             | -36,244        | -34,170        |
| Financial instruments that qualify for offsetting in the statement of financial position | 0              | 0              |
| Net value of financial liabilities in the statement of financial position                | -36,244        | -34,170        |
| Offsettable due to framework agreements  | 18,262         | 13,192         |
| <b>Total net value of financial liabilities</b>  | <b>-17,982</b> | <b>-20,978</b> |

## Net earnings by measurement category

| in € thousand  | 2017/18       | 2016/17       |
|--|---------------|---------------|
| Loans and receivables (LaR)                              | -23,889       | 20,011        |
| Available-for-sale financial assets (AFS)                | 277           | -281          |
| Financial instruments held for trading (FAHfT and FLHfT) | 10,542        | 64,455        |
| Financial liabilities at amortized cost (FLAC)           | 5,805         | -15,022       |
|  | <b>-7,265</b> | <b>69,163</b> |

The net earnings of the financial instruments held for trading mainly include the gains/losses deriving from metal futures contracts on the exchanges and forward foreign exchange contracts, as well as from price-fixed metal delivery transactions treated as derivatives. Purchase or sales contracts that are not yet fixed, which result in a partial compensation effect since they are measured provisionally at the respective price on the reporting date, are not included. Dividends, but not interest, are included in the calculated earnings. The foreign currency impact deriving from items accounted for at amortized cost, which is included in the net result in fiscal year 2017/18, amounts to € -17,643 thousand (previous year: € 5,049 thousand).

In conjunction with the recognition in equity of the change in value of "available-for-sale" financial assets, net measurement impacts of € 3,410 thousand (previous year: € 6,728 thousand) were recorded in other comprehensive income in fiscal year 2017/18.

## 30. RESEARCH AND DEVELOPMENT

Research and development costs of € 10,227 thousand were recognized in profit or loss for the Aurubis Group for fiscal year 2017/18 (previous year: € 11,330 thousand). Moreover, development costs of € 673 thousand (previous year: € 381 thousand) were capitalized in the fiscal year.

## Notes to the Cash Flow Statement

The Consolidated Cash Flow Statement reports the cash flows in the Aurubis Group in fiscal year 2017/18 and in the prior-year comparative period. In accordance with IAS 7, a distinction is made between the cash inflow from operating activities, the cash outflow from investing activities, and the cash outflow from financing activities.

Commencing with earnings before taxes, adjustment is made for all non-cash expenses and income, the financial result (consisting of the result from investments measured using the equity method, interest expenses, interest income, and other financial expenses and income), income taxes paid out, and changes in working capital to arrive at the cash inflow from operating activities (net cash flow).

The net cash flow as at September 30, 2018 amounted to € 203 million, compared to € 480 million in the previous year. The decrease was due in particular to higher inventories as at the balance sheet date.

Investments in fixed assets totaled € 168 million in the reporting period (previous year: € 165 million). The largest individual investments concerned the Industrial Heat project and the Future Complex Metallurgy project. In contrast, the sale of investment property had a positive effect on the cash flow from investing activities.

After deducting the cash outflow from investing activities from the net cash flow, the free cash flow amounted to € 60 million (previous year: € 325 million). The cash outflow from investing activities totaled € 143 million (previous year: € 155 million).

The cash outflow from financing activities amounted to € 151 million (previous year: € 225 million) and, in the reporting year and the year prior, mainly resulted from the repayment of bonded loans (Schuldscheindarlehen). Furthermore, payments of € 19 million were made for the acquisition of non-controlling interests [Q Acquisitions, page 123](#).

Cash and cash equivalents of € 479 million were available to the Group as at September 30, 2018 (previous year: € 571 million).

The table below shows the cash-related and non-cash-related changes in borrowings.

|                                  | Cash-related               |            | Non-cash-related                 |                            |
|----------------------------------|----------------------------|------------|----------------------------------|----------------------------|
| in € million                     | Balance as at<br>10/1/2017 |            | Additions from<br>finance leases | Balance as at<br>9/30/2018 |
| Bank borrowings                  | 325                        | -48        | 0                                | 277                        |
| Liabilities under finance leases | 26                         | -5         | 15                               | 36                         |
|                                  | <b>351</b>                 | <b>-53</b> | <b>15</b>                        | <b>313</b>                 |



## Segment reporting

|   | Segment<br>Metal Refining & Processing |                      | Segment<br>Flat Rolled Products |                      | Other                |                      |
|---|--|----------------------|---------------------------------|----------------------|----------------------|----------------------|
| in € thousand   | 2017/18<br>operating                   | 2016/17<br>operating | 2017/18<br>operating            | 2016/17<br>operating | 2017/18<br>operating | 2016/17<br>operating |
| Revenues  |  |                      |                                 |                      |                      |                      |
| Total revenues  | 10,407,246                             | 9,866,337            | 1,452,014                       | 1,347,530            | 17,488               | 14,396               |
| Inter-segment revenue   | 161,037                                | 178,933              | 19,216                          | 6,502                | 2,646                | 2,728                |
| Revenues with third parties   | 10,246,209                             | 9,687,404            | 1,432,798                       | 1,341,028            | 14,842               | 11,668               |
| EBITDA  | 476,772                                | 466,270              | 29,874                          | 13,908               | -43,807              | -40,103              |
| Depreciation and amortization   | -118,204                               | -119,282             | -11,460                         | -11,454              | -1,124               | -1,162               |
| EBIT  | 358,568                                | 346,988              | 18,414                          | 2,454                | -44,931              | -41,265              |
| Interest income   | 14,241                                 | 11,934               | 1,576                           | 1,967                | 0                    | 91                   |
| Interest expense  | -20,116                                | -21,220              | -9,697                          | -9,437               | -323                 | -195                 |
| Result from investments<br>measured using the equity method                       | 0                                      | 0                    | 10,868                          | 7,468                | 0                    | 0                    |
| Other financial income  | 357                                    | 0                    | 0                               | 0                    | 332                  | 219                  |
| Other financial expenses  | -38                                    | -720                 | 0                               | 0                    | -13                  | 0                    |
| Earnings before taxes   | 353,012                                | 336,982              | 21,161                          | 2,452                | -44,935              | -41,149              |
| Income taxes  | 0                                      | 0                    | 0                               | 0                    | 0                    | 0                    |
| Consolidated net income   |  |                      |                                 |                      |                      |                      |
| Return on capital employed<br>(ROCE) (in %)                                       | 19.4                                   | 20.9                 | 5.2                             | 0.7                  |                      |                      |
| Capital expenditure on intangible<br>assets and property, plant, and<br>equipment | 152,081                                | 160,535              | 17,435                          | 13,984               | 12,383               | 0                    |
| Average number of employees   | 4,473                                  | 4,423                | 1,768                           | 1,746                | 330                  | 307                  |

Prior-year figures have been partially adjusted to reflect changes in allocations between segments.  
Regarding the basic derivation of the ROCE, we refer to the Combined Management Report  
[Q Results of operations, net assets, and financial position of the Aurubis Group, pages 67-68.](#)

| Total                |                      | Reconciliation/<br>consolidation |                 | Effects from<br>discontinued operations |                 | Group<br>continuing operations |                 |
|----------------------|----------------------|----------------------------------|-----------------|---|-----------------|--------------------------------|-----------------|
| 2017/18<br>operating | 2016/17<br>operating | 2017/18<br>IFRS                  | 2016/17<br>IFRS | 2017/18<br>IFRS                         | 2016/17<br>IFRS | 2017/18<br>IFRS                | 2016/17<br>IFRS |
|                      |                      |                                  |                 |   |                 |                                |                 |
|                      |                      |                                  |                 |   |                 |                                |                 |
| 11,693,850           | 11,040,100           | 0                                | 0               | -1,270,102                              | -1,160,377      | 10,423,748                     | 9,879,723       |
| 462,839              | 440,075              | 39,993                           | 157,627         | -49,764                                 | -53,148         | 453,068                        | 544,553         |
| -130,788             | -131,897             | -2,579                           | -3,313          | 13,897                                  | 14,495          | -119,470                       | -120,715        |
| 332,051              | 308,177              | 37,414                           | 154,314         | -35,867                                 | -38,653         | 333,598                        | 423,838         |
| 15,817               | 13,992               | -12,186                          | -11,277         | -39                                     | -35             | 3,592                          | 2,680           |
| -30,136              | -30,852              | 12,185                           | 11,277          | 2,176                                   | 1,843           | -15,775                        | -17,732         |
| 10,868               | 7,468                | 1,691                            | 3,464           | -12,559                                 | -10,932         | 0                              | 0               |
| 689                  | 219                  | 0                                | 0               | 0                                       | 0               | 689                            | 219             |
| -51                  | -720                 | 0                                | 0               | 0                                       | 0               | -51                            | -720            |
| 329,238              | 298,284              | 39,104                           | 157,778         | -46,289                                 | -47,778         | 322,053                        | 408,285         |
|                      |                      |                                  |                 |   |                 | -59,547                        | -90,057         |
|                      |                      |                                  |                 |   |                 | 262,506                        | 318,228         |
|                      |                      |                                  |                 |   |                 |                                |                 |
| 181,899              | 174,519              | 0                                | 0               | -16,048                                 | -13,984         | 165,851                        | 160,535         |
| 6,571                | 6,477                | 0                                | 0               | -1,768                                  | -1,746          | 4,803                          | 4,731           |

From October 1, 2017 onwards, Aurubis has had a new organizational structure. Since that date, the reporting has been separated into two operational business segments, Metal Refining & Processing (MRP) and Flat Rolled Products (FRP):

Segment MRP processes complex metal concentrates, copper scrap, and metal-bearing recycling materials into metals of the highest quality. From an organizational perspective, it includes the Commercial and Operations divisions. The Commercial division combines all market-relevant organizational units (i.e., raw material procurement and product sales). The Operations division is responsible for the production of all basic products and metals, as well as their further processing into other products such as wire rod and shapes.

Segment FRP processes copper and copper alloys – primarily brass, bronze, and high-performance alloys – into flat rolled products and specialty wire and then markets them.

Segment FRP is a discontinued business division that is to be reported separately on an aggregated basis in the consolidated income statement and in the consolidated statement of financial position in accordance with IFRS 5. As Segment FRP's operating business activities are continuing unchanged and are being monitored and managed by the Aurubis Group's Executive Board, this company division also fulfills the definition of a segment that must be reported on, even after its classification as a discontinued business division, and is accordingly presented separately for segment reporting purposes, and will be until the sales transaction has been completed.

Prior-year figures are shown on a comparable basis.

We report on the operating segments in the same way as in the internal reporting to the chief operating decision makers. The chief operating decision makers are defined as the full Executive Board of Aurubis AG.

The Aurubis Group is divided into two reportable segments, which differ as regards their production processes and their products, and are managed separately. The "other" column discloses central administrative income and costs that cannot be directly allocated to one of the reportable segments.

The internal reporting is generally based on the accounting policies in accordance with IFRS, which are applied in the consolidated financial statements. For internal management purposes, the IFRS-based results are reconciled to the operating result. The operating result of the Group and of the respective Segment is determined by adjusting the IFRS-based results for:

- » Effects deriving from the application of IFRS 5. The items reported as discontinued operations are again shown separately. For purposes of measurement, scheduled depreciation and amortization of fixed assets and the application of equity accounting for the purpose of consolidating the investment are continued.
- » Measurement results from the use of IAS 2. The metal price fluctuations resulting from the application of the average cost method are thereby eliminated in the same manner as write-downs and write-ups to the value of copper inventories at the reporting date.
- » Effects deriving from purchase price allocations, primarily on property, plant, and equipment, commencing in fiscal year 2010/11.

The reconciliation to the IFRS-based consolidated financial statements is shown in the reconciliation/consolidation column. In this connection, a total of € -491 thousand (previous year: € -423 thousand) in earnings before taxes (EBT) derives from consolidation impacts, while € 39,596 thousand (previous year: € 158,201 thousand) derives from reconciliation to the IFRS EBT.

The elimination of external sales, amounting to € 1,270,102 thousand and shown in the column "Effects from discontinued operations" (previous year: € 1,160,377 thousand), represents the external sales of Segment FRP less Segment FRP's internal Group sales with Segment MRP that are fully eliminated in the discontinued business division, amounting to € 162,664 thousand (previous year: € 180,594 thousand). With respect to measurement in accordance with IFRS 5, any impact on income deriving from scheduled depreciation and amortization (€ 7,959 thousand) in Segment FRP, or from application of equity accounting for the purpose of consolidating the investment in a joint venture (€ -8,862 thousand) must be discontinued.

The Group generates most of its revenues with business associates in countries within the European Union. The breakdown of external revenues by region is based on the location of the customers, and is as follows:

| in € thousand                  | 2017/18           | 2016/17           |
|--------------------------------|-------------------|-------------------|
| Germany                        | 3,927,859         | 3,913,465         |
| Other European Union countries | 4,347,272         | 3,936,135         |
| Rest of Europe                 | 439,037           | 517,530           |
| Asia                           | 1,324,856         | 1,168,391         |
| America                        | 1,099,237         | 1,067,605         |
| Other countries                | 555,589           | 436,974           |
| <b>Group total</b>             | <b>11,693,850</b> | <b>11,040,100</b> |

The breakdown of capital expenditure and non-current assets by region is based on the location of the respective assets:

| in € thousand            | Investments <sup>1</sup> |                | Fixed assets <sup>1</sup> |                  |
|--------------------------|--------------------------|----------------|---------------------------|------------------|
|                          | 2017/18                  | 2016/17        | 2017/18                   | 2016/17          |
| Germany                  | 108,906                  | 118,054        | 896,181                   | 866,018          |
| Bulgaria                 | 45,719                   | 32,021         | 338,767                   | 334,955          |
| Belgium                  | 13,237                   | 11,933         | 171,935                   | 169,655          |
| Other European countries | 5,730                    | 7,104          | 69,608                    | 75,660           |
| North America            | 8,307                    | 5,407          | 50,566                    | 43,023           |
| <b>Group total</b>       | <b>181,899</b>           | <b>174,519</b> | <b>1,527,057</b>          | <b>1,489,311</b> |

<sup>1</sup> This information relates to the entire Group, including discontinued operations.

The locations in other European countries are mainly operational sites within the European Union.

#### SEGMENT DATA

The revenues of the individual segments consist of inter-segment revenues and of revenues with third parties outside the Group. The total third-party revenues of the individual segments correspond to the consolidated revenues of the Group. The prices and conditions for products and services exchanged between Group companies and segments correspond to those with third parties.

A breakdown of the revenues by product group is provided in the information on revenues [Q Revenues, page 124](#).

Operating EBIT (earnings before interest and taxes) represents operating earnings before taxes, adjusted for the financial result attributable to the segment. Based on this, operating EBITDA (earnings before interest, taxes, depreciation, and amortization) is operating EBIT adjusted for depreciation of property, plant, and equipment and amortization of intangible assets belonging to the segment.

In total, impairment losses amounting to € 3,856 thousand were recognized in respect of assets (previous year: € 10,614 thousand), of which € 3,865 thousand (previous year: € 9,298 thousand) related to Segment MRP and reversals of impairment losses of € 9 thousand (previous year: impairment losses amounting to € 1,316 thousand) related to Segment FRP. As was the case with the impairment losses in the previous year, the impairment losses recognized in Segment MRP related exclusively to current assets. In Segment FRP, all reversals of impairment losses in the fiscal year reported (impairment losses in the previous year) again related to current assets.

The average number of employees for each segment includes all the employees of companies that were consolidated in the accompanying consolidated financial statements.

## Other Disclosures

### DISCLOSURES CONCERNING RELATIONSHIPS TO RELATED PARTIES

In accordance with IAS 24, related parties are regarded as all individual persons and entities that can be influenced by, or that can themselves influence, the company.

The employees' representatives on the Supervisory Board received compensation for their employment at Aurubis AG at a level that is normal for the market.

Within the Aurubis Group, various Group companies purchase different types of services from and provide different types of services to related companies as part of their normal business activities. Such delivery and service relationships are conducted using market prices. In the case of services, these are charged on the basis of existing contracts.

The following amounts relate to a joint venture that is shown in discontinued operations and accounted for using the equity method:

#### 9/30/2018

| in € thousand                           | Income  | Expenses | Receivables | Liabilities |
|---|---------|----------|-------------|-------------|
| Schwermetall Halbzeugwerk GmbH & Co. KG | 106,480 | 29,908   | 0           | 775         |

#### 9/30/2017

| in € thousand                           | Income  | Expenses | Receivables | Liabilities |
|---|---------|----------|-------------|-------------|
| Schwermetall Halbzeugwerk GmbH & Co. KG | 120,050 | 29,863   | 7,848       | 887         |

The following amounts relate to non-consolidated related companies:

### 9/30/2018

| in € thousand  | Income | Expenses | Receivables | Liabilities |
|----------------|--------|----------|-------------|-------------|
| Joint ventures | 1      | 0        | 0           | 1,300       |
| Subsidiaries   | 11,003 | 1,493    | 4,371       | 1,149       |

### 9/30/2017

| in € thousand  | Income | Expenses | Receivables | Liabilities |
|----------------|--------|----------|-------------|-------------|
| Joint ventures | 122    | 0        | 109         | 0           |
| Subsidiaries   | 7,894  | 1,164    | 3,289       | 1,141       |

With the exception of Salzgitter AG, no individual shareholders of Aurubis AG are able to exercise a significant influence on the Aurubis Group.

Salzgitter Group companies account for € 2,455 thousand in expenses for the fiscal year (previous year: € 2,758 thousand) and income of € 47 thousand (previous year: € 0 thousand). As at the reporting date, there were related liabilities of € 119 thousand (previous year: € 3 thousand) and receivables of € 3 thousand (previous year: € 0 thousand).

As at the reporting date, no letters of comfort had been issued to related parties.

### SUBSEQUENT EVENTS

In the course of the merger control proceedings that are currently underway for the sale of Segment Flat Rolled Products by Aurubis AG (Aurubis) to Wieland-Werke AG (Wieland), the European Commission informed Aurubis and Wieland after the balance sheet date that the transaction is unlikely to be authorized based on the commitment proposals submitted. The Executive Board therefore stated in an ad hoc notification issued on October 10, 2018 that it at that point no longer viewed the completion of the transaction with Wieland as highly likely.

The parties agreed to continue the proceedings with the European Commission in order to receive authorization under merger control law, in particular on the basis of a modified assessment under competition law. Although Aurubis is fully supporting this process, the Executive Board has actively identified strategic sales alternatives for Segment FRP as part of its contingency planning in case the antitrust authorities fully or partially prohibit the sale to Wieland.

The Executive Board still sees the sale of Segment FRP, either as a whole or in several parts, as highly likely due to the purchase interest shown by various market participants and intends to conclude the sales transaction in fiscal year 2018/19.

Segment FRP is therefore still classified as held for sale with the result that the disposal group is still measured at the lower of its carrying amount and its fair value less costs to sell.

## DISCLOSURES CONCERNING THE EXECUTIVE BOARD AND THE SUPERVISORY BOARD

### TOTAL COMPENSATION

The total compensation received by the active Executive Board members for fiscal year 2017/18 amounts to € 3,149,131 and, in addition to a fixed component in the amount of € 1,265,000, includes fringe benefits of € 48,879 and a variable component of € 1,835,252 in the fiscal year reported. In addition, expenses for pension provisions in the amount of € 570,000 (IFRS) and for a virtual deferred stock compensation plan in the amount of € 93,149 were recognized in the income statement.

Dr. Boel receives a one-time payment in the amount of € 1,600,000 within the scope of a contract termination agreement, fixed compensation for the period from October 1, 2017 to July 31, 2018 in the amount of € 350,000, as well as variable compensation for one year of € 262,500 and multiannual variable compensation of € 310,833.

Former members of the Executive Board and their surviving dependents received a total of € 2,246,373; € 27,403,439 has been provided for their pension entitlement.

Total compensation of the Aurubis AG Executive Board members newly appointed in fiscal year 2017/18 includes a share-based compensation component with a cash settlement and a Performance Cash Plan.

The recognition and measurement standards of IFRS 2 are to be applied to the share-based compensation component with a cash settlement. This component involves virtual deferred stock. The resulting obligation equals the fair value of the virtual stock. The expenses amounted to € 93 thousand (previous year: € 0 thousand). The carrying amount of the provisions as at the fiscal year-end also amounted to € 93 thousand (previous year: € 0 thousand).

Furthermore, expenses of € 241 thousand for the Performance Cash Plan were recognized (previous year: € 0 thousand), which are included in the same amount in the provisions as at the balance sheet date.

The compensation of the Supervisory Board for fiscal year 2017/18 amounted in total to € 1,571,002.

Details of the individual compensation of the members of the Executive Board and the Supervisory Board are presented and explained in the compensation report.

## REPORTABLE SECURITIES TRANSACTIONS

### DIRECTORS' DEALINGS

In accordance with Art. 19 of the Market Abuse Regulation (EU No. 596/2014), the members of the Executive Board and the Supervisory

Board must disclose the acquisition and sale of shares in the company. This does not apply if the total transactions per person do not exceed € 5,000 per calendar year.

No reportable securities transactions were reported in the period from October 1, 2017 to September 30, 2018.

## DECLARATION OF CONFORMITY WITH THE GERMAN CORPORATE GOVERNANCE CODE IN ACCORDANCE WITH SECTION 161 OF THE GERMAN STOCK CORPORATION ACT (AKTG)

The declaration required under Section 161 of the German Stock Corporation Act (AktG) has been issued by the Executive Board and the Supervisory Board and has been made permanently accessible to the shareholders on the company's website.

## NOTIFICATION PURSUANT TO SECTION 160 (1) NO. 8 OF THE GERMAN STOCK CORPORATION ACT (AKTG)

Up to the date of preparation of the financial statements, Aurubis AG had received the following voting rights notifications from shareholders with respect to exceeding and falling below the relevant notification thresholds, in accordance with Section 33 (1) of the German Securities Trading Act (WpHG):

### Shareholder structure

| Shareholders  | Thresh-<br>old<br>in % | Stake<br>in %                            | Relevant<br>threshold<br>date | Date of<br>publication |
|---|------------------------|--|-------------------------------|------------------------|
| Dimensional Holdings Inc., Santa Monica, USA        | > 3                    | 3.01                                     | 1/21/2008                     | 2/4/2008               |
| Salzgitter Mannesmann GmbH, Salzgitter <sup>3</sup> | < 20                   | 15.751                                   | 10/25/2017                    | 10/27/2017             |
| Salzgitter Mannesmann GmbH, Salzgitter <sup>3</sup> | > 20                   | 20.0000009                               | 4/9/2018                      | 4/11/2018              |
| Salzgitter Mannesmann GmbH, Salzgitter <sup>3</sup> |                        | pursuant to Section 43 WpHG <sup>4</sup> | 4/27/2018                     | 4/27/2018              |
| UBS AG, Zurich, Switzerland                         | < 5                    | 4.99                                     | 3/4/2013                      | 3/20/2013              |
| Allianz Global Investors GmbH, Frankfurt am Main    | < 5                    | 4.87                                     | 7/13/2017                     | 7/17/2017              |
| BlackRock, Inc., Wilmington, DE, USA <sup>2</sup>   | < 5                    | 4.99                                     | 12/4/2017                     | 12/8/2017              |
| BlackRock, Inc., Wilmington, DE, USA <sup>2</sup>   | > 5                    | 5.02                                     | 12/11/2017                    | 12/15/2017             |
| BlackRock, Inc., Wilmington, DE, USA <sup>2</sup>   | < 5                    | 4.91                                     | 12/12/2017                    | 12/18/2017             |
| BlackRock, Inc., Wilmington, DE, USA <sup>2</sup>   | > 5                    | 5.12                                     | 12/15/2017                    | 12/21/2017             |
| BlackRock, Inc., Wilmington, DE, USA <sup>2</sup>   | < 5                    | 4.94                                     | 2/26/2018                     | 3/2/2018               |
| BlackRock, Inc., Wilmington, DE, USA <sup>2</sup>   | > 5                    | 5.20                                     | 3/12/2018                     | 3/16/2018              |

| Shareholders   | Thresh-<br>old<br>in % | Stake<br>in % | Relevant<br>threshold<br>date | Date of<br>publication |
|--|------------------------|---------------|-------------------------------|------------------------|
| BlackRock, Inc.,<br>Wilmington, DE, USA <sup>2</sup> | < 5                    | 4.85          | 3/14/2018                     | 3/20/2018              |
| BlackRock, Inc.,<br>Wilmington, DE, USA <sup>2</sup> | > 5                    | 5.10          | 4/3/2018                      | 4/9/2018               |
| BlackRock, Inc.,<br>Wilmington, DE, USA <sup>2</sup> | < 5                    | 4.75          | 4/4/2018                      | 4/10/2018              |
| BlackRock, Inc.,<br>Wilmington, DE, USA <sup>2</sup> | < 3                    | 2.997         | 10/31/2018                    | 11/6/2018              |
| BlackRock, Inc.,<br>Wilmington, DE, USA <sup>2</sup> | > 3                    | 3.04          | 11/1/2018                     | 11/7/2018              |
| BlackRock, Inc.,<br>Wilmington, DE, USA <sup>2</sup> | < 3                    | 2.98          | 11/9/2018                     | 11/15/2018             |
| BlackRock, Inc.,<br>Wilmington, DE, USA <sup>2</sup> | > 3                    | 3.02          | 11/14/2018                    | 11/20/2018             |
| BlackRock, Inc.,<br>Wilmington, DE, USA <sup>2</sup> | < 3                    | 2.999         | 11/15/2018                    | 11/21/2018             |
| BlackRock, Inc.,<br>Wilmington, DE, USA <sup>2</sup> | > 3                    | 3.004         | 11/19/2018                    | 11/23/2018             |
| BlackRock, Inc.,<br>Wilmington, DE, USA <sup>2</sup> | < 3                    | 2.95          | 11/20/2018                    | 11/26/2018             |
| Norges Bank, Oslo,<br>Norway <sup>1</sup>            | > 3                    | 3.01          | 12/15/2017                    | 12/19/2017             |
| Norges Bank, Oslo,<br>Norway <sup>1</sup>            | < 3                    | 2.99          | 12/18/2017                    | 12/20/2017             |
| Norges Bank, Oslo,<br>Norway <sup>1</sup>            | > 3                    | 3.01          | 12/21/2017                    | 12/22/2017             |
| Norges Bank, Oslo,<br>Norway <sup>1</sup>            | < 3                    | 2.98          | 1/23/2018                     | 1/25/2018              |
| Norges Bank, Oslo,<br>Norway <sup>1</sup>            | > 3                    | 3.08          | 2/9/2018                      | 2/14/2018              |
| Norges Bank, Oslo,<br>Norway <sup>1</sup>            | < 3                    | 2.76          | 2/23/2018                     | 2/27/2018              |
| Norges Bank, Oslo,<br>Norway <sup>1</sup>            | > 3                    | 3.01          | 8/16/2018                     | 8/20/2018              |
| Norges Bank, Oslo,<br>Norway <sup>1</sup>            | < 3                    | 2.96          | 8/17/2018                     | 8/21/2018              |
| Norges Bank, Oslo,<br>Norway <sup>1</sup>            | > 3                    | 3.02          | 9/10/2018                     | 9/12/2018              |
| Norges Bank, Oslo,<br>Norway <sup>1</sup>            | < 3                    | 2.97          | 9/13/2018                     | 9/18/2018              |
| Norges Bank, Oslo,<br>Norway <sup>1</sup>            | > 3                    | 3.53          | 9/14/2018                     | 9/18/2018              |
| Norges Bank, Oslo,<br>Norway <sup>1</sup>            | < 3                    | 2.85          | 9/20/2018                     | 9/24/2018              |

<sup>1</sup> The shares are attributable to the state of Norway, represented by its Ministry of Finance; the transaction was conducted via the Norges Bank.

<sup>2</sup> Held directly or indirectly through subsidiaries.

<sup>3</sup> The shares are attributable to Salzgitter AG, Salzgitter.

<sup>4</sup> German Securities Trading Act.

The voting rights notifications are available online at  
[www.aurubis.com/en/about-aurubis/corporate-governance/voting-rights-notifications](http://www.aurubis.com/en/about-aurubis/corporate-governance/voting-rights-notifications).

Notifications from previous fiscal years are available online at  
[www.aurubis.com/en/about-aurubis/corporate-governance/voting-rights-notifications](http://www.aurubis.com/en/about-aurubis/corporate-governance/voting-rights-notifications).

## DISCLOSURES CONCERNING AUDITORS' FEES

The following fees were recorded as expenses for fiscal year 2017/18 and the prior year for services rendered by the global PricewaterhouseCoopers network:

| in € thousand                         | 2017/18      | 2016/17      |
|---------------------------------------|--------------|--------------|
| Financial statement auditing services | 1,140        | 1,107        |
| Other assurance services              | 50           | 32           |
| Tax advisory services                 | 150          | 128          |
| Other services                        | 171          | 38           |
| <b>Total</b>                          | <b>1,511</b> | <b>1,305</b> |

Of these, the following fees related to services rendered by PricewaterhouseCoopers GmbH Wirtschaftsprüfungsgesellschaft:

| in € thousand                         | 2017/18      | 2016/17    |
|---------------------------------------|--------------|------------|
| Financial statement auditing services | 710          | 693        |
| Other assurance services              | 49           | 32         |
| Tax advisory services                 | 146          | 118        |
| Other services                        | 110          | 10         |
| <b>Total</b>                          | <b>1,015</b> | <b>853</b> |

The tax advisory services related primarily to advice provided in connection with intra-group transfer pricing. In addition, the auditor provided additional assurance services that were contractually agreed upon or requested voluntarily. The "Other services" were primarily transaction consulting services.



## Investments

pursuant to Section 313 (2) of the German Commercial Code (HGB)  
as at September 30, 2018

|    | Company name and registered office                     | % of capital held directly and indirectly | Held directly by |
|----|--|---|------------------|
| 1  | Aurubis AG   |   |                  |
|    | <b>Fully consolidated companies</b>                    |   |                  |
| 2  | Aurubis Belgium NV/SA, Brussels                        | 100                                       | 1                |
| 3  | Aurubis Holding Sweden AB, Stockholm                   | 100                                       | 2                |
| 4  | Aurubis Sweden AB, Finspång                            | 100                                       | 3                |
| 5  | Aurubis Finland Oy, Pori                               | 100                                       | 2                |
| 6  | Aurubis Holding USA LLC, Buffalo                       | 100                                       | 2                |
| 7  | Aurubis Buffalo Inc., Buffalo                          | 100                                       | 6                |
| 8  | Aurubis Netherlands BV, Zutphen                        | 100                                       | 2                |
| 9  | Aurubis Mortara S.p.A., Mortara                        | 100                                       | 2                |
| 10 | Cumerio Austria GmbH, Vienna                           | 100                                       | 1                |
| 11 | Aurubis Bulgaria AD, Pirdop                            | 99.86                                     | 10               |
| 12 | Aurubis Engineering EAD, Sofia                         | 100                                       | 10               |
| 13 | Aurubis Italia Srl, Avellino                           | 100                                       | 1                |
| 14 | Aurubis Switzerland SA, Yverdon-les-Bains              | 100                                       | 1                |
| 15 | Aurubis Stolberg GmbH & Co. KG, Stolberg               | 100                                       | 1                |
| 16 | Aurubis U.K. Ltd., Smethwick                           | 100                                       | 15               |
| 17 | Aurubis Slovakia s.r.o., Dolný Kubín                   | 100                                       | 15               |
| 18 | CABLO Metall-Recycling & Handel GmbH, Fehrbellin       | 100                                       | 1                |
| 19 | Peute Baustoff GmbH, Hamburg                           | 100                                       | 1                |
| 20 | RETORTE GmbH Selenium Chemicals & Metals, Röthenbach   | 100                                       | 1                |
| 21 | E.R.N. Elektro-Recycling NORD GmbH, Hamburg            | 100                                       | 1                |
| 22 | Aurubis Product Sales GmbH, Hamburg                    | 100                                       | 1                |
| 23 | Deutsche Giessdraht GmbH, Emmerich                     | 100                                       | 1                |
|    | <b>Companies accounted for using the equity method</b> |   |                  |
| 24 | Schwermetall Halbzeugwerk GmbH & Co. KG, Stolberg      | 50  | 15               |

|                                   | Company name and registered office                   | % of capital held directly and indirectly | Held directly by |
|-----------------------------------|--|---|------------------|
| <b>Non-consolidated companies</b> |  |   |                  |
| 25                                | Aurubis Stolberg Verwaltungs-GmbH, Stolberg          | 100                                       | 1                |
| 26                                | Hüttenbau-Gesellschaft Peute mbH, Hamburg            | 100                                       | 1                |
| 27                                | Aurubis Hong Kong Ltd., Hong Kong                    | 100                                       | 2                |
| 28                                | Aurubis Metal Products (Shanghai) Co., Ltd, Shanghai | 100                                       | 27               |
| 29                                | Aurubis Rus LLC, St. Petersburg                      | 100                                       | 2                |
| 30                                | Aurubis Canada Metals Inc., Vancouver                | 100                                       | 1                |
| 31                                | BCPC B.V., Zutphen                                   | 100                                       | 1                |
| 32                                | Retorte do Brasil, Joinville                         | 51  | 20               |
| 33                                | C.M.R. International N.V., Antwerp                   | 50  | 1                |
| 34                                | Schwermetall Halbzeugwerk GmbH & Co. KG, Stolberg    | 50  | 15               |
| 35                                | JoSeCo GmbH, Kirchheim/Swabia                        | 50  | 20               |
| 36                                | Aurubis Middle East FZE, Dubai                       | 100                                       | 22               |
| 37                                | Aurubis Turkey Kimya Anonim Sirketi, Istanbul        | 100                                       | 11               |

Hamburg, December 10, 2018

The Executive Board



Jürgen Schachler  
Chairman



Dr. Thomas Bünger  
Member



Rainer Verhoeven  
Member

# Responsibility Statement

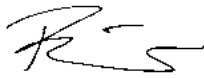
To the best of our knowledge, and in accordance with the applicable reporting principles, the Consolidated Financial Statements give a true and fair view of the net assets, financial position, and results of operations of the Group, and the Combined Management Report includes a fair review of the development and performance of the business and the position of the Group, together with a description of the principal opportunities and risks associated with the expected development of the Group.

Hamburg, December 10, 2018

The Executive Board



Jürgen Schachler  
Chairman



Dr. Thomas Bünger  
Member



Rainer Verhoeven  
Member