Consolidated financial statements of Vossloh AG as of December 31, 2019

Income statement

€ mill.	Notes	2019	2018
Sales revenues	(1)	916.4	865.0
Cost of sales	(2.1)	(745.6)	(678.7)
General administrative and selling expenses	(2.2)	(169.4)	(144.1)
Allowances for financial assets		(10.4)	(0.3)
Research and development costs	(2.3)	(10.7)	(10.9)
Other operating result	(3)	(22.3)	18.4
Operating result		**(42.0)**	**49.4**
Income from investments in companies accounted for using the equity method		5.0	1.4
Other financial income	(4.1)	0.6	3.4
Other financial expenses	(4.2)	(1.2)	0.0
Earnings before interest and taxes (EBIT)		**(37.6)**	**54.2**
Interest income		2.6	1.5
Interest and similar expenses	(5)	(21.1)	(14.9)
Earnings before taxes (EBT)		**(56.1)**	**40.8**
Income taxes	(6)	(10.3)	(16.0)
Result from continuing operations		**(66.4)**	**24.8**
Result from discontinued operations	(7)	(70.4)	(2.1)
Net income		**(136.8)**	**22.7**
thereof attributable to shareholders of Vossloh AG		**(139.7)**	**18.2**
thereof attributable to noncontrolling interests	(8)	2.9	4.5
Earnings per share			
Basic/diluted earnings per share (€)	(9)	(8.32)	1.14
thereof attributable to continuing operations		(4.13)	1.27
thereof attributable to discontinued operations		(4.19)	(0.13)

Statement of comprehensive income

€ mill.	Notes	2019	2018
Net income		**(136.8)**	**22.7**
Changes in fair value of hedging instruments (cash flow hedges)		(0.3)	0.2
Currency translation differences		2.3	(2.4)
Amounts that will potentially be transferred to profit or loss in future periods		**2.0**	**(2.2)**
Remeasurement of defined benefit plans		(3.7)	0.3
Income taxes		1.1	0.2
Amounts that will not be transferred to profit or loss in future periods		**(2.6)**	**0.5**
Income and expenses recognized directly in equity		**(0.6)**	**(1.7)**
Total comprehensive income		**(137.4)**	**21.0**
thereof attributable to shareholders of Vossloh AG		(140.3)	16.7
thereof attributable to noncontrolling interests		2.9	4.3

Cash flow statement for the period from January 1 to December 31, 2019

€ mill.	2019	2018
Cash flow from operating activities		
Earnings before interest and taxes (EBIT)	(37.6)	54.2
EBIT from discontinued operations	(69.7)	(1.8)
Amortization/depreciation/impairment losses (less write-ups) of noncurrent assets	137.8	38.4
Change in noncurrent provisions	8.8	(0.5)
Gross cash flow	**39.3**	**90.3**
Noncash change in investments in companies accounted for using the equity method	(4.9)	(2.0)
Other noncash income/expenses, net	15.9	(23.7)
Net loss/gain from the disposal of noncurrent assets	(0.5)	(0.4)
Income taxes paid	(8.6)	(18.0)
Change in working capital	(19.5)	(2.5)
Changes in other assets/liabilities, net	(9.4)	(6.1)
Cash flow from operating activities	**12.3**	**37.6**
Cash flow from investing activities		
Investments in intangible assets and property, plant and equipment	(51.3)	(57.1)
Investments in companies accounted for using the equity method	(3.5)	(1.2)
Cash-effective dividends from companies accounted for using the equity method	0.1	0.2
Proceeds from the disposal of companies accounted for using the equity method	0.0	1.5
Free cash flow	**(42.4)**	**(19.0)**
Investments in noncurrent financial instruments	(1.1)	(0.2)
Proceeds from the disposal of intangible assets and property, plant and equipment	4.0	3.4
Disbursements/proceeds from the purchase/sale of short-term securities	0.5	0.0
Proceeds from disposals of noncurrent financial instruments	1.0	1.3
Proceeds from the disposal of consolidated companies	39.6	0.0
Payments for the acquisition of consolidated companies	(4.8)	(42.9)
Cash flow from investing activities	**(15.5)**	**(95.0)**
Cash flow from financing activities		
Net proceeds from additions to equity	48.5	0.0
Disbursements to shareholders and noncontrolling interests	(20.3)	(20.3)
Net financing from short-term loans	10.2	5.4*
Net financing from medium-term and long-term loans	28.5	14.9
Repayments from leases	(21.6)	(0.2)
Interest received	2.7	1.5
Interest paid and similar payments	(19.9)	(15.4)
Cash flow from financing activities	**28.1**	**(14.1)***
Net cash inflow/outflow	24.9	(71.5)*
Exchange rate effects	0.4	(0.6)
Opening cash and cash equivalents	**23.3**	**95.4***
Closing cash and cash equivalents	**48.6**	**23.3***

For more information on the cash flow statement and the adjustment of the previous year's figures, see page 122 et seq.
*Previous year's figures adjusted.

Balance sheet

Assets in € mill.	Notes	12/31/2019	12/31/2018
Intangible assets	(10)	280.1	302.8[1]
Property, plant and equipment	(11)	296.8	268.6
Investment properties	(12)	1.8	2.2
Investments in companies accounted for using the equity method	(13)	74.6	66.2
Other noncurrent financial instruments	(14)	6.0	7.7
Other noncurrent assets	(15)	4.0	4.3
Deferred tax assets	(16)	17.7	13.4
Noncurrent assets		**681.0**	**665.2**
Inventories	(17)	152.1	174.8
Trade receivables	(18)	212.8	212.6
Contract assets	(18)	5.0	6.9
Income tax assets	(19)	5.8	7.6
Other current financial instruments	(20)	29.6	27.9
Other current assets	(20)	25.8	18.2
Short-term securities	(21)	0.0	0.5
Cash and cash equivalents	(22)	56.7	48.7
Current assets		**487.8**	**497.2**
Assets held for sale	(7)	162.6	104.5
Assets		**1,331.4**	**1,266.9**

Equity and liabilities in € mill.	Notes	12/31/2019	12/31/2018
Capital stock	(23.1)	49.9	45.3
Additional paid-in capital	(23.2)	190.4	146.5
Retained earnings and net income	(23.3)	158.7	318.7
Accumulated other comprehensive income	(23.4)	(4.8)	2.0
Equity excluding noncontrolling interests		**394.2**	**512.5**
Noncontrolling interests	(23.5)	9.4	10.8
Equity		**403.6**	**523.3**
Pension provisions/provisions for other post employment benefits	(24)	33.2	30.0[3]
Other noncurrent provisions	(25)	10.5	9.1[3]
Noncurrent financial liabilities	(26.1)	385.8	324.0[2]
Noncurrent trade payables	(26.2)	1.4	0.0
Other noncurrent liabilities	(26.4)	10.6	7.4
Deferred tax liabilities	(16)	7.9	7.1
Noncurrent liabilities		**449.4**	**377.6**
Other current provisions	(25)	59.4	36.4
Current financial liabilities	(26.1)	41.3	32.5[2]
Current trade payables	(26.2)	132.8	139.2
Current contract liabilities	(26.2)	0.2	0.0
Current income tax liabilities	(26.3)	4.4	1.8
Other current liabilities	(26.4)	91.7	85.5[1]
Current liabilities		**329.8**	**295.4**
Liabilities related to assets held for sale	(7)	148.6	70.6
Equity and liabilities		**1,331.4**	**1,266.9**

[1] Previous year's figures adapted due to the subsequent adjustment of goodwill related to a business combination see number (10) on page 125.
[2] Previous year's figures adjusted, see number 26.1 on page 141.
[3] Previous year's figures adjusted, see number 24 on page 138 et seq.

Statement of changes in equity

€ mill.	Capital stock	Additional paid-in capital	Retained earnings and net income	Accumulated other comprehensive income: Reserve for currency translation	Reserve for financial instruments held for sale	Reserve for hedging trans-actions	Reserves from the remeasurement of defined benefit plans	Equity excluding noncontrolling interests	Noncon-trolling interests	Total
As of 12/31/2017	**45.3**	**146.5**	**321.7**	**4.2**	**0.0**	**(0.6)**	**0.3**	**517.4**	**15.0**	**532.4**
Conversion effects from the application of new standards (IFRS 9 and IFRS 15)			(6.2)					(6.2)	0.0	(6.2)
Transfer to retained earnings			0.3				(0.3)	0.0		0.0
Change in the scope of consolidation			0.7					0.7		0.7
Net income			18.2					18.2	4.5	22.7
Income and expenses recognized directly in equity after taxes				(2.2)	0.0	0.1	0.5	(1.6)	(0.2)	(1.8)
Dividend payments			(16.0)					(16.0)	(8.5)	(24.5)
As of 12/31/2018	**45.3**	**146.5**	**318.7**	**2.0**	**0.0**	**(0.5)**	**0.5**	**512.5**	**10.8**	**523.3**
Transfer to retained earnings			0.5				(0.5)	0.0		0.0
Capital increase	4.6	43.9						48.5		48.5
Change in the scope of consolidation		0.0	(6.8)	(5.7)		0.0		(12.5)	0.0	(12.5)
Other effects			2.0					2.0		2.0
Net income			(139.7)					(139.7)	2.9	(136.8)
Income and expenses recognized directly in equity after taxes				2.3		(0.3)	(2.6)	(0.6)		(0.6)
Dividend payments			(16.0)					(16.0)	(4.3)	(20.3)
As of 12/31/2019	**49.9**	**190.4**	**158.7**	**(1.4)**	**0.0**	**(0.8)**	**(2.6)**	**394.2**	**9.4**	**403.6**

For more information about changes in accumulated comprehensive income, see numbers (23.1) to (23.5) on pages 136 et seq.

Notes to the consolidated financial statements of Vossloh AG as of December 31, 2019

Segment information by division and business unit

€ mill.		Fastening Systems	Tie Technologies	Consolidation	Core Components	Customized Modules (Switch Systems)
Value added	2019	21.6	(7.8)	(0.1)	**13.7**	**(87.1)**
	2018	21.4	(3.8)	(0.1)	**17.5**	**(6.4)**
Information from income statement/flow figures						
External sales revenues	2019	219.7	120.0	0.0	**339.7**	**472.7**
	2018	208.5	74.7	0.0	**283.2**	**480.9**
Intersegment sales revenues	2019	14.5	5.7	(8.2)	**12.0**	**0.5**
	2018	8.3	3.4	(2.3)	**9.4**	**1.7**
Depreciation/amortization	2019	7.8	11.9	0.0	**19.7**	**17.1**
	2018	6.8	9.5	0.0	**16.3**	**12.8**
Investments in noncurrent assets	2019	16.3	14.1	0.0	**30.4**	**15.8**
	2018	6.7	10.5	0.0	**17.2**	**28.1**
Income from investments in companies accounted for using the equity method	2019	1.9	0.0	0.0	**1.9**	**1.9**
	2018	0.7	0.0	0.0	**0.7**	**0.3**
Result from discontinued operations	2019	0.0	0.0	0.0	**0.0**	**0.0**
	2018	0.0	0.0	0.0	**0.0**	**0.0**
Other material noncash segment expenses	2019	3.1	3.2	0.0	**6.3**	**27.9**
	2018	6.8	0.9	0.0	**7.7**	**6.2**
Impairment losses	2019	0.5	–	–	**0.5**	**27.2**
	2018	0.0	–	–	**0.0**	**0.0**
Reversals of impairment losses	2019	0.1	0.0	0.0	**0.1**	**0.0**
	2018	0.0	0.0	0.0	**0.0**	**0.2**
Information from the balance sheet						
Total assets	2019	229.7	206.3	(0.6)	**435.4**	**532.3**
	2018	201.2	177.1	(0.5)	**377.8**	**605.3**
Liabilities	2019	130.2	74.8	(0.6)	**204.4**	**301.6**
	2018	121.1	49.2	(0.4)	**169.9**	**308.9**
Investments in companies accounted for using the equity method	2019	9.3	0.0	0.0	**9.3**	**52.0**
	2018	4.0	0.0	0.0	**4.0**	**50.2**
Annual average headcount (monthly values)	2019	545	334	0	**879**	**2.296**
	2018	562	220	0	**782**	**2.374**

*The Consolidation column incorporates the elimination of reclassified income, expenses and balance sheet items of reporting segments reported as discontinued operations as required in accordance with IFRS 5.

Lifecycle Solutions (Rail Services)	Discontinued operations/ Locomotives	Consolidation*	Transportation	Holding companies	Consolidation	Group
(20.3)	(43.9)	44.0	**0.1**	1.3	(13.1)	**(105.4)**
2.2	(25.6)	25.2	**(0.4)**	4.9	(23.6)	**(5.8)**
98.6	142.7	(142.7)	**0.0**	0.0	0.0	**911.0**
97.0	200.9	(200.9)	**0.0**	0.1	0.0	**861.2**
7.4	0.2	0.0	**0.2**	0.1	(14.8)	**5.4**
3.0	0.0	0.0	**0.0**	0.1	(10.4)	**3.8**
12.9	17.2	(17.2)	**0.0**	0.6	0.0	**50.3**
6.1	6.0	(6.0)	**0.0**	0.5	0.0	**35.7**
13.3	4.6	(4.6)	**0.0**	0.3	0.0	**59.8**
14.9	3.1	(3.1)	**0.0**	0.4	(0.1)	**60.5**
1.2	0.0	0.0	**0.0**	0.0	0.0	**5.0**
0.4	(0.2)	0.2	**0.0**	0.0	0.0	**1.4**
0.0	(74.4)	0.0	**(74.4)**	4.0	0.0	**(70.4)**
0.0	(15.9)	0.0	**(15.9)**	13.8	0.0	**(2.1)**
4.7	6.9	(6.9)	**0.0**	6.1	0.0	**45.0**
0.7	8.7	(8.7)	**0.0**	1.5	0.0	**16.1**
8.2	–	–	**–**	0.3	–	**36.2**
0.0	–	–	**–**	–	–	**0.0**
0.0	0.0	0.0	**0.0**	0.0	0.0	**0.1**
0.0	0.0	0.0	**0.0**	0.0	0.0	**0.2**
248.9	251.3	(54.1)	**197.2**	1,395.7	(1,478.1)	**1,331.4**
213.0	144.9	(22.6)	**122.3**	1,313.1	(1,364.6)	**1,266.9**
227.5	195.7	(143.2)	**52.5**	647.9	(654.8)	**779.1**
196.3	119.0	(71.4)	**47.6**	612.2	(663.4)	**671.5**
13.3	0.0	0.0	**0.0**	0.0	0.0	**74.6**
12.0	0.0	0.0	**0.0**	0.0	0.0	**66.2**
548	486	(486)	**0**	63	0	**3,786**
501	438	(438)	**0**	63	0	**3,720**

General principles

Vossloh AG is a listed company based in Werdohl, Germany. The Company is registered under HRB 5292 in the commercial register of the Iserlohn Local Court. The development, manufacturing and sale of products as well as the provision of services of all varieties in the field of rail technology, particularly in rail infrastructure and railbound vehicles, are the Vossloh Group's primary activities.

These consolidated financial statements were prepared in accordance with the International Financial Reporting Standards (IFRS) as adopted by the European Union (EU), as well as with the supplementary regulations of Section 315e (1) of the German Commercial Code (HGB). All binding standards as of the balance sheet date have been considered.

On February 28, 2020, Vossloh AG's Executive Board released the consolidated financial statements for transmittal to the Supervisory Board's Audit Committee.

New accounting rules

The following standards and interpretations have been issued by the IASB but were not yet binding for the 2019 fiscal year according to the EU's adoption regulations or were not yet adopted into European law. In the case of standards and interpretations that have not yet been adopted by the EU, the first-time application in accordance with the IASB is indicated. Early adoption of these standards is not planned. Unless otherwise stated, the impact on the consolidated financial statements is currently being reviewed.

New or amended standards	Issued	Applied for the first time in fiscal year	Endorsed by the EU	Key content and impact on the consolidated financial statements of Vossloh AG
IFRS 17: Insurance Contracts	May 2017	2021	./.	None
Amendments to IFRS 3: Definition of a Business	October 2018	2020	./.	Depending on the nature of the transaction, an acquisition can be treated as the acquisition of individual assets or as a business combination. It is not possible to determine the impact of applying this standard, as this will be dependent on future transactions
Definition of "material", amendments to IAS 1 and IAS 8	October 2018	2020	2019	The adjusted definition of materiality may be relevant to individual balance sheet accounting issues
Amendments to References to the Conceptual Framework in IFRS Standards	March 2018	2020	2019	None
Reform of reference interest rates, amendments to IFRS 9, IAS 39 and IFRS 7	September 2019	2020	2020	The impact is currently being investigated and cannot be conclusively assessed yet

First-time application of standards and interpretations

In the 2019 fiscal year, the changes to standards and interpretations listed in the following table were applied for the first time:

Standard/Interpretation	Issued	Endorsed by the EU
IFRS 16: Leases	January 2016	2017
Amendments to IFRS 9: Prepayment Features with Negative Compensation	October 2017	2018
Annual improvements to IFRS Standards, 2015 - 2017 cycle	December 2017	2019
Plan Amendment, Curtailment or Settlement (Amendments to IAS 19)	February 2018	2019
Long-term Interests in Associates and Joint Ventures (Amendments to IAS 28)	October 2017	2019
IFRIC 23: Uncertainty over Income Tax Treatments	June 2017	2018

In the 2019 fiscal year, IFRS 16: Leases will be applied for the first time. We have provided comprehensive information on general aspects of the amendment to the accounting treatment of leases in the case of a lessee in the 2017 annual report.

The conversion to IFRS 16 was implemented in the Vossloh Group by applying the relevant transitional provisions as follows:

- The previous assessment of existing contracts with regard to their classification as leases in accordance with IAS 17 or IFRIC 4 was adopted.

- The first-time application of the new accounting method will be limited retrospectively.

- Leases which ended during 2019 were treated as short-term leases; the resulting payments were recognized as operating expenses.

- The term of leases was determined using the information available at the beginning of the reporting period, not the assessment at the beginning of the lease. Incidentals arising from the agreement of contracts were not included when measuring liabilities from leases.

- The marginal financing rate of Vossloh AG in effect on January 1, 2019, 1.2 percent, was used for discounting purposes for all non-material leases. A term-specific marginal financing rate suitable for the economic environment and the relevant monetary area was used for material leases where the present value of the lease liabilities exceeded €100,000. The weighted average marginal financing rate was 2.43 percent.

- In this respect, the cumulative changes in the existing leases at the time of the first-time application of IFRS 16 (= January 1, 2019) were reported and recognized in the values carried forward to the 2019 fiscal year. The comparative figures for the 2018 fiscal year remained unchanged.

Contracts previously categorized as operating leases were recognized for the first time on January 1, 2019. In this case, the liability to be recognized was calculated in the amount of the present value of the remaining lease installments using the interest rates described above. The corresponding right of use was recognized using the total documented lease liability. Instead of lease payments being recognized as expenses in the income statement, the amortization of the recognized rights of use are now included in the relevant functional expenses (cost of sales, administrative and selling expenses and research and development costs), with the compounding of the present value recognized as a liability in interest expense.

Short-term leases (term including extension options of up to one year maximum) and low-value assets are excluded from the generally required accounting treatment in accordance with the accounting option set out in IFRS 16. In such cases, the contractual lease payments continue to be recognized as operating expenses. Low-value assets include, in particular, leased office equipment and other equipment.

The lease payments disclosed on the previous year's reporting date are reconciled to the lease liabilities in the balance sheet as at January 1, 2019, in the following table. The present value of the liability increased noticeably, mainly as a result of the analyses of the probable duration of further use in the event of extension or termination options.

Reconciliation of future lease payments as of 12/31/2018 from operate leases to the recognized lease obligations at the time of the first-time application

€ mill.	12/31/2018 - 1/1/2019
Present value of lease obligations from operate leases as at the end of 2018	35.9
Plus obligations from finance leases recognized as at 12/31/2018	5.1
Minus obligations from low-value and short-term leases and leases of intangible assets	(3.8)
Plus effects from the differing treatment of extension options	20.3
Lease obligations recognized as of the time of the first-time application	57.5

All lease payments are recognized as the repayment of financial liabilities in cash flow from financing activities in the cash flow statement. Payments for leases which did not lead to the capitalization of rights of use in accordance with the exercising of options are recognized in cash flow from operating activities. Due to the provisions of the syndicated loan concluded in November 2017, the change in the accounting for leases has no effect on compliance with the financial ratios since the corresponding key figures are determined on the basis of the previous accounting method.

Other standards and interpretations which were applied for the first time had no significant impact on the consolidated financial statements.

Principles for preparing the consolidated financial statements

The financial statements of all companies included in the consolidated financial statements are prepared as of Vossloh AG's closing date (December 31) in accordance with uniform accounting and measurement methods; the majority are audited or reviewed by independent statutory accountants.

The consolidated financial statements are prepared in the euro, the functional currency of the company. Figures are mostly presented in millions of euros. The income statement is structured according to the cost-of-sales method.

Preparing the consolidated financial statements requires management to make certain discretionary decisions, assumptions and estimates. These estimates involve a certain level of uncertainty. They affect the valuation of recognized assets, liabilities and of contingent liabilities as of the balance sheet date, as well as the recognition of income and expenses in the reporting period.

Due to uncertainty, the actual values subsequently determined may differ from those estimates and hence from the amounts disclosed in the consolidated financial statements. The estimates and underlying assumptions are subject to ongoing review. Adjustments are made in the period of the change or in future periods, for example in the case of changes to the useful lives of property, plant and equipment.

Estimation uncertainty with a significant impact on the consolidated financial statements is particularly prevalent when accounting for goodwill (see Note 10), recognizing deferred taxes (see Note 16) and recognizing and measuring other provisions (see Note 25).

Discretionary decisions with a significant impact on the consolidated financial statements are particularly common when measuring the duration of leases in the event of extension or termination options (see "Information on leases").

The recognition and measurement principles applied in Vossloh AG's consolidated financial statements are detailed in the notes.

Consolidation

Vossloh's consolidated financial statements comprise the financial statements of Vossloh AG and (generally speaking) all of its subsidiaries. All subsidiaries where Vossloh AG exercises control, usually by directly or indirectly holding the majority of voting rights, are fully consolidated.

The financial statements of subsidiaries are included in the consolidated financial statements from the date control is obtained until the control relationship expires. The acquisition method (purchase method) of accounting is used for capital consolidation of the subsidiaries. In this regard, the cost of the acquired shares is offset against the Group's holding in the equity of the subsidiaries. To determine the equity of subsidiaries acquired, all identifiable assets, liabilities and contingent liabilities of the subsidiary are recognized at fair value at the acquisition date. Remaining positive differences between the purchase price and the market value of the acquired assets and liabilities are recognized as goodwill in accordance with IFRS 3 and are tested for impairment annually at the level of the relevant business unit. Negative goodwill is directly recognized in profit after the values of assets and liabilities have been reassessed. Shares belonging to other investors with a corresponding stake in the identifiable net assets of the respective company acquired are measured at the acquisition date. Changes to the Group's holdings in subsidiaries, which do not lead to an acquisition or loss of control over this subsidiary, are treated as equity transactions.

Receivables and payables, and income and expenses, between consolidated Group companies are eliminated in connection with the consolidation of liabilities as well as income and expenses. Where write-downs have been recognized in the separate financial statements of consolidated subsidiaries on shares in consolidated subsidiaries or intragroup receivables, such write-downs are reversed in consolidation. Interim profits and losses from intragroup transactions are eliminated.

In accordance with IFRS 11, joint ventures are generally accounted for using the equity method insofar as the Group company holding the interest has typical shareholder rights applicable to the net assets of the joint venture. Insofar as the rights of the Group company holding the interest apply to individual assets or liabilities, or the companies participating in the joint venture have entered into specific agreements regarding the division of the goods produced or services rendered by the joint venture, such a joint venture would be deemed jointly operated and the assets and liabilities, or the expense and income, would be accounted for using proportionate consolidation. Where material, other companies in which Vossloh owns an equity interest of between 20 and 50 percent and where Vossloh can exercise a significant influence on their business and financial policies (associated companies) are accounted for using the equity method.

All other equity interests are measured at fair value and recognized in other noncurrent financial instruments.

In the 2019 fiscal year, the following changes occurred in the scope of consolidation:

One company which was not considered material in the previous year and two companies established in the year under review were included in the scope of consolidation for the first time. Two companies left the scope of consolidation due to an internal merger, while one company was sold.

As of the end of the fiscal year, 60 companies were fully included in the consolidated financial statements, 16 of which were domiciled in Germany. This was unchanged from the previous year.

Eleven companies domiciled outside of Germany (previous year: ten) and one company domiciled in Germany (previous year: one) were accounted for using the equity method.

Due to their immateriality with respect to net assets, financial position and results of operations, twelve companies (previous year: 16) in which Vossloh AG directly or indirectly holds a voting majority as of the reporting date or controls by other means were not included in the consolidated financial statements.

Currency translation

Noneuro financial statements of subsidiaries are translated into euros as the Group currency according to the concept of functional currency. Since these subsidiaries are economically independent entities, their functional currency corresponds to their local currency. For balance sheet items, the mean exchange rate as of the reporting date is used, while for the translation of items in the income statement, the annual average rate is applied, which serves as an approximation of the respective rates on the transaction dates.

Compared with the translation of the previous year, currency translation differences in assets and liabilities, and between income statement and balance sheet, are recognized directly in equity and presented in the line item "Accumulated other comprehensive income".

In the separate financial statements, foreign currency transactions are translated at the rate upon initial recognition. Gains or losses arising up to the end of the reporting period from the remeasurement of financial instruments or cash and cash equivalents are recognized in profit or loss.

The exchange rates of countries outside of the eurozone in which the Vossloh Group transacts major business through consolidated subsidiaries are listed below:

Exchange rates

Country	Currency	€	2019	2018	2019	2018
			Current rate		Average rate	
Australia	AUD	1 €	1.60	1.62	1.61	1.58
Brazil	BRL	1 €	4.51	4.44	4.42	4.30
China	CNY	1 €	7.82	7.84	7.74	7.81
United Kingdom	GBP	1 €	0.85	0.90	0.88	0.88
India	INR	1 €	80.07	79.65	78.85	80.74
Kazakhstan	KZT	1 €	429.30	435.98	428.56	406.97
Malaysia	MYR	1 €	4.59	4.73	4.63	4.76
Mexico	MXN	1 €	21.17	22.51	21.56	22.71
Poland	PLN	1 €	4.25	4.29	4.30	4.26
Russia	RUB	1 €	69.61	79.80	72.47	74.04
Sweden	SEK	1 €	10.49	10.16	10.59	10.26
Serbia	RSD	1 €	117.57	118.30	117.82	118.24
Thailand	THB	1 €	33.80	37.07	34.76	38.16
Turkey	TRY	1 €	6.68	6.07	6.36	5.71
USA	USD	1 €	1.12	1.14	1.12	1.18

Notes to the income statement

In the year under review, the Executive Board of Vossloh AG approved the essential cornerstones of a performance program for a sustainable increase in profitability as well as an improvement in the self-financing capacity of the Vossloh Group. The resulting expenses mainly led to the impairment of intangible assets and property, plant and equipment, in addition to termination payments and related payments. Impairments related to the divestment of unprofitable or disadvantageous activities came to €41.9 million. The element related to reducing the number of employees came to €30.2 million, divided between termination payments and provisions for such payments. Additional expenses of €21.2 million are mostly related to the cost of sales, in addition to further impairments of trade receivables and general administrative and selling expenses. One-time effects led to expenses of €93.3 million in the income statement.

(1) Sales revenues

Breakdown of sales revenues

€ mill.	2019	2018
Sales of products		
Fastening Systems	234.2	216.9
Tie Technologies	125.7	78.1
Consolidation	(8.2)	(2.4)
Core Components	351.7	292.6
Customized Modules	471.9	482.6
Lifecycle Solutions	27.6	26.1
Consolidation	(14.5)	(10.2)
Group	**836.7**	**791.1**
Sales revenues from rendering services		
Lifecycle Solutions	64.4	64.1
Group	**64.4**	**64.1**
Sales revenues from customer-specific manufacturing		
Customized Modules	1.3	0.0
Lifecycle Solutions	14.0	9.8
Group	**15.3**	**9.8**
Sales revenues		
Fastening Systems	234.2	216.9
Tie Technologies	125.7	78.1
Consolidation	(8.2)	(2.4)
Core Components	351.7	292.6
Customized Modules	473.2	482.6
Lifecycle Solutions	106.0	100.0
Consolidation	(14.5)	(10.2)
Group	**916.4**	**865.0**

The performance obligations of Group companies consist primarily of the delivery of typical products or the performance of services, which are listed in the description of the business activities of the divisions and business units in the notes to the segment report on pages 108 et seq. Sales revenues are recognized net of sales deductions and price allowances such as discounts, bonuses, rebates, and purchases or returns credited. As a general rule, in accordance with IFRS 15, recognition takes place upon transfer of control of the products to be delivered on the basis of the respective contractually agreed incoterms. In most cases, this is covered by the transfer of ownership and risks to the buyer or when the customer takes physical possession. At several Group companies, "bill-and-hold" arrangements have been contractually agreed because the customers manage the delivery of products on the basis of their own planning of construction projects in cases of new or overhauled rail routes. In such cases, the products have already been accepted by the customer in advance and are also stored separately as the property of the customer. Where partial invoices have been contractually agreed upon in advance, sales are recognized after the customer has finally and formally accepted the partial delivery. The payment terms for the majority of customer contracts do not include any financing components. Some orders include de facto redemption obligations for individual components in the event that components need to be replaced with more suitable versions due to specific effects. Contractual guarantees are also concluded on an arm's length basis.

For individual projects and the performance of services in general, the performance of the owed service and the associated revenue recognition takes place over a period of time. In this context, the proportional earnings contribution realized as of the reporting date is also recognized along with the revenue in the income statement. The degree of having such contracts completed is recognized using the percentage-of-completion method (PoC) by comparing the contract costs already incurred with the total expected contract costs (cost-to-cost method). Costs due to inefficiencies or similar causes are not taken into consideration in the calculation of the percentage of completion. The proportional profit from the PoC method is recognized only where the results of the customer contracts can be determined reliably. If this condition is not met, sales are recognized without including the proportional profit. Where a loss from a customer contract is imminent, this is recognized in full.

The segment reports starting on pages 108 et seq. and 143 et seq. include breakdowns of external sales revenues by division, business unit and region. A further overview of overall sales revenues by region can also be found in the combined management report on page 42 of this annual report.

(2) Functional expenses

According to the cost-of-sales format of the income statement presentation, expenses are allocated to functional categories. The following expense types and their amounts are included in cost of sales, selling, general administrative, and research and development expenses:

Breakdown of cost types

€ mill.	2019	2018
Cost of raw materials and supplies	394.4	375.3
Cost of services purchased	67.8	61.6
Cost of materials	**462.2**	**436.9**
Wages and salaries	210.8	167.5
Social security expenses and charges	43.5	41.8
Pension expenses	5.8	5.6
Personnel expenses	**260.1**	**214.9**
Depreciation/amortization	**86.4**	**35.5**

Depreciation and amortization for the year under review includes valuation allowances for disposal groups which have already been sold and disposal groups which are still available for sale totaling €33.4 million in addition to the amortization of rights of use capitalized in accordance with IFRS 16 totaling €11.4 million.

Based on the quarterly numbers, the average annual workforce structure was as follows:

Workforce structure

	2019	2018
Executive Board/management Board	19	21
Other managers/executives	120	120
Nontariff employees	871	851
Tariff employees	2,700	2,678
Apprentices/trainees	43	58
Interns/working students	20	24
	3,773	**3,752**

In the Locomotives business unit, which has been classified as available for sale, 537 people on average were employed over the year (previous year: 481). The number of employees in the Vossloh Group in accordance with Section 314 (1) No. 4 of the German Commercial Code was 3,773 (previous year: 3,752).

(2.1) Cost of sales

Cost of sales covers the cost of goods and services sold in the period. Besides such direct costs as materials, labor and energy, cost of sales comprises indirect costs, primarily amortization of intangible assets, in addition to depreciation on plant, property and equipment. Cost of sales also includes any write-downs of inventories in the period.

(2.2) General administrative and selling expenses

Breakdown of general administrative and selling expenses

€ mill.	2019	2018
Selling expenses	57.4	55.8
General administrative expenses	112.0	88.3
General administrative and selling expenses	**169.4**	**144.1**

In addition to personnel expenses, selling expenses primarily include outbound freight and commissions.

Administrative expenses cover personnel, material and other administration expenses, including related amortization and depreciation.

(2.3) Research and development costs

All research costs are directly expensed as research and development expenses in the income statement. Costs incurred for developing a marketable product are capitalized if the criteria in IAS 38 are met. Noncapitalizable development costs are also recognized in this line item in the income statement. Research and development expenses before capitalized development expenses came to €11.6 million in the past fiscal year (previous year: €12.3 million). Of these costs for development projects, €0.9 million (previous year: €1.4 million) were recognized in the balance sheet.

(3) Other operating result

Breakdown of other operating result

€ mill.	2019	2018
Currency exchange gains	12.3	3.1
Release of allowances and reversal of write-downs	0.0	2.0
Income from government grants	1.2	1.6
Insurance reimbursements	0.7	1.6
Rental income	1.0	1.1
Income from the disposal of intangible assets and property, plant and equipment	1.2	0.8
Other income	9.6	13.1
Other operating income	**26.0**	**23.3**
Currency exchange losses	(3.7)	(3.6)
Expenses for buildings	(0.3)	(0.4)
Losses on the disposal of intangible assets and property, plant and equipment	(1.0)	(0.3)
Impairment of intangible assets and property, plant and equipment	(35.1)	0.0
Impairment of inventories and other assets	(6.8)	0.0
Other expenses	(1.4)	(0.6)
Other operating expenses	**(48.3)**	**(4.9)**
Other operating result	**(22.3)**	**18.4**

Currency exchange gains include €8.2 million related to the release of currency translation differences connected to the sale of Cleveland Track Material and extensive liquidation through the sale of the significant assets of Vossloh Track Material. Currency exchange gains and losses also include changes in the market value of stand-alone derivatives for the economic hedging of currency risk. Income from government grants is mainly related to R&D projects. Payments received on account of such grants are recognized as deferred income and amortized to other operating income. Investment/capex-related grants or incentives are offset against the cost of the property, plant and equipment concerned. Conditions yet to be met and where the failure to meet such conditions would entail the repayment of grants do not exist, nor do any contingent liabilities in this regard. As of the end of the reporting period, no grants were recognized as a cost reduction in property, plant and equipment, as in the previous year.

Write-downs on intangible assets and property, plant and equipment were almost entirely due to the performance program implemented during the fiscal year. €17.5 million was recognized in connection with the sale of the shares in Cleveland Track Material. Impairments of various intangible assets, property, plant and equipment and rights of use were recorded in the Rail Services and Switch Systems business units, totaling €8.2 million and €9.1 million respectively. Vossloh Switch Systems also incurred expenses in conjunction with the treatment of two companies as disposal groups. Additional information can be found in note (7) on page 120 et seq. In the previous year, other income included a badwill of €5.5 million.

(4.1) Other financial income

Breakdown of other financial income

€ mill.	2019	2018
Income from investments	0,3	2,9
Income from shares in affiliated companies	0,2	0,4
Income from the measurement of financial instruments at fair value	0,0	0,0
Write-ups of financial instruments	0,0	0,0
Income from securities	0,1	0,1
Other financial income	**0,6**	**3,4**

(4.2) Other financial expenses

Breakdown of other financial expenses

€ mill.	2019	2018
Write-down of financial instruments	(1.2)	0.0
Other financial expenses	**(1.2)**	**0.0**

(5) Interest expenses

Breakdown of interest expenses

€ mill.	2019	2018
Interest from bank liabilities	(6.2)	(5.0)
Guarantee commissions	(0.9)	(0.9)
Interest from leases	(1.2)	0.0
Other interest expense	(12.8)	(9.0)
Interest expenses	**(21.1)**	**(14.9)**

(6) Income taxes

Breakdown of income taxes

€ mill.	2019	2018
Current income taxes	13.0	13.6
Deferred taxes	(2.7)	2.4
Income taxes	**10.3**	**16.0**

Of the current income taxes, €(0.1) million (previous year: €(1.3) million) related to previous years. In the case of deferred taxes, this applied to €(0.3) million (previous year: €(0.7) million). Totaling €3.2 million (previous year: €3.6 million) of deferred tax income resulted from the reversal of temporary differences. Remeasurements of temporary differences resulted in deferred tax expenses of €0.3 million (previous year: €0.1 million).

In Germany, the statutory corporate income tax rate of 15 percent and the solidarity surcharge (5.5 percent of corporate income tax) are applied. Municipal trade tax is also collected at rates defined by the respective local municipalities. We expect an average tax rate of 31.87 percent for Vossloh AG as the parent company (previous year: 31.88 percent).

The Vossloh Group's actual tax expense of €10.3 million (previous year: €16.0 million) was €28.2 million (previous year: €3.0 million) above the anticipated tax expense that would have resulted from applying a Group holding-wide tax rate to EBT.

The reconciliation of the expected income tax expense to the actual income tax shown in the consolidated income statement is presented below:

Reconciliation to the recognized income tax expense

		2019	2018
Earnings before taxes	€ mill.	(56.1)	40.8
Income tax rate including trade taxes	%	31.87	31.88
Expected tax expense when applying a uniform tax rate	€ mill.	(17.9)	13.0
Tax reduction due to divergent foreign income tax rates	€ mill.	5.3	(1.7)
Tax reduction due to tax-exempt income	€ mill.	(7.0)	(4.0)
Tax increase due to non-deductible expenses	€ mill.	8.6	3.6
Taxes for previous years	€ mill.	(0.1)	(2.1)
Tax effect of write-ups/write-downs of deferred tax assets	€ mill.	20.7	6.6
Double-taxation effects	€ mill.	(0.1)	0.0
Effects from the remeasurement of deferred taxes	€ mill.	0.3	0.1
Effects from the measurement of investments in companies accounted for using the equity method	€ mill.	1.6	0.5
Other differences	€ mill.	(1.1)	0.0
Recognized income tax expense	€ mill.	10.3	16.0
Effective income tax rate	%	(18.4)	39.2

The other deviations are mainly the result of tax credits for Vossloh Cogifer KIHN SA in Luxembourg. Deferred taxes from items, which increased other comprehensive income, amounted to €1.1 million (previous year: €0.2 million). Those deferred taxes arose from the remeasurement of defined benefit plans in the amount of €1.1 million (previous year: €0.2 million) to be accounted for in the fiscal year in addition to changes in the measurement of hedging instruments on cash flow hedges amounting to €0.0 million (previous year: €0.0 million). Taxable temporary differences of €194.3 million resulted from the valuation of investments in the respective parent companies and the net assets in the consolidated balance sheet (previous year: €307.8 million). The resulting deferred taxes to be recognized would theoretically amount to €3.3 million (previous year: €5.3 million). Because the Group can manage the reversal of temporary differences and this reversal is not considered likely in the near future, no related deferred tax liabilities are incurred.

(7) Result from discontinued operations/assets and liabilities held for sale

The result from discontinued operations during the reporting year primarily concerned the Locomotives business unit, which is reported as discontinued operations in accordance with IFRS 5. A contract for the sale to CRRC Zhuzhou Co., Ltd. in China was signed in August 2019. The Executive Board expects this transaction to be finalized in the near future. The result reported in the income statement comprises all income and expenses resulting from current business of Vossloh Locomotives and the associated tax expense in addition to all expenses incurred as a result of the measurement of assets and liabilities at fair value less expected costs to sell. In addition, provisions in connection with earlier sales from sub-units of the former Transportation division have been released.

The assets and liabilities held for sale in the balance sheet relate to the companies of this business unit, the company Vossloh Cogifer do Brasil Metalùrgica in Brazil and Vossloh Signaling in the Switch Systems business unit in the USA, which the Group intends to sell and which are treated as disposal groups. The line item also includes the remaining property, plant and equipment of Vossloh Track Material. All other assets of this company were sold during the fiscal year in two transactions. Operations were ceased, and the currency translation differences in other comprehensive income attributable to this company were reversed through profit and loss.

The composition of the assets and liabilities held for sale is shown in the table below:

Assets and liabilities held for sale

€ mill.	12/31/2019	12/31/2018
Intangible assets (excl. goodwill)	0.0	0.0
Goodwill	0.0	0.0
Property, plant and equipment	39.6	0.0
Other noncurrent assets	7.1	0.7
Noncurrent assets	**46.7**	**0.7**
Inventories	70.5	69.6
Trade receivables	8.1	9.7
Contract assets	20.3	19.8
Other current assets	4.3	2.5
Cash and cash equivalents	2.6	2.2
Current assets	**105.8**	**103.8**
Assets	**152.5**	**104.5**
Provisions	18.4	19.0
Trade payables	20.3	20.3
Liabilities from leases	78.2	0.0
Other liabilities	26.1	31.3
Liabilities	**143.0**	**70.6**

Composition of the result from discontinued operations

€ mill.	2019	2018
Income	142.7	200.9
Expenses	(168.3)	(215.3)
Result from operating activities, before taxes	**(25.6)**	**(14.4)**
Income taxes	0.8	0.1
Result from operating activities, after taxes	**(24.8)**	**(14.3)**
Impairment loss on other noncurrent assets	(49.6)	(2.7)
Subsequent effects from former business units	4.0	14.9
Result from discontinued operations	**(70.4)**	**(2.1)**
thereof attributable to shareholders of Vossloh AG	(70.4)	(2.1)
thereof attributable to noncontrolling interests	0.0	0.0

In the statement of comprehensive income, €(0.4) million (previous year: €0.0 million) results from the revaluation of defined benefit plans and related income taxes of €0.1 million (previous year: €0.0 million) from discontinued operations.

Assets and liabilities related to disposal groups

€ mill.	12/31/2019
Intangible assets (excl. goodwill)	0.0
Goodwill	0.0
Property, plant and equipment	1.5
Other noncurrent assets	0.0
Noncurrent assets	**1.5**
Inventories	4.6
Trade receivables	2.7
Other current assets	0.6
Cash and cash equivalents	0.7
Current assets	**8.6**
Assets	**10.1**
Provisions	0.3
Trade payables	0.8
Liabilities from leases	1.8
Other liabilities	2.7
Liabilities	**5.6**

(8) Noncontrolling interests

The share of the Group's total net income attributable to noncontrolling interests includes shares in profit of €4.4 million (previous year: €4.6 million) and shares in losses of €1.5 million (previous year: €0.1 million).

(9) Earnings per share

		2019	2018
Weighted average of shares outstanding	Number	16,798,618	15,967,437
Net income attributable to Vossloh AG shareholders	€ mill.	(139.7)	18.2
Basic/diluted earnings per share	€	(8.32)	1.14
thereof attributable to continuing operations	€	(4.13)	1.27
thereof attributable to discontinued operations	€	(4.19)	(0.13)

Notes to the cash flow statement

The cash flow statement shows the changes in cash and cash equivalents and current account payables within the Vossloh Group. Cash pertains to cash on hand and in the bank. Cash equivalents comprise any financial instruments with a maximum residual term of three months from the point of acquisition that can be readily converted into cash. Short-term current account liabilities relate to target bank balances due in the near future and are included in cash and cash equivalents. In the previous year, these matters were included in short-term borrowing. The cash flow statement is prepared in conformity with IAS 7 and breaks down changes in cash and cash equivalents into the cash flows from, and outflows for, operating, investing and financing activities. The cash flow from operating activities is presented according to the indirect method.

The other noncash income and expenses primarily encompass currency translation effects and the changes to deferred taxes. Cash receipts and payments arising from the purchase or sale of consolidated companies and other units were offset against cash inflows and outflows. In the previous year, cash inflows totaling €2.0 million were offset against purchase price payments of €44.9 million. Proceeds from the sale of consolidated companies include a sale price of €40.1 million and cash outflows of €0.5 million.

Net financing from short-term loans includes the repayment of the loan from Bayerische Landesbank (€14.4 million) and a new loan taken out by Vossloh Fastening Systems China which was recognized as a liability totaling €9.3 million on the reporting date. "Net financing from medium-term and long-term loans" primarily consists of drawdowns from additional tranches of the syndicated loan totaling €35.0 million. In the previous year, this item included the repayment of the Schuldschein loan of €50.0 million, the utilization of the credit line from the syndicated loan at €56.2 million and the raising of a short-term loan for €25.0 million from Bayerische Landesbank. For more information, see our notes on the financial liabilities under (26.1).

The figures in the cash flow statement shown on page 105 relate to the entire Group including effects of discontinued operations. The table below divides the subtotals of the cash flow statement and opening and closing cash and cash equivalents into continuing and discontinued operations.

€ mill.	2019		2018	
Cash flow items	thereof from continuing operations	thereof from discontinued operations	thereof from continuing operations	thereof from discontinued operations
Gross cash flow	56.0	(16.7)	87.3	3.0
Cash flow from operating activities	54.8	(42.5)	36.2	1.4
Free cash flow	2.4	(44.8)	(17.3)	(1.7)
Cash flow from investing activities	(13.2)	(2.3)	(92.1)	(2.9)
Cash flow from financing activities	(17.0)	45.1	(16.0)	1.9
Opening cash and cash equivalents	21.0	2.3	93.6	1.8
Exchange rate effects	0.4	0.0	(0.7)	0.1
Closing cash and cash equivalents	46.0*	2.6	21.0	2.3

*of which €0.7 million included in disposal groups and recognized in assets held for sale in accordance with IFRS 5.

The following table clarifies the distribution of the changes in financial liabilities, as well as in derivatives from hedging relationships included in the cash flow from financing activities, between cash and noncash items:

€ mill.	Noncurrent and medium-term credit liabilities	Current credit liabilities	Liabilities from leases	Derivatives in hedging relationships	Total
As of 12/31/2017	**248.8**	**55.7**	**0.0**	**(3.1)**	**301.4**
Payments for the period	14.7	32.1	(0.2)	0.0	46.6
Noncash changes					
Business acquisitions	0.0	0.0	0.0	0.0	0.0
New lease agreements	0.0	0.0	5.2	0.0	5.2
Changes in fair value	0.2	0.4	0.0	11.2	11.8
Exchange rate effects	0.0	(0.4)	0.0	0.0	(0.4)
Other	56.1	(56.1)	0.0	0.0	0.0
As of 12/31/2018	**319.8**	**31.7**	**5.0**	**8.1**	**364.6**
Payments for the period	28.5	(6.1)	(13.5)	0.0	8.9
Noncash changes					
Change due to disposal groups which have been sold and are still available for sale	0.0	0.0	(2.5)	0.0	(2.5)
New lease agreements	0.0	0.0	58.9	0.0	58.9
Changes in fair value	0.0	0.0	1.2	1.9	3.1
Exchange rate effects	0.0	0.0	0.0	0.0	0.0
Other	0.0	4.1	0.0	0.0	4.1
As of 12/31/2019	**348.3**	**29.7**	**49.1**	**10.0**	**437.1**

Notes to the balance sheet

The balance sheet is broken down into noncurrent and current assets and liabilities. Assets and liabilities maturing or due within one year are deemed current.

Irrespective of their maturity, trade receivables/payables are always considered current even if due after one year but within one normal business cycle. Deferred taxes are recognized as noncurrent assets or liabilities.

(10) Intangible assets

Breakdown of intangible assets

€ mill.	2019	2018
Goodwill	252.3	266.9
Development costs	5.0	7.3
Concessions, licenses and property rights	21.6	28.3
Advance payments	1.2	0.3
	280.1	**302.8**

Except for goodwill, all intangible assets have a finite useful life and are therefore carried at amortized cost. Goodwill is carried in the respective functional currency of the Group company whose acquisition gave rise to the goodwill.

Pursuant to IFRS 3 in conjunction with IAS 36, goodwill from acquisitions is not amortized but is tested annually for impairment as of the balance sheet date or upon the occurrence of triggering events (impairment test). In this connection, the higher amount from value in use or fair value less costs to sell is compared to the respective carrying amount of a group of cash-generating units (CGUs). For the CGU groups in question, the value in use is always the higher value. Within the Vossloh Group, goodwill is assigned to the business units, which represent groups of CGUs. The value in use is calculated based on the medium-term budget for the respective units and is derived from the expected discounted cash flows. In this respect, key assumptions are the anticipated orders resulting from sales planning, the corresponding expected sales revenues and the full earnings and balance sheet planning based on this.

When measuring the value in use by discounting anticipated cash flows, a pre-tax discount rate specific to the CGU is applied. When determining the respective discount rate, weighted specific country risks, inflation effects and tax rates are considered, whereby the weightings from the country risks as well as the inflation effects from the regional distribution of sales were derived from both the past fiscal year and over the budget periods, while the tax rates were determined on the basis of the relative earnings contributions of the companies within the business units.

The planning is based on empirical data and expected future market trends and encompasses a detailed planning period of three years. The expected sales growth of the business units is based on the planned projects and projects which are already included in the order backlog to various extents. Average annual sales growth in the business units, which is anticipated for this period in line with the medium-term budget, is reported in the table below. The growth rate of the perpetual annuity was set at 50 percent of the business unit-specific inflation rate resulting from the discount factor calculation described above.

For periods beyond this planning horizon, the cash flows are projected forward by assuming the described growth rate to determine the value in use. An equal level of financing of inventories, trade receivables and payables, and property, plant and equipment associated with this growth was also included in the cash flow. As the business units' values in use (including assigned goodwill) exceed their carrying amounts, no goodwill impairment loss had to be recognized. Within the scope of sensitivity analyses, various scenarios are examined: an increase in the discount rates by 50 basis points, a separate derivation of the WACC just for the terminal value and a general reduction in cash flows by 7.5 percent. A need for impairment ranging between €1.1 million and €17.1 million was identified in all scenarios for the Rail Services business unit. A need for impairment in the single-digit million range was only detected in the Tie Technologies business unit in the event of WACC going up by 50 basis points in addition to a 7.5 percent decrease in cash flow.

Goodwill breakdown by reporting segment

€ mill.	2019				2018
	Discount rate (in %)	Growth rate of the perpetual annuity (in %)	Average revenue growth p.a. (in %)	Carrying amount	Carrying amount
Vossloh Switch Systems	10.38	1.10	0.2	137.8	155.7
Vossloh Rail Services	7.75	0.84	4.9	56.8	56.8
Vossloh Tie Technologies	10.57	1.14	7.5	57.6	56.1
Vossloh Fastening Systems	13.53	1.99	9.0	1.2	1.2
				253.4	**269.8**

In the goodwill of the Vossloh Switch Systems business unit, €1.1 million of calculated noncontrolling interests are included for the purposes of the impairment test (previous year: €2.9 million).

The purchase price allocation of Austrak Pty. Ltd, acquired in the previous year, was finalized in the spring of 2019. This resulted in a €1.5 million increase in the goodwill recognized in the Tie Technologies business unit and other current liabilities. The corresponding balance sheet figures in the previous year were therefore adjusted on page 106 in accordance with IFRS 3.49. The goodwill attributed to Vossloh Switch Systems fell by €12.1 million due to the sale of Cleveland Track Material. The goodwill allocated to this business unit was also reduced by €2.8 million as part of the sale of the operational business of Vossloh Track Material and the treatment of Vossloh Signaling as a disposal group.

Development costs are capitalized at cost of sales wherever such costs can clearly be assigned, the developed product's technical feasibility and future marketability are ensured, and the development work is reasonably certain to produce future cash inflows.

The cost of sales includes all costs directly or indirectly assignable to the development process. Capitalized development costs are amortized on a straight-line basis over useful lives of one to ten years.

Concessions, licenses and property rights are for the most part amortized on a straight-line basis over a period of one to twenty years.

The amortization of intangible assets in the amount of €2.7 million (previous year: €2.7 million) is included in the income statement under cost of sales, €2.3 million (previous year: €1.7 million) under general administrative and selling expenses and €0.9 million (previous year: €0.9 million) under research and development costs.

Impairments were recorded in the year under review in the amount of €4.8 million (previous year: €0.0 million).

Changes in intangible assets

€ mill.	2019	2018	2019	2018	2019	2018	2019	2018	2019	2018
	Goodwill		Development costs		Concessions, licenses and property rights		Advance payments		Intangible assets	
Net carrying amount as of December 31	**252.3**	**266.9**	**5.0**	**7.3**	**21.6**	**28.3**	**1.2**	**0.3**	**280.1**	**302.8**
Cost										
As of January 1	**327.1**	**311.4**	**11.3**	**9.4**	**65.2**	**55.0**	**0.3**	**0.1**	**403.9**	**375.9**
Changes from first-time consolidation/business acquisitions	0.1	13.1	0.0	0.0	(0.1)	8.1	0.0	0.0	0.0	21.2
Changes from the transition and deconsolidation	0.0	0.0	0.0	0.0	(3.7)	0.0	0.0	0.0	(3.7)	0.0
Additions/ongoing investments	0.0	0.0	0.7	1.9	1.3	1.1	1.1	0.3	3.1	3.3
Disposals	(6.6)	0.0	(1.1)	0.0	(4.9)	(0.2)	0.0	0.0	(12.6)	(0.2)
Transfers	0.0	0.0	0.0	0.0	1.6	0.0	(0.2)	0.0	1.4	0.0
Currency translation differences	2.1	2.6	0.0	0.0	0.5	1.2	0.0	(0.1)	2.6	3.7
As of December 31	**322.7**	**327.1**	**10.9**	**11.3**	**59.9**	**65.2**	**1.2**	**0.3**	**394.7**	**403.9**
Accumulated amortization and impairment losses										
As of January 1	**60.2**	**60.2**	**4.0**	**3.1**	**36.9**	**32.2**	**0.0**	**0.0**	**101.1**	**95.5**
Changes from the transition and first-time consolidation	0.0	0.0	0.0	0.0	(2.5)	0.0	0.0	0.0	(2.5)	0.0
Depreciation and impairment losses in the fiscal year	14.9	0.0	2.8	0.9	8.2	4.4	0.0	0.0	25.9	5.3
Disposals	(5.4)	0.0	(0.9)	0.0	(4.6)	(0.1)	0.0	0.0	(10.9)	(0.1)
Transfers	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0
Currency translation differences	0.7	0.0	0.0	0.0	0.2	0.4	0.0	0.0	0.9	0.4
As of December 31	**70.4**	**60.2**	**5.9**	**4.0**	**38.3**	**36.9**	**0.0**	**0.0**	**114.6**	**101.1**

(11) Property, plant and equipment

Breakdown of property, plant and equipment

€ mill.	2019	2018
Land, leasehold rights and buildings including buildings on nonowned land	76.3	90.2
Rights of use – land, leasehold rights and buildings including buildings on nonowned land	33.1	–
Technical equipment and machinery	116.2	129.8
Rights of use – technical equipment and machinery	11.0	–
Other equipment, factory and office equipment	13.0	16.9
Rights of use – other equipment, factory and office equipment	5.1	–
Advance payments and construction in process	42.1	31.7
	296.8	**268.6**

Property, plant and equipment is capitalized at cost and depreciated on a straight-line basis over the expected useful lives. In addition to the purchase price, acquisition costs include incidental costs. Acquisition costs are reduced by purchase price reductions. In the case of qualifying assets as defined by IAS 23, the borrowing costs allocable to the production period are also recognized. During the year under review, €0.1 million (previous year: €0.1 million) was recognized.

In accordance with IFRS 16, rights of use from leased property, plant and equipment is recognized at the commencement date with the total of the lease liability, payments before and at the beginning of use, ancillary costs in connection with entering into the contract and the estimated cost of restoration or similar liabilities at the end of the period of use. The initial valuation of the lease liability is derived from the present value of the expected lease payments. The interest rate used for the calculation of the present value is usually the marginal financing rate used in the monetary area for the financing of an asset with a comparable useful life. The term of the agreements in question (and by extension the sum total of expected lease payments) is determined on the basis of the conditions of the agreement, in addition to the expectations of the relevant management team if extension or termination options are in place. The relevant management has discretionary scope which is documented for material lease agreements. Fixed payments are agreed in the majority of cases. Contractual residual value guarantees are recognized at their anticipated value. Hire purchase agreements exist for a variety of assets in the Rail Services business unit. The purchase price at the end of the basic lease term was taken into account accordingly for the purposes of the measurement. Rights of use assets are mainly depreciated over the assumed term of the lease agreement. In the event of a subsequent transfer of ownership, depreciation is based on the expected total period of use for the asset in question.

Development of property, plant and equipment including the rights of use capitalized in accordance with IFRS 16

€ mill.	2019	2018	2019	2018	2019	2018	2019	2018	2019	2018
	Land, leasehold rights and buildings including buildings on nonowned land		Technical equipment and machinery		Other equipment, factory and office equipment		Advance payments and construction in process		Property, plant and equipment	
Net carrying amount as of December 31	**109.4**	**90.2**	**127.2**	**129.8**	**18.1**	**16.9**	**42.1**	**31.7**	**296.8**	**268.6**
Cost										
As of January 1	**144.1**	**121.1**	**340.6**	**288.6**	**51.6**	**46.2**	**31.7**	**28.4**	**568.0**	**484.3**
Adjustment to opening balance due to first-time application of IFRS 16	41.2	–	10.3	–	6.0	–	–	–	57.5	–
Changes from first-time consolidation/business acquisitions	0.0	1.9	0.0	27.0	0.0	0.0	0.0	0.8	0.0	29.7
Changes from the transition and deconsolidation	(12.6)	0.0	(18.5)	0.0	(3.7)	0.0	(2.7)	0.0	(37.5)	0.0
Additions/ongoing investments	3.7	14.7	12.0	19.2	4.5	5.7	33.2	16.7	53.4	56.3
Disposals	(4.1)	(0.5)	(8.3)	(2.2)	(3.6)	(1.7)	(3.3)	(0.9)	(19.3)	(5.3)
Transfers	1.7	5.0	8.8	7.3	(0.5)	1.2	(11.1)	(13.5)	(1.1)	0.0
Currency translation differences	1.0	1.9	1.4	0.7	0.2	0.2	0.5	0.2	3.1	3.0
As of December 31	**175.0**	**144.1**	**346.3**	**340.6**	**54.5**	**51.6**	**48.3**	**31.7**	**624.1**	**568.0**
Accumulated amortization and impairment losses										
As of January 1	**53.9**	**47.9**	**210.8**	**194.0**	**34.7**	**29.9**	**0.0**	**0.0**	**299.4**	**271.8**
Changes from the transition and first-time consolidation	(2.6)	0.0	(13.3)	0.0	(2.5)	0.0	0.0	0.0	(18.4)	0.0
Amortization and impairment of the fiscal year	17.9	6.4	26.4	18.1	8.7	5.7	6.2	0.0	59.2	30.2
Disposals	(4.5)	(0.4)	(5.5)	(1.3)	(3.7)	(0.9)	0.0	0.0	(13.7)	(2.6)
Transfers	0.8	0.0	0.0	0.0	(0.9)	0.0	0.0	0.0	(0.1)	0.0
Currency translation differences	0.1	0.0	0.7	0.0	0.1	0.0	0.0	0.0	0.9	0.0
As of December 31	**65.6**	**53.9**	**219.1**	**210.8**	**36.4**	**34.7**	**6.2**	**0.0**	**327.3**	**299.4**

The following rights of use are recognized as part of property, plant and equipment:

Development of recognized rights of use in accordance with IFRS 16

€ mill.	2019		
	Land, leasehold rights and buildings including buildings on nonowned land	Technical equipment and machinery	Other equipment, factory and office equipment
Net carrying amount as of December 31	**33.1**	**11.0**	**5.1**
Cost			
As of January 1: Capitalization due to first-time application of IFRS 16	41.2	10.3	6.0
Changes from first-time consolidation/business acquisitions	0.0	0.0	0.0
Changes from the transition and deconsolidation	(1.0)	0.0	(0.1)
Additions/ongoing investments	3.0	1.7	1.7
Disposals	(3.0)	(0.1)	(0.1)
Transfers	0.0	0.0	0.0
Currency translation differences	0.1	0.0	0.0
As of December 31	**40.3**	**11.9**	**7.5**
Accumulated amortization and impairment losses			
Changes from the transition and first-time consolidation	(0.3)	0.0	0.0
Amortization and impairment of the fiscal year	8.0	0.9	2.5
Disposals	(0.5)	0.0	(0.1)
Transfers	0.0	0.0	0.0
Currency translation differences	0.0	0.0	0.0
As of December 31	**7.2**	**0.9**	**2.4**

Depreciation is primarily based on the following useful lives:

Useful lives of property, plant and equipment

Buildings	5 to 50 years
Technical equipment and machinery	2 to 30 years
Other equipment, factory and office equipment	2 to 30 years

Changes from deconsolidation relate to the property, plant and equipment of the sold company Cleveland Track Material. Disposals include property, plant and equipment classified as held for sale. Impairment losses in addition to the depreciation of property, plant and equipment totaled €15.0 million in the year under review (previous year: €0.0 million). The underlying factors were the result of the performance program. Impairment losses totaling €5.1 million related to assets which were written down due to the sale of Cleveland Track Material. Impairments of €3.5 million were recognized for assets in two disposal groups before being reclassified to assets held for sale. Additional impairments of €6.4 million were recognized for assets in the Rail Services and Fastening Systems business units. The recoverable amount of impaired assets was €6.3 million. This concerns a value in use in accordance with IAS 36. A discount rate of 7.9 percent was used for measurement purposes.

Depreciation of property, plant and equipment is included in the income statement in the amount of €37.6 million (previous year: €26.6 million) under cost of sales, €6.3 million (previous year: €3.4 million) under general administrative and selling expenses and €0.3 million (previous year: 0.2 million) under research and development costs.

(12) Investment properties

Development of investment properties

€ mill.	2019	2018
Net carrying amounts	**1.8**	**2.2**
Cost		
As of January 1	5.2	5.7
Additions	0.0	0.0
Disposals	(0.9)	0.0
Transfers	(0.3)	(0.6)
Currency translation differences	0.0	0.0
As of December 31	**4.0**	**5.1**
Accumulated amortization and impairment losses		
As of January 1	3.0	2.9
Amortization of the fiscal year	0.2	0.2
Disposals	(0.9)	0.0
Transfers	(0.1)	(0.2)
Currency translation differences	0.0	0.0
As of December 31	**2.2**	**2.9**

Investment properties include land and buildings not used for operations and fully or partly leased to nongroup lessees. According to IAS 40, buildings owned for investment purposes are carried at depreciated cost. Straight-line depreciation of investment properties is based on useful lives of 20 years.

Rental income in the reporting year amounted to €1.0 million (previous year: €1.0 million). Expenses (including depreciation, maintenance and repairs and incidentals) incurred for properties leased out totaled €0.3 million (previous year: €0.4 million); as in the previous year, there were no nonleased properties. As in the previous year, expenses for leased properties include no amounts for write-downs. The fair value of buildings owned for investment purposes, incl. existing buildings, totals €2.5 million (previous year: €6.9 million). The fair values are primarily based on the current market prices of comparable properties. An assessment performed by an accredited expert did not take place.

(13) Investments in companies accounted for using the equity method

Information on investments in companies accounted for using the equity method

€ mill.	2019	2018
Result from continuing operations	5.0	1.4
Result from discontinued operations	(0.1)	(0.2)
Income and expenses recognized directly in equity	0.1	(0.1)
Total comprehensive income	**5.0**	**1.1**

Significant financial information on Wuhu China Railway Cogifer Track Co. Ltd., Wuhu, China, which is accounted for using the equity method

€ mill.	2019	2018
Noncurrent assets	15.5	17.1
Current assets	20.6	22.6
thereof cash and cash equivalents	2.1	4.9
Noncurrent liabilities	0.0	0.0
thereof noncurrent financial liabilities	0.0	0.0
Current liabilities	17.6	22.9
thereof current financial liabilities	6.6	8.9
Sales revenues	22.3	17.3
Result from continuing operations	1.9	0.5
Depreciation/amortization	1.8	1.8
Interest income	0.1	0.0
Interest expenses	0.5	0.5
Tax expense	0.0	0.0
Total comprehensive income	**1.9**	**0.5**

Significant financial information on Vossloh Beekay Castings Ltd., Bhilai, New Delhi, India, which is accounted for using the equity method

€ mill.	2019	2018
Noncurrent assets	2.4	2.1
Current assets	8.6	7.8
thereof cash and cash equivalents	0.3	0.5
Noncurrent liabilities	0.3	0.1
thereof noncurrent financial liabilities	0.0	0.0
Current liabilities	4.4	2.9
thereof current financial liabilities	0.0	0.0
Sales revenues	10.1	10.3
Result from continuing operations	(0.6)	0.8
Depreciation/amortization	0.3	0.4
Interest income	0.0	0.0
Interest expenses	0.0	0.0
Tax expense	0.1	0.3
Total comprehensive income	**(0.6)**	**0.6**

Significant financial information on Futrifer-Indústrias Ferroviárias, SA, Lisbon, Portugal, which is accounted for using the equity method

€ mill.	2019	2018
Noncurrent assets	0.3	0.2
Current assets	3.6	3.9
thereof cash and cash equivalents	1.7	1.4
Noncurrent liabilities	0.0	0.0
thereof noncurrent financial liabilities	0.0	0.0
Current liabilities	1.6	2.1
thereof current financial liabilities	0.0	0.0
Sales revenues	6.3	5.6
Result from continuing operations	0.3	0.1
Depreciation/amortization	0.1	0.1
Interest income	0.0	0.0
Interest expenses	0.0	0.0
Tax expense	0.2	0.0
Total comprehensive income	**0.3**	**0.1**

The investments in these companies are accounted for using the equity method. In this connection, the carrying amounts of associated companies are adjusted for proportional profits or losses after taxes, dividends distributed or any other changes in equity. This pertains to shares in eleven foreign companies (previous year: ten) and one domestic company (previous year: one) upon which significant influence is exercised.

(14) Other noncurrent financial instruments

Breakdown of other noncurrent financial instruments

€ mill.	2019	2018
Shares in unconsolidated affiliated companies	2.0	2.9
Other investments	3.3	3.3
Loans	0.5	1.4
Securities	0.1	0.1
Derivative financial instruments in hedging relationships	0.0	0.0
Other noncurrent financial assets	0.1	0.0
	6.0	**7.7**

Shares in unconsolidated affiliated companies for which the criterion of control has been fulfilled but which are not included due to insignificance are generally recognized at fair value. They do not play a material role in the net asset and earnings position of the Group. The related assessment is made on the basis of the primary financial indicators of the companies, such as EBIT, sales, total assets and equity. No further information is provided for these equity instruments in accordance with IFRS 9 due to a lack of materiality.

Loans not quoted in an active market as well as other noncurrent financial assets are initially measured at fair value (which generally equals the nominal amount of the receivable or the loan amount) on the basis of the business model followed for such financial instruments (payment flows arise exclusively from interest payments or the repayment amount upon maturity). Non- and low-interest-bearing long-term loans and receivables are discounted. For their subsequent measurement at amortized cost, the effective interest rate method is used.

Noncurrent securities with fixed or quantifiable payments and fixed maturities that are quoted in an active market and for which the business model described above applies are measured at amortized cost using the effective interest rate method.

Other noncurrent securities are recognized at fair value. Any fair value changes upon remeasurement are recognized directly in equity and, upon disposal of such securities, the respective amount included in accumulated other comprehensive income is recycled to the income statement.

Other financial instruments are measured according to their IFRS 9 classification. For the reconciliation of the IFRS 9 valuation categories, see pages 145 et seq., “Additional information on financial instruments.”

(15) Other noncurrent assets

Prepaid expenses are primarily recognized under other noncurrent assets.

(16) Deferred taxes

In accordance with IAS 12, deferred taxes are recognized for temporary differences between tax bases and IFRS carrying amounts, for tax loss carryforwards, as well as for consolidation transactions recognized in the income statement. Deferred taxes are determined at the rates enacted at the reporting date that will apply at the expected time of realization.

Deferred taxes due to temporary differences were allocable to the following balance sheet items:

Deferred taxes

€ mill.	2019		2018	
	Deferred tax assets	Deferred tax liabilities	Deferred tax assets	Deferred tax liabilities
Intangible assets and property, plant and equipment	2.1	26.7	2.8	25.2
Inventories	4.0	0.0	4.7	0.0
Receivables	1.5	2.6	1.4	2.0
Other assets	0.0	0.0	0.0	0.0
Pension provisions	7.7	0.0	6.8	0.0
Other provisions	4.5	1.4	2.9	0.0
Liabilities	4.9	1.1	0.9	0.7
Other liabilities	5.5	5.2	3.1	4.6
Loss and interest carryforwards	16.6	–	16.2	–
Total	**46.8**	**37.0**	**38.8**	**32.5**
Netting	(29.1)	(29.1)	(25.4)	(25.4)
Deferred taxes according to the balance sheet	**17.7**	**7.9**	**13.4**	**7.1**

The changes in deferred tax assets and liabilities for the year under review were recognized primarily in the income statement, and to a lesser degree in the statement of comprehensive income. This was also the case in the previous year.

As of December 31, 2019, tax loss carryforwards of €338.2 million (previous year: €269.4 million) existed in Germany for corporate income tax purposes and of €308.7 million for trade tax purposes (previous year: €261.8 million). No deferred taxes were recognized for corporate income tax losses of €316.5 million (previous year: €255.6 million), and no deferred taxes were recognized for trade tax losses of €285.7 million (previous year: €247.5 million). In order to determine the deferred taxes on loss carryforwards and interest revenue which are eligible for capitalization, the period of detailed planning, which normally covers three years, has been extended by two years as in previous periods and specifically taken into account in anticipated taxable income. Companies which realized losses in the reporting period or previous periods reported deferred tax assets of €15.4 million (before netting). Impairment was underpinned by tax planning calculations.

In addition, non-German companies reported tax loss carryforwards of €88.5 million (previous year: €52.2 million), of which €36.8 million (previous year: €52.2 million) was incorporated. Allowances were recorded in the year under review against deferred tax assets in the amount of €23.3 million (previous year: €10.3 million). At the same time, deferred tax assets that had previously been impaired of €2.6 million (previous year: €3.7 million) were released. According to current German law and the law of most other countries, the carryforward of tax losses is not subject to any limitation or expiration. Loss carryforwards totaling €14.9 million (previous year: €9.1 million) expire after more than five years.

(17) Inventories

Breakdown of inventories

€ mill.	2019	2018
Raw materials and supplies	81.1	102.4
Work in process	32.6	37.8
Merchandise	9.7	10.5
Finished products	28.0	22.6
Advance payments	0.7	1.5
Total	**152.1**	**174.8**

Inventories are stated at the lower of cost or net realizable value (NRV). Cost of sales comprises all production costs including directly attributable costs as well as all fixed and variable manufacturing overheads systematically allocable to the production process and special direct manufacturing costs. Borrowing costs are capitalized as part of cost wherever qualifying assets according to IAS 23 exist. To the extent that a

Group valuation is made, inventories are valued at the moving average price. Inventory risks from obsolescence or slow-moving items are appropriately allowed for. Allowances on inventories amounted to €22.4 million as of the balance sheet date (previous year: €27.0 million), which primarily resulted from excessive inventories. €1.1 million of this was recognized in profit or loss in the year under review (previous year: €(2.1) million). The carrying amount of inventories stated at net realizable value totaled €4.3 million (previous year: €12.2 million).

As the reasons for previous write-downs no longer existed, inventories were written up in 2019 by €0.3 million (previous year: €0.2 million).

(18) Trade receivables and contract assets

Given their short remaining term, trade receivables are carried at their nominal value. The simplified method for calculating the expected credit loss (ECL) is applied for valuation allowances. As of every reporting date, risk provisioning is carried out on the basis of the entire term by means of a provision matrix based on the actual receivables defaults per business unit. Prior experiences are then supplemented with future-oriented information such as macroeconomic circumstances and expectations for the divisions. Depending on the age of the trade receivables, valuation allowances are recognized at a loss rate based on the number of days of arrears.

The provision matrix is presented in table format:

€ mill.				%
Risk class	**Gross carrying amounts**	**Net carrying amounts (after consideration of individual risks; not including refundable VAT)**	**Impairment**	**Average Vossloh Group loss rate**
Assets not due	173.6	136.4	0.2	0.13
Overdue by 1 to 30 days	20.1	18.0	0.1	0.52
Overdue by 31 to 90 days	12.6	11.2	0.1	0.70
Overdue by 91 to 180 days	12.9	11.5	0.1	0.59
Overdue by 181 to 360 days	7.7	6.8	0.4	5.74
Overdue by more than 360 days	1.0	1.0	0.4	41.94
Overdue by more than 360 days with individual value adjustment	5.2	4.7	0.3	6.02
	233.1	**189.6**	**1.6**	

Specific risks are taken into account by appropriate valuation allowances. If there are indications of probable impairment, such as a declaration of insolvency, an appropriate valuation allowance is recognized. Derecognition only occurs if the recovery of the respective receivable is virtually impossible for legal or practical reasons (e.g. end of insolvency proceedings). Trade receivables vis-à-vis certain customers are treated as a special category and thus impaired to a lesser extent, despite being past due by more than 360 days.

The balance and changes in the allowances for trade receivables are presented below:

Changes in the allowances (including consideration of individual risks) for trade receivables

€ mill.	2019	2018
Balance as of January 1	**12.7**	**13.4**
Adjustment by conversion in accordance with IFRS 9	–	0.9
Addition from company acquisitions	0.0	0.0
Additions	10.9	2.9
Releases	(1.8)	(4.4)
Utilizations	(1.5)	(0.1)
Currency translation differences	0.0	0.0
Balance as of December 31	**20.3**	**12.7**

Additions include €7.7 million additional valuation allowances connected to the performance program. Contract assets result from the recognition of customer contracts for which revenue is realized over the course of the fulfillment of the performance obligation. In applying this method, any contract costs incurred, including a percentage of profit equivalent to the percentage of completion less any losses, are recognized as a contract asset. Where total progress under construction contracts exceeds the total of all advance payments received from customers, construction contracts are presented under assets as a contract asset. Where the situation is reversed, after advance payments are credited toward total progress, they are recognized on the balance sheet under liabilities as "Contract liabilities." Prepayments ordinarily only take place to a limited extent, with the result that the orders relevant in this context typically result in a positive credit balance during the period of fulfillment of performance obligations.

Contract assets and liabilities

€ mill.	2019		2018	
	Contract assets	Contract liabilities	Contract assets	Contract liabilities
Contract costs	14.4	0.8	17.5	0.0
Proportional profit	1.0	0.0	0.7	0.0
Proportional losses	(0.7)	0.0	(3.7)	0.0
Total progress under construction contracts	14.7	0.8	14.5	0.0
Advance payments received	0.0	0.0	(0.6)	0.0
Partial billings	(9.7)	(1.0)	(7.0)	0.0
Balance sheet presentation	**5.0**	**0.2**	**6.9**	**0.0**

(19) Income tax assets

These include €0.3 million of income taxes (previous year: €0.2 million) reimbursable to companies of the Fastening Systems business unit, €4.7 million (previous year: €6.2 million) to Vossloh Switch Systems, €0.4 million (previous year: €0.6 million) to the companies of the Rail Services business unit, €0.1 million (previous year: €0.1 million) to the Tie Technologies business unit and €0.3 million (previous year: €0.5 million) to companies at Group level.

(20) Other current financial instruments and other current assets

Breakdown of other current financial instruments and other current assets

€ mill.	2019	2018
Receivables from reimbursements	12.8	6.1
Receivables from investees	7.2	6.0
Loans and other financial receivables	5.7	3.5
Security and similar deposits	2.4	1.9
Derivative financial instruments	0.7	0.7
Creditors with debit accounts	0.4	1.1
Receivables from affiliated companies	0.2	4.3
Receivables from employees	0.2	0.4
Subsequent purchase price adjustment	0.0	3.9
Interest receivables	0.0	0.0
Other current financial instruments	**29.6**	**27.9**
Other tax receivables (excluding income taxes)	11.2	6.7
Deferred income	2.8	3.3
Sundry current assets	11.8	8.2
Other current assets	**25.8**	**18.2**

The receivables shown under other current financial instruments are recognized at cost or, where appropriate, at amortized cost. Specific risks are taken into account by appropriate allowances. The receivables from reimbursements are not reimbursements made by shareholders. Other financial receivables primarily result from retained amounts in connection with factoring contracts in the Switch Systems business unit.

A financial asset from a previous sale of a business unit was reported at €6.0 million (previous year: €3.9 million).

The balances and changes in allowances are presented below:

Changes in allowances

€ mill.	2019	2018
Balance as of January 1	**1.1**	**0.6**
Additions	3.0	0.5
Releases	0.0	0.0
Utilizations	0.0	0.0
Currency translation differences	(0.2)	0.0
Balance as of December 31	**3.9**	**1.1**

For the reconciliation of the IAS 9 valuation categories, see pages 145 et seq., "Additional information on financial instruments." Other tax receivables and miscellaneous current assets are measured at amortized cost.

(21) Short-term securities

This line item presents funds invested in short-term fixed-income securities for which both interest payments and sales come into account. These are reported at fair value; changes in value are recognized directly in other equity.

For the reconciliation of the IFRS 9 valuation categories, see pages 145 et seq., "Additional information on financial instruments."

(22) Cash and cash equivalents

Cash comprises cash on hand and in the bank. Cash equivalents comprise any financial instruments with a maximum residual term of three months from the time of acquisition that can be readily converted into cash. Cash and cash equivalents are carried at their nominal value.

(23) Equity/capital management

For the statement of changes in equity, see page 107. Vossloh's capital management strategy is primarily geared towards raising enterprise value on a sustainable basis by making a positive contribution to its value added. Secondary to this, the aim is also to safeguard liquidity at all times as well as to ensure that the Vossloh Group's equity ratio is adequate in order to ensure the ability of the Company to operate as a going concern. The optimization of the capital structure contributes as much to this as does efficient management of cash inflows and outflows from financing activities and effective risk management.

Vossloh AG observes all statutory regulations within the scope of its capital management activities. It is not subject to any capital requirements imposed by the Articles of Incorporation. No special capital terms are used. Through its dividend policy, the Vossloh Group aims to pay out dividends on a sustainable basis if so permitted by the economic situation and approved by the corporate bodies. The decision on the amount of the annual dividend is made on a year-by-year basis. There is no fixed payout ratio.

(23.1) Capital stock

Vossloh AG's capital stock of €49,857,682.23 (previous year: €45,325,167.47) is divided into 17,564,180 (previous year: 15,967,437) no-par-value shares. Only shares of common stock are issued. One no-par-value share represents a notional interest of €2.84 in the capital stock.

The capital stock was increased in the year under review, the process of which was completed on June 19. This involved issuing 1,596,743 new shares at a placement price of €30.70 per share by way of an accelerated placement procedure. €0.7 million of the gross proceeds of the issue amounting to €49.0 million was deducted from equity with no effect on income.

(23.2) Additional paid-in capital

The additional paid-in capital includes the stock premium from shares issued by Vossloh AG. There are also differences recorded in additional paid-in capital that arose based on the purchase and sale prices for treasury shares. €43.9 million was added to the additional paid-in capital as a result of the capital increase in the year under review.

Employee bonus program

The employee bonus program was suspended in the year under review as a result of the performance program. In the previous year, employees of German Vossloh companies were given the option of acquiring either two Vossloh AG shares at no cost or eight shares at a discount of 50 percent of the issue price of €40.10 per share – determined as the market price as of the share transfer date. Under this program, employees of the Vossloh Group, including employees of the business unit held for sale, were granted a total of 2,286 shares at no cost from both implementation options in the previous year. The expense to the Group for granting shares was €102.5 thousand in the previous year and was determined on the basis of the price of €37.80 per share on the final day of the participating period at that time. The shares issued are each subject to a three-year holding period. The shares issued are acquired via the capital market; there are no other obligations from the program.

(23.3) Retained earnings and net income

The retained earnings contain the prior-year earnings of the companies included in the consolidated financial statements, which have not been distributed from the Group point of view.

The retained earnings contain an effect from switching to the correct method to be used to take account of currency losses from certain financial transactions stemming from previous years amounting to €2.0 million.

Change in other comprehensive income

€ mill.	Reserve from currency translation	Reserve from hedging transactions (cash flow hedges)	Reserve from the remeasurement of defined benefit plans	Other comprehensive income not including non-controlling interests	Noncon-trolling interests	Other com-prehensive income
	2019					
Reclassification of actuarial gains and losses from defined benefit plans to retained earnings			(0.5)	**(0.5)**		**(0.5)**
Foreign subsidiaries – Currency translation differences –	2.3			**2.3**	0.0	**2.3**
Cash flow hedges		(0.3)		**(0.3)**		**(0.3)**
Actuarial gains and losses from defined benefit plans			(2.6)	**(2.6)**		**(2.6)**
Deconsolidation and transfer effects	(5.7)			**(5.7)**		**(5.7)**
Total	**(3.4)**	**(0.3)**	**(3.1)**	**(6.8)**	**0.0**	**(6.8)**
€ mill.	2018					
Reclassification of actuarial gains and losses from defined benefit plans to retained earnings			(0.3)	**(0.3)**		**(0.3)**
Foreign subsidiaries – Currency translation differences –	(2.2)			**(2.2)**	(0.2)	**(2.4)**
Cash flow hedges		0.1		**0.1**		**0.1**
Actuarial gains/losses from defined benefit plans			0.5	**0.5**		**0.5**
Deconsolidation effects				**0.0**		**0.0**
Total	**(2.2)**	**0.1**	**0.2**	**(1.9)**	**(0.2)**	**(2.1)**

(23.4) Accumulated other comprehensive income

Accumulated other comprehensive income contains the changes in equity without profit or loss effect from the translation of financial statements of foreign subsidiaries, from the measurement of derivatives in connection with hedging transactions (cash flow hedges), and of financial instruments classified at fair value through other comprehensive income as well as actuarial gains and losses relating to employee benefits recognized during the reporting year. During the year under review, an expense of €0.5 million (previous year: €0.3 million) was reclassified from the reserve for revaluation of defined benefit plans to retained earnings.

(23.5) Noncontrolling interests

€8.7 million (previous year: €8.8 million) of noncontrolling interests relate to minority shareholders of the Fastening Systems business unit; another €0.7 million (previous year: €2.0 million) relates to the Switch Systems business unit.

(24) Pension provisions/ Provisions for other post-employment benefits

Development of pension provisions/provisions for other post-employment benefit

€ mill.	Present value of the obligations	Fair value of plan assets	Total
As of 1/1/2018	**41.1**	**(11.7)**	**29.4**
Service cost	1.0		1.0
Net interest expense/(income)	0.8	(0.3)	0.5
Remeasurements			
Return on plan assets excluding the portion included in net interest expense		(0.1)	(0.1)
Gains/losses on changes in demographic assumptions	0.0		0.0
Gains/losses on changes in financial assumptions	(0.6)		(0.6)
Experience-related assumptions	0.9		0.9
Benefits paid	(1.7)	0.6	(1.1)
As of 12/31/2018	**41.5**	**(11.5)**	**30.0**
Service cost	1.0		1.0
Net interest expense/(income)	0.8	(0.2)	0.6
Remeasurements			
Return on plan assets excluding the portion included in net interest expense		(0.1)	(0.1)
Gains/losses on changes in demographic assumptions	0.0		0.0
Gains/losses on changes in financial assumptions	4.9		4.9
Experience-related assumptions	(1.9)		(1.9)
Benefits paid	(1.9)	0.6	(1.3)
As of 12/31/2019	**44.4**	**(11.2)**	**33.2**

Vossloh AG and some subsidiaries have entered into pension obligations to former or current employees. Pension payments are subject to the relevant conditions and are made until the death of the beneficiary. These defined benefit obligations vary according to the economic situation and are as a rule based on service years, pensionable pay and position within Vossloh. The future pension payment obligations must be met by the subsidiaries in question (defined benefit plan).

In accordance with IAS 19, the projected unit credit method has been used to determine pension obligations, taking into account current market interest rates and anticipating future pay and pension increases, as well as fluctuation rates. Accounting risks of the defined benefit plans particularly arise from the development of the current market interest rates, as the current low interest rate leads to comparably high present values of liabilities.

At the same time, there is also the risk that the market values of the plan assets do not increase at the same rate. Both effects could lead to a decrease in equity as a result of actuarial losses.

The plan assets, which are offset against the present value of the pension benefits, pertain primarily to pension liability insurance policies, which cover the major portion of the personal claims from the pension commitments. Each of these insurance contracts has been pledged to the individual beneficiary concerned, with the present value of the obligations being offset at fair value.

The pension provisions recognized are based on actuarial reports of independent actuaries using the mortality tables 2018 G from Klaus Heubeck.

The recognized pension provisions and the provisions for other post-employment benefits are derived as follows:

Analysis of the recognized pension provisions/Provisions for other post-employment benefits

€ mill.	2019		2018	
	Pension provisions	Provision for other post-employment benefits	Pension provisions	Provision for other post-employment benefits
Present value of pension commitments covered by plan assets	15.5	6.1	15.6	6.8
Fair value of plan assets	(10.3)	(0.9)	(10.6)	(0.9)
Provision for pension benefits covered by plan assets	**5.2**	**5.2**	**5.0**	**5.9**
Present value of pension commitments not covered by plan assets	21.1	1.7	17.1	2.0
Provision for pension benefits not covered by plan assets	**21.1**	**1.7**	**17.1**	**2.0**
Recognized pension provision	**26.3**	**6.9**	**22.1**	**7.9**

The current service cost represents a portion of the personnel expense that is included in the functional costs. Interest expense is shown in other interest expense. The actual return on plan assets amounted to 3.7 percent in the reporting period (previous year: 3.6 percent).

A discount rate of 1.16 percent (previous year: 2.0 percent) was used in the year under review. This parameter is seen as significant; for this reason, a sensitivity analysis was performed due to possible changes. A decrease or increase in the discount rate by 25 basis points would have increased or decreased the defined benefit obligation (DBO) and therefore increased the provision by €1.5 million (previous year: €1.2 million) or decreased the provision by €1.4 million (previous year: €1.2 million). The average duration of the defined benefit pension plans is 15.3 years (previous year: 14.6 years). Other parameters include the anticipated staff turnover (6.0 percent), income trend (3.0 percent), pension trend (1.8 percent) and the anticipated increase in the contribution measurement threshold (2.5 percent) (all values are per anumm and unchanged over the previous year).

In addition, voluntary or statutory defined contribution plans are in place at a number of Group companies. These Group companies are under no obligation to make any pensions-related payments other than their contractual contributions to an outside fund, which totaled €8.2 million in the fiscal year (previous year: €7.9 million).

The pension provisions include provisions for possible nonrecurring payments required under the law in France ("Indemnités de fin de carrière") for employees who leave the Company (both in the case of retirement as well as other situations). In accordance with IAS 19, such provisions are required to be treated as employee benefits and, because of the way they have been structured, classified as a "defined benefit plan." These were accounted for under "Other noncurrent provisions" in the previous year; as these provisions are also created for post-employment benefits, recognizing this item under this line improves the informative value of the consolidated financial statements. The previous year's amount of €7.9 million has been restated accordingly.

Assets have partially been set up in an external benefit fund ("plan assets") in order to finance the expected payments. The provisions recognized on the balance sheet therefore constitute the total of the fair value of the plan assets and the present value of the obligation.

When calculating the provision, a discount rate of 0.77 percent (previous year: 1.54 percent) and an expected increase of wage and salary payments in line with the previous year of 2.0 percent was assumed.

(25) Other provisions

Breakdown of other provisions

€ mill.	2019	2018
Personnel-related provisions	3.5	2.5
Warranty obligations and follow-up costs	2.0	1.9
Litigation risks and impending losses	0.0	0.0
Other provisions	5.0	4.7
Other noncurrent provisions	**10.5**	**9.1**
Personnel-related provisions	0.1	0.1
Warranty obligations and follow-up costs	7.2	7.6
Litigation risks and impending losses	10.0	9.1
Other provisions	42.1	19.6
Other current provisions	**59.4**	**36.4**
	69.9	**45.5**

All provisions reported as current provisions have maturities of one year or less. All provisions reported as noncurrent provisions have remaining terms exceeding one year. The utilization dates are subject to significant uncertainty, especially with regard to risks from warranty obligations and litigation risks. The other provisions consider all obligations that are identifiable at the balance sheet date, based on past events, and are uncertain in terms of amount or timing. Provisions are recognized at amounts most likely to be utilized. If the effect of discounting is material, noncurrent provisions are recognized at the present value of the uncertain obligations.

Change in other provisions

€ mill.	Opening balance 1/1/2019	Addition from first-time consolidation	Disposal from deconsolidation	Utilization	Release	Addition	Interest effect	Currency translation differences	Closing balance as of 12/31/2019
Personnel-related provisions	2.6	0.0	0.0	(0.2)	(0.1)	1.3	0.0	0.0	3.6
Warranty obligations and follow-up costs	9.5	0.0	(0.3)	(1.0)	(2.1)	3.1	0.0	0.0	9.2
Litigation risks and impending losses	9.1	0.0	(0.2)	(2.5)	(1.1)	4.7	0.0	0.0	10.0
Other provisions	24.3	0.0	(0.9)	(5.2)	(2.8)	31.7	0.0	0.0	47.1
Other provisions	**45.5**	**0.0**	**(1.4)**	**(8.9)**	**(6.1)**	**40.8**	**0.0**	**0.0**	**69.9**

The warranty obligations include both provisions for specific warranty cases and the general warranty costs empirically derived from past sales. The accrued litigation risks and impending losses account for obligations under lawsuits and for loss risks from contracts in progress. As of the balance sheet date, provisions for impending losses on purchase obligations totaled €6.2 million (previous year: €6.5 million). The other provisions include provisions for risks from company disposals and possible claims for damages. Additions in the reporting year are primarily attributable to the performance program, in particular here to provisions for termination payments.

Liabilities

Liabilities according to remaining terms

€ mill.	2019	2018	2019	2018	2019	2018	2019	2018
Remaining term	≤ 1 year		1–5 years		> 5 years		Total	
Financial liabilities	41.3	32.5	373.3	202.4	12.5	121.6	427.1	356.5
Trade payables	132.8	139.2	0.9	0.0	0.5	0.0	134.2	139.2
Liabilities from construction contracts	0.2	0.0	0.0	0.0	0.0	0.0	0.2	0.0
Income tax liabilities	4.4	1.8	0.0	0.0	0.0	0.0	4.4	1.8
Other liabilities	91.7	85.5	10.6	7.4	0.0	0.0	102.3	92.9
Total	**270.4**	**259.0**	**384.8**	**209.8**	**13.0**	**121.6**	**668.2**	**590.4**

(26.1) Financial liabilities

Breakdown of financial liabilities

€ mill.	2019	2018
Other noncurrent liabilities to banks	348.3	319.8
Noncurrent liabilities from leases	37.5	4.2
Noncurrent financial liabilities	**385.8**	**324.0**
Current liabilities to bank	24.0	30.2
Current notes payable	11.6	0.8
Current liabilities for outstanding dividend payments	4.2	0.0
Interest payable	1.5	1.5
Current notes payable	0.0	0.0
Current financial liabilities	**41.3**	**32.5**
Financial liabilities	**427.1**	**356.5**

Financial liabilities are principally measured at amortized cost. Financial lease liabilities stem from the lease liabilities to be accounted for under IFRS 16. See the explanatory notes to section (11) on page 126 et seq. for how these line items are measured.

In July 2017, Schuldschein loans with terms of four years amounting to €135 million and seven years amounting to €115 million were issued by Vossloh AG. The agreed interest rate is fixed at 0.988 percent for the four-year maturities for an amount of €85 million, and variable at an amount of €50 million with a margin of 85 basis points above Euribor. For the seven-year maturities, a partial amount of €90 million has a fixed interest rate of 1.763 percent and the remaining amount of €25 million, 120 basis points above Euribor. A floor of 0.0 percent is respectively applicable to the reference value.

At the end of November 2017, Vossloh AG concluded a new €150 million syndicated loan with eight banks, definitively replacing the syndicated loan which had been in place since 2015 and was scheduled to expire in April 2018. The financing agreement now has a term until November 2024 after exercising the option to extend it by one year respectively in November 2018 and 2019. In April 2019, the volume of the loan was increased by €80 million to €230 million. If necessary, it can be increased by up to a further €70 million during the term of the loan. The funds are available to the Company in the form of a revolving line of credit that can be flexibly accessed. Compliance with a covenant in the form of the ratio of net financial debt to EBITDA was agreed here. If the agreed threshold of this key figure is breached, this will allow the lending banks to terminate the agreement ahead of time. At the same time, the amount of the key figure in question determines the interest (basis points above Euribor). This is currently 1.8 percent. As of the balance sheet date, the credit line had been utilized in the amount of €102.3 million via cash, lines of credit available to subsidiaries, and guarantees (previous year: €56.2 million). Compliance with the covenant must be proven every six months. The review scheduled for June 30, 2019 was skipped on the basis of an amendment to the contract. Evidence of compliance with the covenant was in place on the reporting date. The existing liability stemming from this syndicated loan is reported under noncurrent financial liabilities as required by the terms of the contract and not, as in the previous year, under current financial liabilities; the change properly reflects the actual arrangement.

For the reconciliation of the IFRS 9 valuation categories, see pages 145 et seq., "Additional information on financial instruments."

(26.2) Trade payables and contract liabilities

Contract liabilities result from contracts where the revenue recognition takes place over a period of time and the advance payments made by customers and partial invoices are in excess of the cumulative performance from the processing of the respective contracts. For the detailed breakdown of these liabilities into gross receivables, prepayments received and partial invoices and other information, see Note (18) Contract assets.

(26.3) Income tax liabilities

These pertain to the actual income taxes due to the tax authorities as of the balance sheet date, which are reported by the various Group companies.

(26.4) Other liabilities

Breakdown of other liabilities

€ mill.	2019	2018
Freestanding derivatives	10.1	5.0
Derivatives from cash flow hedges	0.0	0.1
Noncurrent financial liabilities	**10.1**	**5.1**
Personnel-related liabilities	0.3	0.1
Noncurrent deferred income	0.2	0.0
Advance payments received	0.0	0.0
Other	0.0	2.2
Noncurrent nonfinancial liabilities	**0.5**	**2.3**
Other noncurrent liabilities	**10.6**	**7.4**
VAT payable	7.8	3.9
Other nonincome taxes	5.6	5.1
Social security and health insurance contributions	4.6	4.8
Liabilities to employees	2.3	2.2
Liabilities to other long-term investees and investors	1.7	3.4
Other liabilities to affiliated companies	1.1	1.4
Debtors with credit balances	0.6	0.2
Derivatives from cash flow hedges	0.4	0.1
Freestanding derivatives	0.3	3.6
Liabilities due to insurance companies	0.0	0.2
Commissions	0.0	0.2
Current financial liabilities	**24.4**	**25.1**
Personnel-related liabilities	31.7	29.1
Advance payments received	28.5	14.3
Deferred income	0.5	1.5
Other	6.6	15.5
Current nonfinancial liabilities	**67.3**	**60.4**
Other current liabilities	**91.7**	**85.5**

Upon initial recognition, financial instruments are stated at their fair value as of the trading date including direct transaction costs, if any, and thereafter carried at amortized cost unless their measurement at fair value is required. The recognition of gains/losses from the measurement at fair value depends on whether the IFRS 9 hedge accounting criteria are met. In contrast, the corresponding gains/losses from measuring derivatives in cash flow hedges at fair value are recognized directly in equity after considering deferred taxes. Gains/losses from the measurement at fair value of freestanding derivatives are recognized in other operating income. Fair value hedging was not practiced as of the reporting date.

The prepayments received, recognized at €28.5 million (previous year: €14.3 million) under other liabilities, consist of customer payments for projects where revenue recognition will not be carried out over a period of time. In accordance with IAS 19, the current liabilities to employees are recognized at the undiscounted amount owed. The other current liabilities included dividend payments to noncontrolling interests of €4.3 million adopted in the previous year but not yet distributed.

Notes to the segment report

The primary format for segment reporting is defined by Vossloh's internal organizational and reporting structures, which are based on the products and services offered by the Vossloh Group's business units. In accordance with IFRS 8, segment reporting to the Executive Board and Supervisory Board encompasses not only the divisions but also separately presents their business units.

The segment structure in the three core divisions has not changed compared with the previous year. In addition to the Fastening Systems business unit, the Tie Technologies business unit is part of the Core Components division. Vossloh Switch Systems and Vossloh Rail Services continue to be the only business units of the Customized Modules and Lifecycle Solutions divisions, respectively. As of the balance sheet date, the Transportation division consisted solely of the Locomotives business unit, which was reported as a discontinued operation.

The Core Components division comprises the Fastening Systems and Tie Technologies business units. Vossloh Fastening Systems is a leading manufacturer of rail fastening systems. The product lineup includes track fasteners for every application – from light-rail to heavy-haul and high-speed lines. Vossloh Tie Technologies, another business unit within this division, is North America's leading manufacturer of concrete ties. In addition to concrete ties, switch ties, concrete elements for slab tracks and level crossing systems are manufactured at several plants in the U.S. and at production sites in Mexico and Canada. Vossloh Tie Technologies has also been a leading manufacturer of concrete ties in Australia through its ownership of Austrak Pty. Ltd. since December 2018.

The Customized Modules division and the Switch Systems business unit comprised in this division are among leading switch manufacturers worldwide. The business unit equips rail networks with switches and crossings as well as with the related control and monitoring systems, which it also installs and maintains if required. Here, also, the lineup extends from light-rail to high-speed applications.

The Lifecycle Solutions division and Rail Services business unit engage in activities such as rail trading, long-rail (un)loading at construction sites, welding new rails, reconditioning old rails, on-site welding, rail replacement, rail grinding/milling, rail inspection and construction site supervision. It also organizes and monitors just-in-time rail shipments to construction sites and ensures on-site availability of the approved (un)loading systems.

Activities in the field of rail vehicles, including corresponding services, are combined in the Transportation division. The division comprises the Locomotives business unit available for sale.

For around 100 years, the diesel locomotives developed and produced in the Locomotives business unit have set new benchmarks in terms of technological standards, economy, flexibility and eco-friendliness. This business unit also offers extensive services – particularly those relating to locomotive servicing and maintenance.

In the consolidation, all intrasegment and intersegment transactions are eliminated. This pertains primarily to the offsetting of intragroup income/expenses, the elimination of dividends between Group companies and the elimination of intragroup receivables/payables. The accounting methods applied by all segments are identical and conform to IFRS as adopted by the EU. Intersegment business is transacted on an arm's length basis.

Segment information is presented for each division and business unit on pages 108 et seq.

The major noncash segment expenses include additions to provisions.

In the analysis of its results of operations in the combined management report, the Vossloh Group reports the pretax value added as a key performance indicator. In this context, a WACC of 7.5 percent (previous year: 7.5 percent) before tax was employed in the reporting year.

A reconciliation of the segment result "value added" of the entire Group to the earnings before interest and taxes (EBIT) presented in the consolidated income statement is shown below:

Reconciliation of value added to EBIT

€ mill.	2019	2018
Value added	(105.7)	(5.8)
Cost of capital employed (WACC: 7.5 percent)	68.1	60.0
EBIT	**(37.6)**	**54.2**

Segment information by region is provided for noncurrent assets and external sales revenues in accordance with IFRS 8.33. The external sales revenues presented by region are based on the customer location. As sales with unconsolidated subsidiaries are not taken into account in this overview of external sales revenues, the figures are not compatible with the overview of sales by region on page 42 of the combined management report.

Segment information by region

€ mill.	2019	2018	2019	2018
	External sales revenues		Noncurrent assets[1]	
Germany	81.8	85.7	181.6	166.8
France	103.8	102.1	165.5	148.8
Rest of Western Europe	68.1	67.3	30.5	28.6
Northern Europe	105.2	111.6	21.3	16.8
Southern Europe	74.0	77.2	1.3	1.9
Eastern Europe	67.7	83.7	11.3	7.7
Total of Europe	**500.6**	**527.6**	**411.5**	**370.6**
Americas	185.8	158.7	117.2	161.3
Asia	149.7	132.1	11.3	12.7
Africa	15.1	19.3	0.0	0.0
Australia	59.8	23.5	42.7	33.3
Total	**911.0**	**861.2**	**582.7**	**577.9**

[1] Excluding financial instruments and deferred tax assets

Additional information on financial instruments

Financial instruments are recognized and measured according to the measurement categories of IFRS 9 mentioned in the following:

- Financial assets at amortized cost
- Financial assets at fair value with the recognition of changes in value through profit or loss (FVTPL)
- Financial assets at fair value with the recognition of changes in value through other comprehensive income (FVOCI)

Vossloh's consolidated balance sheet includes both derivative and nonderivative financial instruments.

Nonderivative financial instruments

Nonderivative financial instruments primarily comprise receivables, cash and cash equivalents and other financial assets in assets. On the liabilities side, they include financial liabilities. They are recognized in the consolidated balance sheet when Vossloh becomes a contractual party to the financial instrument. Financial assets are derecognized according to IFRS 9 when the contractual right to payments from a financial asset expires or when the financial asset is transferred along with all material risks and opportunities. Financial liabilities are derecognized when the contractual obligation is settled, canceled or expires.

Derivative financial instruments

In the case of derivative financial instruments, the value of which is derived from a basis value, these pertain particularly to foreign currency forwards.

The Vossloh Group uses various derivative financial instruments primarily to hedge for currency risks from firm foreign-currency contractual obligations, future currency receivables/payables, and interest rate risks arising from long-term financing.

Hedges of assets and liabilities reported in the balance sheet are recognized as freestanding derivatives. The offsetting changes in value of the underlying and hedging transactions, which relate to the hedged risk, are recognized in the balance sheet. Any fair value changes (gains/losses) due to exchange rate volatility are recognized in the income statement. Rather than being carried out on the basis of planned items, the hedging of currency exposure is typically handled directly after an order is received by means of a foreign currency forward.

When accounting for cash flow hedges of pending or uncompleted transactions (executory contracts), changes in the derivative's fair value are recognized directly in equity after allowing for deferred taxes. Upon completion or recognition of the underlying transactions, the associated gains/losses previously recognized in profit and loss are either recycled to the income statement or offset against the cost of purchased assets. The cash flow hedges existing on December 31, 2019 had a maximum term of around six years.

The nominal volume of the foreign currencies hedged by freestanding derivatives is divided as follows:

€ mill.	Currency	2019	2018
USA	USD	163.2	206.3
United Kingdom	GBP	1.2	–
Australia	AUD	15.8	14.7
South Africa	ZAR	–	0.3
		180.2	**221.3**

The table below shows the fair value of derivatives used for hedging currency and interest rate risks, as well as the hedged nominal volumes:

Derivative financial instruments			Fair value	Nominal value	Fair value	Nominal value
€ mill.			2019	2019	2018	2018
Interest rate swaps	Maturity	up to 1 year	–	–	–	–
		up to 5 years	–	–	–	–
		over 5 years	(0.1)	8.0	(0.1)	8.0
			(0.1)	**8.0**	**(0.1)**	**8.0**
Foreign currency forwards	Maturity	up to 1 year	0.3	110.7	(3.0)	151.7
		up to 5 years	(10.1)	69.6	(5.0)	69.6
		over 5 years	–	–	–	–
			(9.8)	**180.3**	**(8.0)**	**221.3**
Total			**(9.9)**	**188.3**	**(8.1)**	**229.3**

Discounted estimated future cash flow methods are used to determine fair values of interest hedging instruments, currency hedging transactions and foreign currency forwards. The discount is based on current market rates, which match the maturity of the financial instruments.

The carrying amounts of financial instruments, the assignment based on measurement category and the required disclosures on fair value according to IFRS 13 and their measurement sources according to IFRS 7 are presented in the following table:

Carrying amounts, measurement categories and fair values as of December 31, 2019

€ mill.	IFRS 9 carrying amounts according to 12/31/2019 balance sheet	Measurement categories pursuant to IFRS 9			Fair values as of 12/31/2019
		Amortized cost	Fair value through OCI (FVOCI)	Fair value through profit or loss (FVTPL)	
Trade receivables	212.8	212.8			212.8
Other financial instruments and other assets	32.9	29.4	0.6	2.9	32.9
Cash and cash equivalents	56.7	56.7			56.7
Total financial assets	**302.4**	**298.9**	**0.6**	**2.9**	**302.4**
Financial liabilities	377.9	377.9			377.9
Trade payables	134.2	134.2			134.2
Other liabilities	83.8	73.0	0.4	10.4	83.8
Total financial liabilities	**595.9**	**585.1**	**0.4**	**10.4**	**595.9**

Carrying amounts, measurement categories and fair values as of December 31, 2018

€ mill.	IFRS 9 carrying amounts according to 12/31/2018 balance sheet	Measurement categories pursuant to IFRS 9			Fair values as of 12/31/2018
		Amortized cost	Fair value through OCI (FVOCI)	Fair value through profit or loss (FVTPL)	
Trade receivables	212.6	212.6			212.6
Securities	0.5	0.1	0.4		0.5
Other financial instruments and other assets	32.9	32.2		0.7	32.9
Cash and cash equivalents	48.7	48.7			48.7
Total financial assets	**294.7**	**293.6**	**0.4**	**0.7**	**294.7**
Financial liabilities	351.5	351.5			351.5
Trade payables	139.2	139.2			139.2
Other liabilities	70.9	62.1	0.1	8.7	70.9
Total financial liabilities	**561.6**	**552.8**	**0.1**	**8.7**	**561.6**

Trade receivables, cash and cash equivalents and other receivables and assets primarily have short maturities. Their carrying amounts as of the reporting date therefore approximately correspond to the fair value.

Trade payables and liabilities from construction contracts as well as other liabilities also usually have short remaining terms. Their carrying amounts therefore approximately correspond to the fair value. The fair value of noncurrent financial liabilities was calculated by discounting the payments of principal and interest to be expected from these liabilities in the future based on current market interest rates.

The financial liabilities carried at fair value mainly pertain to freestanding derivatives.

The table below shows the assignment of the financial assets and liabilities carried at fair value to the fair value hierarchy levels in accordance with IFRS 7 and IFRS 13. There were no reclassifications between the various levels of the fair value hierarchy either during the reporting year or the previous year.

Assignment to levels of the fair value hierarchy

	Determined based on market prices (Level 1)		Derived from fair value (Level 2)		Measurement not based on fair value (Level 3)	
€ mill.	12/31/2019	12/31/2018	12/31/2019	12/31/2018	12/31/2019	12/31/2018
Financial assets measured at fair value			3.5	0.4		
Financial liabilities measured at fair value			10.8	8.8		
Total	**0.0**	**0.0**	**14.3**	**9.2**	**0.0**	**0.0**

The basis for the levels of the hierarchy for the measurement of fair value is the inputs applied. In Level 1, inputs are in the form of unadjusted quoted prices in active markets for identical assets or liabilities. Measurement models are used at both Level 2 and Level 3. While the inputs at Level 2 are observable on the market, there is no observable market data at Level 3.

Vossloh AG enters into derivatives transactions for a framework agreement ("framework agreement for financial futures contracts") which do not qualify for netting. The reason for this is that the Group has no legal claim to offset the amounts recognized at the present time. The right to offset can only be enforced when future events occur, such as if a bank loan is defaulted on or other credit events. The following table presents the carrying amounts of the recognized financial instruments that are subject to the outlined agreements.

Offsetting possibilities for derivative financial assets and liabilities

€ mill.	2019	2018
Financial assets		
Recognized gross amounts of financial assets	0.6	0.7
Financial instruments that qualify for offsetting	0.0	0.0
Net balance sheet figures of financial assets	**0.6**	**0.7**
Offsettable on the basis of framework agreements	(0.5)	(0.7)
Total net value of financial assets	**0.1**	**0.0**
Financial liabilities		
Recognized gross amounts of financial liabilities	(10.5)	(8.8)
Financial instruments that qualify for offsetting	0.0	0.0
Net balance sheet figures of financial liabilities	**(10.5)**	**(8.8)**
Offsettable on the basis of framework agreements	0.5	0.7
Total net value of financial liabilities	**(10.0)**	**(8.1)**

Net gains/(losses) on financial instruments by measurement category

€ mill.	Assets at amortized cost	Assets at fair value through profit or loss (FVTPL)	Liabilities at amortized cost	Liabilities at fair value through OCI (FVOCI)	2019	2018
Net gains/(losses) from:						
Interest	0.0	(6.0)	0.0		(6.0)	(4.5)
Remeasurement						
from addition to allowances	(12.2)				(12.2)	1.6
from reversal of allowances	1.8				1.8	0.0
from currency translation differences	8.7				8.7	(0.2)
at fair value		(3.4)		0.2	(3.2)	3.0
Total	**(1.7)**	**(9.4)**	**0.0**	**0.2**	**(10.9)**	**(0.1)**

Interest is accounted for here within net interest income, while the net gains and losses on disposal and currency translation are disclosed within other operating income. Gains from the remeasurement to fair value of securities held for trading and the write-down of financial instruments available for sale are included in the above table and recognized within the other financial result.

Financial risk management

The Vossloh Group's business operations are exposed to financial risks. These risks relate to liquidity, currency, interest and credit. The Group-wide management and limitation of the liquidity, currency and interest rate risks is handled by Treasury Management. Credit risks are monitored as part of general risk management.

Liquidity risks

Vossloh manages its liquidity risks (i.e. the risk that the Group is not able at all times to meet its payment obligations) through rolling liquidity planning and a central cash management system. As of the end of the year cash, cash equivalents and readily salable securities of €56.7 million were at the Group's disposal, as well as additional, un-utilized credit facilities of €193.7 million to satisfy any future liquidity requirements. €120.6 million were related to free credit lines of Vossloh AG under the syndicated loan with a term until November 2024. The majority of the free credit lines of the subsidiaries, which totaled €73.1 million, had a duration of up to a year or were granted for an unlimited term. The table below shows the contractually agreed undiscounted payments of principal and interest for financial liabilities:

Maturities of interest and principal payments

	up to 1 year				1 to 5 years				More than 5 years			
€ mill.	2019		2018		2019		2018		2019		2018	
	Repayment	Interest	Repayment	Interest	Repayment	Interest	Repayment	Interest	Repayment	Interest	Repayment	Interest
Nonderivative financial liabilities	(37.1)	(5.3)	(88.6)	(3.9)	(373.3)	(9.5)	(143.8)	(11.5)	(12.5)	0.0	(119.8)	(2.3)
Derivative financial liabilities	(0.6)	(0.1)	(3.7)		(10.1)	(0.1)	(5.1)		0.0		0.0	
Derivative financial assets	0.7		0.7									

Currency risks

Currency risks arise from recognized noneuro assets and liabilities whose euro equivalent may be adversely affected by unfavorable exchange rates, and pending or uncompleted currency transactions whose future cash flows may show a negative trend depending on how foreign exchange rates develop. Significant operations-related currency risks Vossloh is exposed to originate from trade receivables and payables denominated in a noneuro currency, as well as from pending or uncompleted trade and purchasing transactions. Vossloh has issued binding instructions to centrally hedge against currency risks Group-wide through Treasury Management by using foreign currency forwards at matching maturities and amounts as micro hedges of the associated underlying transactions. The fixed exchange rates for the hedged underlying transactions counter any unfavorable rate effects on cost estimates and assets. As of the reporting date, Vossloh has not designated any currency derivatives as a cash flow hedge; as such, all currency derivatives are freestanding. The translation of foreign separate financial statements into the Group currency, the euro, results in currency translation differences (translation risks) which are recognized directly in the "Accumulated other comprehensive income" balance sheet item (see "Currency translation" on page 114). Income, expenses and carrying values of companies that are not based in the eurozone are thus dependent on the respective euro exchange rate. Translation risks are not currently hedged because they do not directly affect cash flow. In addition, investments in foreign companies are typically long-term.

Interest rate risks

Interest rate risks mainly result from floating-rate short-term loans raised for Group financing purposes, as well as from short-term funds invested at variable rates.

The risk of an unfavorable market rate trend and thus higher interest payments for floating-rate notes is contained by contracting interest rate swaps and caps (see the glossary for these terms, page 169).

In connection with hedge accounting, such interest rate hedging transactions are accounted for as cash flow hedges. Interest rate floors embedded in hedging transactions are recognized in the income statement as fair value hedges. The nominal amount of the interest rate swap amounted to €8.0 million as of the reporting date and has a term until the end of 2026.

The critical terms match is applied as the method for assessing the effectiveness of the hedge, as well as the dollar offset method. The swap displays an effectiveness of 100 percent. The effects from the swap were recognized directly in other comprehensive income at €(0.2) million and in the income statement in net interest income at €0.1 million as of the reporting date.

The fair value of derivatives used for hedging against currency and interest rate risks, as well as the hedged nominal volumes are detailed in the "Additional information on financial instruments" on pages 145 et seq. Taking into account the existing interest rate derivatives, 46 percent of the financial liabilities were taken up with fixed interest rates as of the reporting date, with 54 percent subject to a variable interest rate.

Sensitivity analysis

Given certain assumptions, sensitivity analyses put an approximate figure to the risk that exists if certain influential factors undergo changes. The following changes have been assumed with regard to interest-rate risk and exchange-rate risk:
- An increase in market interest rates of 1 percent or a reduction in market interest rates of 0.25 percent (parallel shift in the yield curve);
- a simultaneous appreciation of the euro against all foreign currencies by 10 percent.

Financial instruments originally stipulated with variable interest rates as well as existing interest rate derivatives were taken into consideration in the determination of the interest-rate risk as of the reporting date. A market interest rate that is higher by 100 percentage points related to the financial liabilities and receivables identified with variable rates as of December 31, 2019, would have increased the financial result by €0.8 million. A market interest rate that was lower by 25 points would have reduced the net financial result by €0.1 million owing to the existing Euribor floor rule in the syndicated loan. Equity would have been €0.5 million lower at the higher market interest rate or €0.1 million lower at the lower market interest rate. This is based on the underlying assumption that the changed interest rate would have applied for an entire year.

As currency risks were almost fully hedged, the impact of a simultaneous 10 percent depreciation of the euro on the unhedged foreign currency positions was insignificant for the results of operations. The following table shows the effects of the sensitivity analysis of key existing foreign currency derivatives and currency loans on other net interest income and equity. A positive value reflects an increase in earnings and equity.

Sensitivity analysis of key foreign currency derivatives

	USD			
	12/31/2019		12/31/2018	
€ mill.	+10 %	–10 %	+10 %	–10 %
Net interest result	(0.1)	0.1	(0.8)	1.1
Equity	0.0	0.1	(0.6)	0.8

Credit risks

Credit risks are defined as the risk that counterparties fail to meet their financial obligations. The credit risk attached to the cash and cash equivalents invested by the Vossloh Group with banks and the short-term securities held by Group companies, as well as to hedging instruments contracted with banks, is minimized by selecting counterparties of prime standing only. As part of business operations, trade receivables and other receivables are potentially exposed to credit risk.

These credit risks are monitored by the risk management system and minimized by taking out credit insurance (for example Euler Hermes). Specific credit risks are taken into account through adequate allowances.

The balance of gross receivables (receivables before deduction of allowances) is broken down as follows in terms of operational credit risks:

Balance of gross current receivables

€ mill.	Receivables not past due	Receivables past due	Impaired receivables	Gross balance
Trade receivables				
2019	153.3	59.5	20.3	233.1
2018	136.7	76.1	12.5	225.3
Others				
2019	55.6	2.4	1.4	59.4
2018	44.6	1.0	1.5	47.1

The analysis below breaks down the receivables past due but not impaired:

Receivables past due

€ mill.	up to 1 month	1 to 3 months	3 to 6 months	6 to 12 months	More than 12 months	Total
Trade receivables						
2019	20.1	12.6	12.9	7.7	6.2	**59.5**
2018	26.6	15.7	11.8	12.4	9.6	**76.1**
Others						
2019	0.3	0.3	0.5	0.3	1.0	**2.4**
2018	0.3	0.0	0.1	0.3	0.3	**1.0**

No specific credit risk arises from past due receivables since, given customer structure of the Vossloh Group, many debtors are government or other public-sector agencies.

The maximum credit risk of all financial assets corresponds to their carrying amounts (see analysis on page 146).

Other disclosures

Contingent liabilities

Contingent liabilities decreased significantly from December 31, 2018, by €0.3 million from €21.3 to €21.0 million. As in the previous year, €9.0 million was attributable to total contingent liabilities for the former Electrical Systems business unit sold with effect from January 31, 2017. Vossloh AG was given an irrevocable and unconditional guarantee for these contingent liabilities at first request by a first-class bank. The Group has incurred contingent liabilities under guarantees of €2.7 million (previous year: €3.5 million), (of which €2.4 million (previous year: €3.2 million) are attributed to nonconsolidated affiliated companies) and of €18.3 million (previous year: €17.8 million) for letters of comfort (of which €9.6 million (previous year: €9.1 million) attributed to nonconsolidated affiliated companies). The risk of a claim is considered unlikely for all of the listed contingent liabilities.

Commitments triggered by orders arising from the acquisition of property, plant and equipment and intangible assets totaled €22.2 million (previous year: €16.0 million).

Leasing

Agreements on the use of assets have regularly been concluded between the companies of the Vossloh Group and the respective owners. The subject of these agreements primarily relate to land and buildings, machinery and factory and office equipment, in particular company cars and IT equipment. The resulting assets subject to such rights of use are capitalized under property, plant and equipment pursuant to IFRS 16, while the present values of payment obligations are recognized financial liabilities. The option granted under IFRS 16.4 as regards rights of use for intangible assets is exercised in such a way that rights of use arising from such contracts are not recognized on the balance sheet. The accounting methods applied for the rights of use and for the financial liability resulting from the lease are outlined in the explanatory notes to property, plant and equipment. Here, the expense incurred for the depreciation of capitalized values in use was also shown. Interest expense from the compounding of lease liabilities is accounted for under net interest expense.

Expenses relating to short-term leases (term of less than one year) and for low-value assets – the resulting rights of use are not capitalized in accordance with the option in IFRS 16.6 – are accounted for as other operating expenses in the income statement. The same applies to variable lease payments, which are not to be taken into account when measuring the lease liability. Gains or losses from what are referred to as "sale-and-leaseback" transactions are accounted for depending on the conditions of the lease agreement to the extent that such transactions take place. No such transactions were realized in the reporting year. Rental income stemming from subleases are accounted for as other operating income.

The following table provides a summary of the expenses recognized in the income statement relating to leases. No figures from the previous year are shown here in view of the transitional provisions applied.

€ mill.	2019
Interest expense from the compounding of lease liabilities	1.2
Expenses from short-term leases	4.5
Expenses from the renting of low-value assets	0.3
Expenses from variable lease payments	0.1
Rental income from subletting	0.1

The following table shows the residual terms of the recognized leases:

Liabilities according to remaining terms

€ mill.	2019			
Remaining term	≤ 1 year	1 to 5 years	> 5 Jahre	Total
Liabilities from leases	11,6	27,2	10,3	49,1

Future payments that have not yet been taken into account when measuring lease liabilities may result from variable lease payments, extension options that do not yet appear to be largely probable or not exercising termination options or from residual value guarantees that have not been taken into account. The resulting payments are insignificant in total. Payments in the amount of €1.8 million are expected from leases that have already been agreed and whose use will only begin at a later date. There are no restrictions imposed by lease agreements or assurances about certain financial circumstances.

Disclosures regarding companies with noncontrolling interests

Significant Group companies with shareholders that have a noncontrolling interest are:
1. Vossloh Fastening Systems (China) Co. Ltd., Kunshan, China
2. Vossloh Cogifer Kihn SA, Rumelange, Luxembourg.

Re 1.: 32 percent of the shares of capital of this company are held by shareholders with a noncontrolling interest. In the 2019 fiscal year, €4.1 million (previous year: €4.1) million) of the company's net income was attributable to these shareholders. As of December 31, 2019, the share of equity attributable to shareholders with a noncontrolling interest was €10.3 million (previous year: €10.6 million).

Significant financial information for Vossloh Fastening Systems (China) Co. Ltd., Kunshan, China

€ mill.	2019	2018
Noncurrent assets	11.3	12.1
Current assets	86.2	73.1
Noncurrent liabilities	2.2	0.9
Current liabilities	62.1	51.6
Sales revenues	66.7	57.1
Value added	14.9	14.8
Total comprehensive income	13.4	12.4
Cash flow	(9.2)	(0.9)
Dividends to shareholders	13.0	26.3

Re 2.: 10.79 percent of the shares of capital of this company are held by shareholders with a noncontrolling interest. In the 2019 fiscal year, €(0.6) million (previous year: €0.5) million) of the company's net income was attributable to these shareholders. As of December 31, 2019, the share of equity attributable to shareholders with a noncontrolling interest was €0.6 million (previous year: €1.2 million).

Significant financial information for Vossloh Cogifer Kihn, SA, Rumelange, Luxembourg

€ mill.	2019	2018
Noncurrent assets	15.4	16.0
Current assets	15.2	19.7
Noncurrent liabilities	1.1	0.8
Current liabilities	17.0	17.3
Sales revenues	39.4	49.6
Value added	(6.1)	3.1
Total comprehensive income	(5.1)	4.4
Cash flow	1.3	(0.5)
Dividends to shareholders	0.0	0.0

Where shareholders of other Group companies hold noncontrolling interests, these interests are insignificant both individually and cumulatively.

Related party transactions

As the ultimate controlling parent, Vossloh AG is at the helm of the Vossloh Group. The consolidated companies of the Vossloh Group regularly transact normal business with unconsolidated affiliated companies, joint ventures and associated companies. Resulting transactions were executed on an arm's length basis. Related unconsolidated companies and associated companies are disclosed in the list of shareholdings on page 156 et seq.

Individuals among the Vossloh Group's related parties are the members of the Executive and Supervisory Boards.

Mr. Heinz Hermann Thiele, who was the largest single shareholder in the Annual General Meetings in recent years, indirectly controls the companies of the Knorr-Bremse Group. These companies are accordingly to be treated as related parties. Transactions with companies of the Knorr-Bremse Group in the fiscal year resulted in material purchases in the amount of €0.1 million (previous year: €0.1 million), sales in the amount of €0.0 million (previous year: €0.0 million) as well as open receivables and advance payments as of December 31, 2019, in the amount of €0.0 million (previous year: €0.0 million) and trade payables of €0.0 million (previous year: €0.0 million). There is also a financial asset worth €6.0 million resulting from the sale of shares of the former Vossloh Kiepe GmbH, Düsseldorf.

The table below breaks down the period's transactions with related parties (entities/individuals), These were conducted almost exclusively with unconsolidated subsidiaries and reflected in segment reporting as internal sales revenues and in the consolidated balance sheet as receivables/payables due from or to affiliated companies. Transactions with associated companies are also taken into consideration. The volume of transactions with related individuals was negligible.

€ mill.	2019	2018
Sale or purchase of goods		
Sales revenues from the sale of finished goods or WIP	16.3	11.7
Cost of materials from the purchase of finished goods or WIP	11.4	0.7
Trade receivables	10.9	7.8
Trade payables	1.8	1.0
Advance payments received	0.1	0.0
Expenses for irrecoverable/doubtful accounts	0.1	0.0
Sale or purchase of other assets		
Income from the sale of other assets	0.0	0.4
Receivables from the sale of other assets	6.2	4.9
Liabilities from the purchase of other assets	1.0	1.1
Services rendered or received		
Income from services rendered	1.6	1.1
Expenses for services received	0.5	0.8
Licenses		
License income	0.1	0.1
License expenses	0.1	0.6
Financing		
Interest income from financial loans granted	0.1	0.0
Receivables on financial loans granted	3.1	8.8
Provision of guarantees and collateral		
Provision of guarantees	2.4	3.2
Provision of other collateral	0.7	1.3

Payments to related parties

€	Short-term remuneration due 2019	Short-term remuneration due 2018	Pension entitlements (service cost) 2019	Pension entitlements (service cost) 2018	Other noncurrent grants 2019	Other noncurrent grants 2018	Benefits due to employment contracts coming to an end 2019	Benefits due to employment contracts coming to an end 2018	Total 2019	Total 2018
Executive Board of Vossloh AG	2,382,122	2,066,654	324,919	410,630	658,243	539,085	1,151,176	–	4,516,460	3,016,369
Supervisory Board of Vossloh AG	429,167	435,833	–	–	–	–	–	–	429,167	435,833

The short-term benefits paid for the Executive Board comprised the fixed and annual variable remuneration. Provisions for pensions of Executive Board members totaling €1.9 million (previous year: €2.0 million). For an itemized breakdown by member of this total, and further details of the remuneration system, see the remuneration report (an integral part of the Vossloh Group's combined management report).

Auditor fees

In the 2019 fiscal year, the Group auditor's fees include €0.5 million for statutory audits. They relate exclusively to attestation services.

The fees for statutory audits mainly include those paid for the mandatory Group audit and the statutory audits by Deloitte GmbH of Vossloh AG and its German subsidiaries' financial statements. In addition, there were report reviews of the interim financial statements.

German Corporate Governance Code

In November 2019, the Executive and Supervisory Boards issued the declaration of conformity pursuant to Section 161 of the German Stock Corporation Act (AktG), and made it permanently available to the stockholders on Vossloh's website.

Events after the reporting period

It is not yet possible to determine what effects the coronavirus COVID-19 will have on our business in terms of production difficulties or project delays. This will be determined by how quickly the spread of the virus can be successfully contained and what the ensuing effects will be on the economy in China and worldwide. We analyze all risks relevant to our business on an ongoing basis in order to ensure that we are able to take any appropriate action at short notice.

Group companies and investees

Pursuant to Section 313 (2) HGB, details of the Vossloh Group's shareholdings are listed below:

List of shareholdings

€ mill.		Foot-note	Shareholding in %	at	Consoli-dation[1]	Equity[2]	Result after taxes[2]
(1)	**Vossloh Aktiengesellschaft, Werdohl**				(k)		
(2)	Vossloh International GmbH, Werdohl		100.00	(1)	(k)		
(3)	Vossloh US Holdings, Inc., Wilmington, Delaware, USA		100.00	(2)	(k)		
(4)	Vossloh Australia Pty. Ltd., Sydney, Australia		100.00	(1)	(k)		
	Core Components division						
	Fastening Systems business unit						
(5)	Vossloh Fastening Systems GmbH, Werdohl	3	100.00	(1)	(k)		
(6)	Vossloh Tehnica Feroviara SRL, Bucharest, Romania	6	100.00	(5)	(n)	0.1	0.0
(7)	Vossloh Drazni Technika s.r.o., Prague, Czech Republic		100.00	(5)	(n)	1.1	0.6
(8)	Vossloh Sistemi S.r.l., Cesena, Italy		100.00	(5)	(k)		
(9)	Vossloh Skamo Sp.z o.o., Nowe Skalmierzyce, Poland		100.00	(5)	(k)		
(10)	Vossloh Rail Technologies Ltd. Sti., Ankara, Turkey		100.00	(5)	(k)		
(11)	FÉDER-7 Rugógyártó Kft., Sárkeresztes, Hungary		100.00	(5)	(n)	0.4	0.0
(12)	Vossloh Fastening Systems America Corp., Chicago, Illinois, USA		100.00	(3)	(k)		
(13)	Vossloh Fastening Systems (China) Co. Ltd., Kunshan, China		68.00	(5)	(k)		
(14)	Vossloh-Werke International GmbH, Werdohl		100.00	(5)	(k)		
(15)	Beijing China-Railway Vossloh Technology Co. Ltd., Beijing, China		49.00	(5)	(n)	3.0	1.4
(16)	Vossloh Fastening Systems Southern Africa Proprietary Limited, Cape Town, South Africa	6	100.00	(88)	(n)	0.0	0.0
(17)	TOO Vossloh Fastening Systems (Kazakhstan), Kapshagay, Kazakhstan		50.00	(14)	(e)		
(18)	Suzhou Vossloh Track Systems Co. Ltd., Suzhou, China		100.00	(14)	(k)		
(19)	AO Vossloh Fastening Systems RUS, Engels, Russia		50.00	(5)	(e)		
(20)	Vossloh Fastening Systems Australia Pty. Ltd., Sydney, Australia		100.00	(4)	(n)	1.0	0.0
(21)	OOO Vossloh Bahn- und Verkehrstechnik, Moscow, Russia		99.00/1.00	(2)/(1)	(k)		
(22)	Vossloh Maschinenfabrik Deutschland GmbH, Werdohl		100.00	(5)	(n)	1.8	–0.1
(23)	Vossloh Fastening Systems India Private Limited, New Delhi, India		99.99/0.01	(5)/(14)	(n)	0.1	0.1
(24)	Vossloh (Anyang) Track Material Co. Ltd., Anyang, China	4	51.00	(14)	(e)		
(25)	Kunshan Vossloh Railway Materials Trading Co. Ltd., Kunshan, China	4	100.00	(14)	(k)		
	Tie Technologies business unit						
(26)	Rocla International Holdings, Inc., Wilmington, Delaware, USA		100.00	(3)	(k)		
(27)	Rocla Concrete Tie, Inc., Lakewood, Colorado, USA		100.00	(26)	(k)		
(28)	RCTI de Mexico, S. de R. L. de C. V., Mexico City, Mexico		99.998/0.002	(27)/(3)	(k)		
(29)	RocBra Participacoes e Empreendimentos Ltda., São Paulo, Brazil	6	100.00	(26)	(n)	4.9	0.0
(30)	Cavan Rocbra Industria E Comercio De Pre Moldados De Concreto S/A, São Paulo, Brazil	6	20.00	(29)	(n)	25.4	9.2
(31)	Austrak Pty. Ltd., Brisbane, Australia		100.00	(4)	(k)		
(32)	Vossloh Tie Technologies Canada ULC, Vancouver, Canada	4	100.00	(27)	(k)		
	Customized Modules division						
	Switch Systems business unit						
(33)	Vossloh France SAS, Rueil-Malmaison, France		100.00	(1)	(k)		
(34)	Vossloh Cogifer SA, Rueil-Malmaison, France		100.00	(33)	(k)		
(35)	Jacquemard AVR SA, St. Jean Bonnefonds, France		100.00	(34)	(k)		
(36)	Vossloh Cogifer Finland Oy, Teijo, Finland		100.00	(37)	(k)		
(37)	Vossloh Nordic Switch Systems AB, Ystad, Sweden		100.00	(34)	(k)		
(38)	Vossloh Cogifer KIHN SA, Rumelange, Luxembourg		89.21	(34)	(k)		
(39)	Vossloh Laeis GmbH, Trier		100.00	(38)	(k)		
(40)	Futrifer-Indústrias Ferroviárias, SA, Lisbon, Portugal		61.00	(34)	(e)		
(41)	Amurrio Ferrocarril y Equipos SA, Amurrio, Spain		50.00	(34)	(e)		
(42)	Montajes Ferroviarios, S. L., Amurrio, Spain		100.00	(41)	(n)	0.2	(0.1)
(43)	Burbiola SA, Amurrio, Spain		50.00	(41)	(n)	1.5	0.1
(44)	Vossloh Cogifer UK Limited, Scunthorpe, United Kingdom		100.00	(34)	(k)		
(45)	Vossloh Cogifer Italia S.r.l., Milan, Italy		100.00	(34)	(k)		
(46)	Vossloh Cogifer Polska Sp.z o.o., Bydgoszcz, Poland		96.95	(34)	(k)		
(47)	ATO-Asia Turnouts Limited, Bangkok, Thailand		51.00	(34)	(e)		
(48)	Vossloh Cogifer Malaysia Sdn. Bhd., Kuala Lumpur, Malaysia		100.00	(34)	(k)		
(49)	Siema Applications SAS, Villeurbanne, France		100.00	(34)	(k)		

€ mill.		Foot-note	Shareholding in %	at	Consoli-dation[1]	Equity[2]	Result after taxes[2]
(50)	VOSSLOH MIN SKRETNICE DOO ZA Proizvodnjui Montazu Skretnica i Opreme Nis, Niš, Serbia		100.00	(34)	(k)		
(51)	Vossloh Beekay Castings Ltd., New Delhi, India	5	58.48	(34)	(e)		
(52)	Vossloh Cogifer Turnouts India Private Limited, Hyderabad, India	5	100.00	(34)	(k)		
(53)	Vossloh Cogifer Signalling India Private Limited, Bangalore, India	5	100.00	(34)	(k)		
(54)	Vossloh Track Material, Inc., Wilmington, Delaware, USA		100.00	(3)	(k)		
(55)	Vossloh Cogifer Australia Pty. Ltd., Castlemaine, Australia		100.00	(4)	(k)		
(56)	Vossloh Cogifer Kloos BV, Nieuw-Lekkerland, the Netherlands		100.00	(34)	(k)		
(57)	Wuhu China Railway Cogifer Track Co. Ltd., Wuhu, China		50.00	(34)	(e)		
(58)	Vossloh Signaling USA, Inc., Wilmington, Delaware, USA		100.00	(3)	(k)		
(59)	Vossloh Cogifer Argentina S. A., Buenos Aires, Argentina		90.00/10.00	(34)/(35)	(n)	(3.8)	(3.2)
(60)	Vossloh Cogifer Southern Africa Proprietary Ltd. Cape Town, South Africa		100.00	(88)	(n)	0.0	0.0
(61)	Vossloh Cogifer do Brasil Administracao de Bens e Participacoes Ltda., Sorocaba, Brazil		99.99/0.01	(34)/(35)	(k)		
(62)	Vossloh Cogifer do Brasil Metalúrgica MBM SA, Sorocaba, Brazil		100.00	(61)	(k)		
(63)	Outreau Technologies SAS, Outreau, France		100.00	(34)	(k)		
	Lifecycle Solutions division						
	Rail Services business unit						
(64)	Vossloh Rail Services GmbH, Hamburg	3	100.00	(1)	(k)		
(65)	Vossloh Rail Center GmbH, Hamburg	3	100.00	(64)	(k)		
(66)	Vossloh Rail Inspection GmbH, Leipzig (formerly: GTS Gesellschaft für Gleistechnik Süd mbH)	3	100.00	(65)	(k)		
(67)	Alpha Rail Team GmbH & Co. KG, Berlin	3	100.00	(65)	(k)		
(68)	Alpha Rail Team Verwaltungs GmbH, Berlin		100.00	(65)	(k)		
(69)	Vossloh Logistics GmbH, Hanover	3	100.00	(64)	(k)		
(70)	VOSSLOH Turkey Demiryolu Sistemleri Ltd. Sti., Istanbul, Turkey		100.00	(73)	(k)		
(71)	Vossloh Rail Maintenance GmbH, Hamburg (formerly: Vossloh High Speed Grinding GmbH)	3	100.00	(64)	(k)		
(72)	Vossloh Mobile Rail Services GmbH, Leipzig	3	100.00	(65)	(k)		
(73)	Vossloh Rail Services International GmbH, Hamburg	3	100.00	(64)	(k)		
(74)	Vossloh MFL Rail Milling GmbH, Liezen, Austria		50.00	(73)	(e)		
(75)	Vossloh Rail Services Scandinavia AB, Örebro, Sweden		100.00	(73)	(k)		
(76)	Vossloh Rail Services North America Corporation, Denver, Colorado, USA		100.00	(3)	(n)	0.7	(0.1)
(77)	Beijing CRM-Vossloh Track Maintenance Technology Co., Ltd., Beijing, China		47.00	(73)	(e)		
(78)	Vossloh Rail Services Kunshan Co., Ltd., Kunshan, China		100.00	(73)	(k)		
(79)	Vossloh Rail Services Finland Oy, Kouvola, Finland		100.00	(73)	(k)		
(80)	Rhomberg Sersa Vossloh GmbH, Föhren		50.00	(64)	(e)		
(81)	Vossloh Services France SAS, Rueil-Malmaison, France	4	49.9/50.1	(34)/(73)	(k)		
	Transportation division						
	Locomotives business unit						
(82)	Vossloh Locomotives GmbH, Kiel	3	100.00	(1)	(k)		
(83)	Locomotion Service GmbH, Kiel	3	100.00	(82)	(k)		
(84)	Vossloh Locomotives France SAS, Paris, France		100.00	(82)	(k)		
(85)	Vossloh Locomotives Scandinavia AB, Örebro, Sweden		100.00	(82)	(k)		
(86)	Imateq SAS, Saint Pierre des Corps, France		55.00	(84)	(e)		
(87)	Imateq Italia S.R.L., Tortona, Italy		100.00	(82)	(k)		
	Other companies						
(88)	Vossloh Southern Africa Holdings Proprietary Ltd., Johannesburg, South Africa	6	100.00	(2)	(n)	0.5	0.0

[1] Fully consolidated companies are noted (k), those accounted for using the equity method (e) and unconsolidated companies (n). Exclusion from the scope of consolidation is based on immateriality with respect to net assets, financial position and results of operations.
[2] Foreign currency amounts in the case of equity are translated at the average exchange rate as of the balance sheet date and post-tax profits or losses are translated at the annual average rate.
[3] Company claims exemption from preparing and publishing separate financial statements pursuant to Section 264 (3) or 264b HGB.
[4] Included in the consolidation for the first time in the reporting year.
[5] Differing fiscal year April 1 to March 31
[6] Information on equity and the result after taxes is based on financial statements from previous years.

Executive Board of Vossloh AG

Oliver Schuster, born 1964, Kierspe
Chairman of the Executive Board (since 10/1/2019)
First appointment: 3/1/2014, appointed until: 2/28/2025
External mandates:
- Wohnungsgesellschaft Werdohl GmbH: Member of the Supervisory Board
Group mandates:
- Vossloh Cogifer SA: Member of the Supervisory Board
- Vossloh France SAS: President

Andreas Busemann, born 1966, Frankfurt am Main,
Chairman of the Executive Board (until 9/30/2019)
First appointment: 4/1/2017, appointed until: 9/30/2019

Dr.-Ing. Karl Martin Runge, born 1964, Kassel
First appointment: 10/1/2019, appointed until: 9/30/2022
Group mandates:
- Vossloh Cogifer SA: Chairman of the Supervisory Board (since 12/5/2019)
- Vossloh International GmbH: Managing Director (since 10/21/2019)
- Vossloh Fastening Systems (China) Co. Ltd.: Chairman of the Administrative Board (since 12/2/2019)

Volker Schenk, born 1964, Düsseldorf
First appointment: 5/1/2014, appointed until: 9/30/2019
External mandates:
- Institut für Bahntechnik GmbH: Member of the Supervisory Board
Group mandates until 9/27/2019:
- Vossloh Cogifer SA: Chairman of the Supervisory Board
- Vossloh Australia Pty. Ltd.: Member of the Administrative Board
- Vossloh Fastening Systems Australia Pty. Ltd.: Member of the Administrative Board
- Vossloh International GmbH: Managing Director
- Vossloh Southern Africa Holdings Pty. Ltd.: Managing Director
- Wuhu China Railway Cogifer Track Co., Ltd.: Member of the Administrative Board
- Vossloh Fastening Systems (China) Co., Ltd.: Chairman of the Administrative Board
- Beijing China-Railway Vossloh Technology Co., Ltd.: Member of the Administrative Board
- Beijing CRM-Vossloh Track Maintenance Technology Co., Ltd.: Chairman of the Supervisory Board
- Suzhou Vossloh Track Systems Co., Ltd.: Chairman of the Administrative Board

Supervisory Board of Vossloh AG

Prof. Dr. Rüdiger Grube[2,4], Chairman, Hamburg, independent management consultant and former CEO of Deutsche Bahn AG (member of the Supervisory Board since February 5, 2020)
- Chairman of the Supervisory Board of Hamburger Hafen- und Logistik AG, Hamburg
- Non-executive member of the Administrative Board of RIB Software SE, Stuttgart
- Member of the Supervisory Board of Herrenknecht AG, Lahr-Schwanau
- Non-executive member of the Administrative Board of Deufol SE, Hofheim (Wallau)
- Chairman of the Supervisory Boards of Bombardier Transportation Germany GmbH, Berlin, and of Bombardier Transportation (Bahntechnologie) Holding Germany GmbH, Berlin

Ulrich M. Harnacke[2,3,4], former Chairman, Mönchengladbach, Auditor and Tax Advisor (member of the Supervisory Board since May 20, 2015)
- Member of the Shareholders' Committee of Thüga Holding GmbH & Co., KGaA, Munich, Germany
- Member of the Supervisory Board and Chairman of the Audit Committee of Brenntag AG, Essen, Germany
- Member of the Advisory Board of Zentis GmbH & Co. KG, Aachen, Germany

Dr.-Ing. Volker Kefer[2,4], former Chairman, Erlangen, former Deputy CEO of Deutsche Bahn AG (member of the Supervisory Board from May 24, 2017 until March 4, 2019)

Dr. Sigrid Evelyn Nikutta[2,4], Deputy Chairwoman, Berlin, member of the Board of Management of Deutsche Bahn AG and CEO of DB Cargo AG (member of the Supervisory Board since May 22, 2019)
- Chairman of the Supervisory Board of BT Berliner Transport GmbH, Berlin (until December 31, 2019)
- Chairman of the Supervisory Board of Institut für Bahntechnik GmbH, Berlin (November 22, 2019)

Prof. Dr. Anne-Christine d'Arcy[3,4], Vienna (Austria), University Professor for Corporate Governance und Management Control (member of the Supervisory Board since May 9, 2018)

Dr. Bernhard Düttmann[3,4], Meerbusch, independent management consultant and interim Member of the Executive Board of CECONOMY AG (member of the Supervisory Board from May 9, 2018 until December 31, 2019)
- Member of the Supervisory Board of alstria office REIT-AG, Hamburg
- Member of the Supervisory Board of CECONOMY AG, Düsseldorf (mandate suspended due to appointment to the Executive Board)

Andreas Kretschmann[1], Neuenrade, social security employee (member of the Supervisory Board since August 30, 2017)

Michael Ulrich[1,2,3], Kiel, Machinist (member of the Supervisory Board since April 20, 2007)

[1]Employee representative
[2]Member of the Staff Committee
[3]Member of the Audit Committee
[4]Member of the Nomination Committee

Proposed profit appropriation

In accordance with German GAAP, the financial statements for the 2019 fiscal year show a net loss of €63,513,786.27 and, After including the profit carryforward of €94,684,926.77 and withdrawals from retained earnings of €50,000,000.00, the net profit retained amounts to €81,171,140.50.

The Executive Board and Supervisory Board will propose to the Annual General Meeting that a dividend of €1.00 per share be paid out on the dividend-bearing capital stock of €49,857,682.23 and that the remaining amount of €63,606,960.50 be carried forward. The total dividend amount is €17,564,180.00.

Werdohl, Germany, February 28, 2020,
Vossloh AG
The Executive Board

Oliver Schuster, Dr.-Ing. Karl Martin Runge

Responsibility statement

We confirm that, to the best of our knowledge and in accordance with applicable accounting principles, the consolidated financial statements present a true and fair view of the Vossloh Group’s net assets, financial position and results of operations, and the combined management report gives a true and fair view of the Group's performance and the overall position of the Group, as well as the significant risks and opportunities associated with the Group’s expected development.

Werdohl, Germany, February 28, 2020,

Vossloh AG
The Executive Board

Oliver Schuster, Dr.-Ing. Karl Martin Runge

Independent Auditor`s report

To Vossloh Aktiengesellschaft, Werdohl/Germany

Report on the audit of the consolidated financial statements and of the combined management report

Audit Opinions

We have audited the consolidated financial statements of Vossloh Aktiengesellschaft, Werdohl/Germany, and its subsidiaries (the Group) which comprise the consolidated balance sheet as at 31 December 2019, the consolidated statement of profit or loss, the consolidated statement of comprehensive income, the consolidated statement of cash flows and the consolidated statement of changes in equity for the financial year from 1 January to 31 December 2019, and the notes to the consolidated financial statements, including a summary of significant accounting policies. In addition, we have audited the combined management report of Vossloh Aktiengesellschaft, Werdohl/Germany, for the financial year from 1 January to 31 December 2019. In accordance with the German legal requirements, we have not audited the content of the corporate governance statement pursuant to Section 289f and Section 315d German Commercial Code (HGB), which make part of the combined management report, and the consolidated non-financial statement pursuant to Section 315b HGB included in the combined management report.

In our opinion, on the basis of the knowledge obtained in the audit,

- the accompanying consolidated financial statements comply, in all material respects, with the International Financial Reporting Standards (IFRS) as adopted by the EU and the additional requirements of German commercial law pursuant to Section 315e (1) HGB and, in compliance with these requirements, give a true and fair view of the assets, liabilities and financial position of the Group as at 31 December 2019 and of its financial performance for the financial year from 1 January to 31 December 2019, and
- the accompanying combined management report as a whole provides an appropriate view of the Group's position. In all material respects, this combined management report is consistent with the consolidated financial statements, complies with German legal requirements and appropriately presents the opportunities and risks of future development. Our audit opinion on the combined management report does not cover the content of the corporate governance statement and the consolidated non-financial statement referred to above.

Pursuant to Section 322 (3) sentence 1 HGB, we declare that our audit has not led to any reservations relating to the legal compliance of the consolidated financial statements and of the combined management report.

Basis for the Audit Opinions

We conducted our audit of the consolidated financial statements and of the combined management report in accordance with Section 317 HGB and the EU Audit Regulation (No. 537/2014; referred to subsequently as "EU Audit Regulation") and in compliance with German Generally Accepted Standards for Financial Statement Audits promulgated by the Institut der Wirtschaftsprüfer (IDW). Our responsibilities under those requirements and principles are further described in the "Auditor's Responsibilities for the Audit of the Consolidated Financial Statements and of the Combined Management Report" section of our auditor's report. We are independent of the group entities in accordance with the requirements of European law and German commercial and professional law, and we have fulfilled our other German professional responsibilities in accordance with these requirements. In addition, in accordance with Article 10 (2) point (f) of the EU Audit Regulation, we declare that we have not provided non-audit services prohibited under Article 5 (1) of the EU Audit Regulation. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions on the consolidated financial statements and on the combined management report.

Key Audit Matters in the Audit of the Consolidated Financial Statements

Key audit matters are those matters that, in our professional judgement, were of most significance in our audit of the consolidated financial statements for the financial year from 1 January to 31 December 2019. These matters were addressed in the context of our audit of the consolidated financial statements as a whole and in forming our audit opinion thereon; we do not provide a separate audit opinion on these matters.

In the following we present the key audit matters we have determined in the course of our audit:

1. Recoverability of goodwill
2. Measurement and presentation of discontinued operations and disposal groups

Our presentation of these key audit matters has been structured as follows:

a. description (including reference to corresponding information in the consolidated financial statements)
b. auditor's response

1. Recoverability of goodwill

a. The consolidated financial statements of Vossloh Aktiengesellschaft disclose goodwill of mEUR 252.3 under the intangible assets balance sheet item, accounting for 19.0% of the consolidated balance sheet total.

   Within Vossloh Group, a distinction is made between four cash-generating units (CGUs), each of which is allocated goodwill. Goodwill is tested for impairment (impairment test) annually as at the balance sheet date or on related occasions. This impairment test is carried out by comparing the carrying amounts of the cash-generating units with their respective recoverable amounts in order to determine any need for impairment. The recoverable amount is determined on the basis of value in use taking into account the medium-term budget of the respective unit using expected discounted cash flows (discounted cash flow method).

   The cash flow forecasts are based on the group planning for a three-year detailed planning period that was approved by the executive board, acknowledged by the supervisory board and which is applicable at the time the impairment test is carried out. This also comprises expectations on the future development of the market and country-specific assumptions on the development of macro-economic indicators. Planning periods further in the future that account for a significant portion of value in use (period of perpetuity) are included in the value in use by rolling forward of cash flows taking into account a CGU-specific growth rate. Discounting is made using the weighted capital costs of the respective cash-generating unit.

   The result of this valuation is highly dependent on the executive board's assessment of the future cash flows and the discount rate used and, therefore, is subject to great uncertainty. Therefore, and due to the complexity of the valuation of this high-amount item, this matter was of particular significance in the scope of our audit.

   The Company's disclosures on goodwill are included in chapter 10 of the notes to the consolidated financial statements.

b. During our audit, we, among other things, obtained an understanding of the method applied in the impairment test, estimated the determination of the weighted capital costs and assessed the calculation method of the impairment test by consulting our valuation specialists. We examined the appropriateness of the future cash flows used in the valuation, among other things, by comparing them with the current planning prepared by the executive board and acknowledged by the supervisory board and by means of questioning the executive board regarding the material planning assumptions. Moreover, we reviewed the planning in a critical manner taking into account general and industry-specific market expectations. Together with the Company's representatives in charge, we thoroughly discussed and obtained an understanding of any incremental adjustments of the detailed planning period and the rolling forward of cash flows for the period of perpetuity.

   As already minor changes of the discount rate used may have material impacts on the amount of the determined recoverable amount, we dealt in detail with the parameters used in determining the discount rate used and obtained an understanding of the computation scheme. Furthermore, on account of the material significance of goodwill for assets and liabilities of the Group, we performed additional own sensitivity analyses in order to be able to asses any possible risk for impairment in the event of a potential change in a key valuation assumption. In addition, we audited the completeness and appropriateness of the disclosures in the notes to the consolidated financial statements required under IAS 36.

2. Measurement and presentation of discontinued operations and disposal groups

a. The assets and liabilities held for sale mainly relate to the Locomotives segment as a discontinued operation. Further companies are presented as disposal groups. As at the balance sheet date, the assets disclosed and liabilities held for sale amount to mEUR 162.6 and mEUR 148.6, respectively. The profit or loss from discontinued operations amounts to mEUR -70.4 in the reporting year 2019.

The Locomotives segment classified as a discontinued operation has been intended for sale already since the financial year 2017. The shares in this company were sold by contract dated 26 August 2019. The realisation of the transaction is still subject to approval by the responsible European and Chinese authorities. For the companies VSIG and VCBM, the first-time recognition as disposal groups held for sale was made in the past financial year 2019 since concrete sales negotiations were held.

These discontinued operations are measured and presented in the consolidated financial statements of Vossloh Aktiengesellschaft according to the provisions under IFRS 5. The assets and liabilities as well as the expenses and income from the discontinued operations are determined and allocated on the basis of the contract dated 26 August 2019 and of existing offers.

As part of the measurement under IFRS 5, the executive board determined that the need for impairment of the assets still recorded at year-end was mEUR 83.0, with mEUR 33.4 being stated under profit or loss from continuing operations and mEUR 49.6 under profit or loss from discontinued operations.

On account of the key importance of the judgemental measurement of the discontinued operation and the disposal groups intended for sale for the assets, liabilities and financial position of the Group and of the resulting earnings effects realised in the financial year for the financial performance, these matters were of particular significance in the scope of our audit.

The Company's disclosures on the discontinued operation and the disposal group intended for sale as well as on the profits or losses from discontinued operations are included in the chapter "Explanations regarding the statement of profit and loss" in section 7 of the notes to the consolidated financial statements.

b. We assessed whether the requirements for classifying the Locomotives segment as a held for sale operation was still fulfilled as at the balance sheet date 31 December 2019 and whether the classification of the other companies as disposal groups intended for sale is appropriate. For this purpose, we questioned the executive board and inspected minutes of executive board and supervisory board meetings. In addition, our audit procedures comprised an inspection and assessment of the sales contract and/or the existing offers. Based on this, we evaluated the calculation of the impairment.

Moreover, we checked whether only such assets and liabilities that are subject of the sales contract and/or the offers were reported separately under IFRS 5. Likewise, we obtained an understanding of the determination of such expenses and income that are allocated to the discontinued operations and reported separately in the statement of profit and loss and in the notes to the consolidated financial statements.

In the scope of our audit of the measurement under IFRS 5 as at the balance sheet date, we assessed whether the executive board's judgement is appropriate and reasonable. For this purpose, we questioned, among other things, the executive board and the technical departments of Vossloh Aktiengesellschaft involved in the sale and performed a critical assessment of the information provided, such as the sales contract, offers and minutes of executive board meetings. Moreover, we obtained an understanding of the computations for determining the resulting impairment loss as well as its allocation to the non-current assets.

Furthermore, we evaluated whether the accompanying disclosures in the notes to the consolidated financial statements are complete and appropriate.

Other Information

The executive board is responsible for the other information. The other information comprises

- the corporate governance statement included in the annual report in accordance with Section 289f HGB and Section 315d HGB, which makes part of the combined management report,

- the consolidated non-financial statement in accordance with Section 315b HGB, which is included in the combined management report, and

- the corporate governance report according to No. 3.10 of the German Corporate Governance Code,

- the executive board's confirmation regarding the consolidated financial statements and the combined management report pursuant to Section 297 (2) sentence 4 and Section 315 (1) sentence 5 HGB, respectively, and

- all the remaining parts of the annual report, with the exception of the audited consolidated financial statements and combined management report and our auditor's report.

Our audit opinions on the consolidated financial statements and on the combined management report do not cover the other information, and consequently we do not express an audit opinion or any other form of assurance conclusion thereon.

In connection with our group audit, our responsibility is to read the other information and, in so doing, to consider whether the other information

- is materially inconsistent with the consolidated financial statements, with the combined management report or our knowledge obtained in the audit, or

- otherwise appears to be materially misstated.

Responsibilities of the Executive Board and the Supervisory Board for the Consolidated Financial Statements and the Combined Management Report

The executive board is responsible for the preparation of the consolidated financial statements that comply, in all material respects, with IFRS as adopted by the EU and the additional requirements of German commercial law pursuant to Section 315e (1) HGB, and that the consolidated financial statements, in compliance with these requirements, give a true and fair view of the assets, liabilities, financial position and financial performance of the Group. In addition, the executive board is responsible for such internal control as it has determined necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, the executive board is responsible for assessing the Group's ability to continue as a going concern. It also has the responsibility for disclosing, as applicable, matters related to going concern. In addition, it is responsible for financial reporting based on the going concern basis of accounting unless there is an intention to liquidate the Group or to cease operations, or there is no realistic alternative but to do so.

Furthermore, the executive board is responsible for the preparation of the combined management report that as a whole provides an appropriate view of the Group's position and is, in all material respects, consistent with the consolidated financial statements, complies with German legal requirements, and appropriately presents the opportunities and risks of future development. In addition, the executive board is responsible for such arrangements and measures (systems) as it has considered necessary to enable the preparation of a combined management report that is in accordance with the applicable German legal requirements, and to be able to provide sufficient appropriate evidence for the assertions in the combined management report.

The supervisory board is responsible for overseeing the Group's financial reporting process for the preparation of the consolidated financial statements and of the combined management report.

Auditor’s Responsibilities for the Audit of the Consolidated Financial Statements and of the Combined Management Report

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and whether the combined management report as a whole provides an appropriate view of the Group’s position and, in all material respects, is consistent with the consolidated financial statements and the knowledge obtained in the audit, complies with the German legal requirements and appropriately presents the opportunities and risks of future development, as well as to issue an auditor’s report that includes our audit opinions on the consolidated financial statements and on the combined management report.

Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Section 317 HGB and the EU Audit Regulation and in compliance with German Generally Accepted Standards for Financial Statement Audits promulgated by the Institut der Wirtschaftsprüfer (IDW) will always detect a material misstatement. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements and this combined management report.

We exercise professional judgement and maintain professional scepticism throughout the audit. We also

- identify and assess the risks of material misstatement of the consolidated financial statements and of the combined management report, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our audit opinions. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal controls.

- obtain an understanding of internal control relevant to the audit of the consolidated financial statements and of arrangements and measures relevant to the audit of the combined management report in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an audit opinion on the effectiveness of these systems.

- evaluate the appropriateness of accounting policies used by the executive board and the reasonableness of estimates made by the executive board and related disclosures.

- conclude on the appropriateness of the executive board’s use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group’s ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in the auditor’s report to the related disclosures in the consolidated financial statements and in the combined management report or, if such disclosures are inadequate, to modify our respective audit opinions. Our conclusions are based on the audit evidence obtained up to the date of our auditor’s report. However, future events or conditions may cause the Group to cease to be able to continue as a going concern.

- evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements present the underlying transactions and events in a manner that the consolidated financial statements give a true and fair view of the assets, liabilities, financial position and financial performance of the Group in compliance with IFRS as adopted by the EU and with the additional requirements of German commercial law pursuant to Section 315e (1) HGB.

- obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express audit opinions on the consolidated financial statements and on the combined management report. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinions.

- evaluate the consistency of the combined management report with the consolidated financial statements, its conformity with German law, and the view of the Group’s position it provides.

- perform audit procedures on the prospective information presented by the executive board in the combined management report. On the basis of sufficient appropriate audit evidence we evaluate, in particular, the significant assumptions used by the executive board as a basis for the prospective information, and evaluate the proper derivation of the prospective information from these assumptions. We do not express a separate audit opinion on the prospective information and on the assumptions used as a basis. There is a substantial unavoidable risk that future events will differ materially from the prospective information.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide those charged with governance with a statement that we have complied with the relevant independence requirements, and communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, the related safeguards.

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the consolidated financial statements of the current period and are therefore the key audit matters. We describe these matters in the auditor’s report unless law or regulation precludes public disclosure about the matter.

Other legal and regulatory requirements

Further information pursuant to Article 10 of the EU Audit Regulation

We were elected as group auditor by the general meeting on 22 May 2019. We were engaged by the supervisory board on 1 October 2019. We have been the group auditor of Vossloh Aktiengesellschaft, Werdohl/Germany, since the financial year 2019.

We declare that the audit opinions expressed in this auditor’s report are consistent with the additional report to the audit committee pursuant to Article 11 of the EU Audit Regulation (long-form audit report).

German public auditor responsible for the engagement

The German Public Auditor responsible for the engagement is René Kadlubowski.

Düsseldorf/Germany, 28 February 2020

Deloitte GmbH
Wirtschaftsprüfungsgesellschaft

Signed: André Bedenbecker	Signed: René Kadlubowski
Wirtschaftsprüfer	Wirtschaftsprüfer
(German Public Auditor)	(German Public Auditor)