3

Consolidated Financial Statements

Balance Sheet

Assets

€ thousands	Notes	31 Dec. 2019	31 Dec. 2018
Non-current assets			
Intangible assets	1	97,128	91,089
Right-of-use assets	2	50,096 *	–
Property, plant and equipment	3	511,281	496,659
Non-current financial assets	4	1,962	1,773
Other non-financial assets	5	2,840	2,914
Investments accounted for using the equity method	6	24,203	23,855
Deferred tax assets	20	95,101	80,391
		782,611	**696,681**
Current assets			
Inventories	7	544,703	544,430
Contract assets	8	76,428	74,499
Trade receivables	8	504,101	518,116
Other financial assets	8	90,938	103,388
Other non-financial assets	8	39,613	49,504
Cash and cash equivalents	9	280,875	255,545
Assets held for sale	10	7,753	–
		1,544,411	**1,545,482**
		2,327,022	**2,242,163**

* The new balance sheet item “Right-of-use assets” (rights of use to leased assets) results from the first-time adoption of IFRS 16 in the year under review.
Further information is provided in the Notes to the consolidated financial statements.

Equity and Liabilities

€ thousands	Notes	31 Dec. 2019	31 Dec. 2018
Equity	**11**		
Subscribed capital		44,772	44,772
Capital reserve		66,663	66,663
Revenue reserves		568,916	577,756
Equity attributable to shareholders of KSB SE & Co. KGaA		680,351	689,191
Non-controlling interests		182,210	167,600
		862,562	**856,791**
Non-current liabilities			
Deferred tax liabilities	20	11,146	10,252
Provisions for employee benefits	12	646,340	578,640
Other provisions	12	1,366	1,377
Financial liabilities	13	56,750 *	30,099
		715,602	**620,368**
Current liabilities			
Provisions for employee benefits	12	12,190	9,287
Other provisions	12	68,376	83,557
Financial liabilities	13	44,318 *	48,777
Contract liabilities	13	165,463	157,389
Trade payables	13	252,741	270,212
Other financial liabilities	13	31,226	32,767
Other non-financial liabilities	13	161,528	154,689
Income tax liabilities	13	9,050	8,326
Liabilities in connection with assets held for sale	10, 13	3,967	–
		748,858	**765,004**
		2,327,022	**2,242,163**

* The first-time adoption of IFRS 16 in the year under review had a material effect on the lease liabilities included in the financial liabilities.
Further information is provided in the Notes to the consolidated financial statements.

Statement of Comprehensive Income

Income statement

€ thousands	Notes	2019	2018
Sales revenue	**14**	**2,383,185**	**2,245,948**
Changes in inventories		− 9,316	22,554
Work performed and capitalised		7,354	7,332
Total output of operations		**2,381,223**	**2,275,834**
Other income	15	33,413	33,050
Cost of materials	16	− 984,787	− 934,545
Staff costs	17	− 848,295	− 765,462
Depreciation and amortisation	1 - 3	− 81,851	− 104,491
Other expenses	18	− 372,198	− 416,869
Other taxes		− 13,902	− 12,815
Earnings before finance income / expense and income tax (EBIT)		**113,603**	**74,702**
Finance income	19	5,741	4,893
Finance expense	19	− 17,098	− 16,544
Income from / expense to investments accounted for using the equity method	19	1,186	2,510
Finance income / expense		**− 10,171**	**− 9,141**
Earnings before income tax (EBT)		**103,432**	**65,561**
Taxes on income	20	− 44,932	− 41,644
Earnings after income tax		**58,500**	**23,917**
Attributable to:			
Non-controlling interests	21	15,415	12,618
Shareholders of KSB SE & Co. KGaA		**43,085**	**11,299**
Diluted and basic earnings per ordinary share (€)	22	24.47	6.26
Diluted and basic earnings per preference share (€)	22	24.73	6.64

Statement of income and expense recognised in equity

€ thousands	Notes	2019	2018
Earnings after income tax		**58,500**	**23,917**
Remeasurement of defined benefit plans	12	– 70,479	– 10,736
Taxes on income		21,389	3,341
Expense and income recognised directly in equity and not reclassified to profit or loss in subsequent periods		**– 49,090**	**– 7,395**
Currency translation differences		3,982	– 13,276
Attributable to: Expense and income recognised directly in equity attributable to investments accounted for using the equity method		209	451
Changes in the fair value of financial instruments: Hedging reserve		– 530	– 5,571
Taxes on income		162	1,665
Attributable to: Expense and income recognised directly in equity attributable to investments accounted for using the equity method		–	– 37
Changes in the fair value of financial instruments: Hedging cost reserve		– 45	– 53
Taxes on income		13	18
Expense and income recognised directly in equity and reclassified to profit or loss in subsequent periods		**3,582**	**– 17,217**
Other comprehensive income		**– 45,508**	**– 24,612**
Total comprehensive income		**12,992**	**– 695**
Attributable to:			
Non-controlling interests		16,593	12,983
Shareholders of KSB SE & Co. KGaA		**– 3,601**	**– 13,678**

Further information is provided in the Notes to the consolidated financial statements.

Statement of Changes in Equity

€ thousands	Subscribed capital of KSB SE & Co. KGaA	Capital reserve of KSB SE & Co. KGaA
31 Dec. 2017	44,772	66,663
Impact of transition to IFRS 9 and IFRS 15	–	–
1 Jan. 2018 (restated under IFRS 9 and IFRS 15)	**44,772**	**66,663**
Other comprehensive income	–	–
Earnings after income tax	–	–
Total comprehensive income	**–**	**–**
Dividends paid	–	–
Capital increase / decrease	–	–
Change in consolidated Group / Step acquisitions	–	–
Other	–	–
31 Dec. 2018	**44,772**	**66,663**

€ thousands	Subscribed capital of KSB SE & Co. KGaA	Capital reserve of KSB SE & Co. KGaA
1 Jan. 2019	44,772	66,663
Other comprehensive income	–	–
Earnings after income tax	–	–
Total comprehensive income	**–**	**–**
Dividends paid	–	–
Capital increase / decrease	–	–
Change in consolidated Group / Step acquisitions	–	–
Other	–	–
31 Dec. 2019	**44,772**	**66,663**

Accumulated currency translation differences (€ thousands)	Equity attributable to shareholders of KSB SE & Co. KGaA	Non-controlling interests	Total equity
1 Jan. 2018	– 83,769	– 20,145	– 103,914
Change in 2018	– 14,501	652	– 13,849
31 Dec. 2018	**– 98,270**	**– 19,493**	**– 117,763**
1 Jan. 2019	– 98,270	– 19,493	– 117,763
Change in 2019	2,505	1,318	3,823
31 Dec. 2019	**– 95,765**	**– 18,175**	**– 113,940**

Revenue reserves							
	Other comprehensive income						
Other revenue reserves	Currency translation differences	Changes in the fair value of financial instruments: Hedging reserve	Changes in the fair value of financial instruments: Hedging cost reserve	Remeasurement of defined benefit plans	Equity attributable to shareholders of KSB SE & Co. KGaA	Non-controlling interests	Total equity
862,874	– 83,769	976	– 539	– 167,687	723,290	162,108	885,398
– 9,218	–	–	–	–	– 9,218	– 7	– 9,225
853,656	**– 83,769**	**976**	**– 539**	**– 167,687**	714,072	**162,101**	876,173
–	– 13,686	– 3,906	– 35	– 7,350	– 24,977	365	– 24,612
11,299	–	–	–	–	11,299	12,618	23,917
11,299	**– 13,686**	**– 3,906**	**– 35**	**– 7,350**	– 13,678	**12,983**	– 695
– 13,360	–	–	–	–	– 13,360	– 2,506	– 15,866
–	–	–	–	–	–	–	–
3,032	– 815	–	–	– 80	2,137	– 4,978	– 2,841
20	–	–	–	–	20	–	20
854,647	– 98,270	– 2,930	– 574	– 175,117	689,191	167,600	856,791

Revenue reserves							
	Other comprehensive income						
Other revenue reserves	Currency translation differences	Changes in the fair value of financial instruments: Hedging reserve	Changes in the fair value of financial instruments: Hedging cost reserve	Remeasurement of defined benefit plans	Equity attributable to shareholders of KSB SE & Co. KGaA	Non-controlling interests	Total equity
854,647	**– 98,270**	**– 2,930**	**– 574**	**– 175,117**	689,191	**167,600**	856,791
–	2,664	– 368	– 32	– 48,950	– 46,686	1,178	– 45,508
43,085	–	–	–	–	43,085	15,415	58,500
43,085	**2,664**	**– 368**	**– 32**	**– 48,950**	– 3,601	**16,593**	12,992
– 5,583	–	–	–	–	– 5,583	– 1,983	– 7,566
–	–	–	–	–	–	–	–
503	– 159	–	–	–	344	–	344
–	–	–	–	–	–	–	–
892,652	– 95,765	– 3,298	– 606	– 224,067	680,351	182,210	862,562

* Accumulated income and expenses recognised under other comprehensive income as at the reporting date amounted to € – 143 thousand and resulted from provisions for pensions and similar obligations, which represent a disposal group classified as held for sale under IFRS 5.

Statement of Cash Flows

€ thousands	2019	2018
Earnings after income tax	58,500	23,917
Depreciation and amortisation / Write-ups	81,851	104,491
Increase / decrease in non-current provisions	1,791	– 41,305
Gain / loss on disposal of fixed assets	– 2,736	– 957
Other non-cash expenses / income	– 138	– 455
Cash flow	**139,268**	**85,691**
Increase / Decrease in inventories	– 1,215	– 50,834
Increase / Decrease in trade receivables and other assets	30,626	– 7,522
Increase / Decrease in contract assets	– 2,347	– 6,606
Increase / Decrease in current provisions	– 16,138	10,320
Increase / Decrease in liabilities (excluding financial liabilities)	– 11,725	35,997
Increase / Decrease in contract liabilities	7,720	– 4,433
Other non-cash expenses (operating)	– 1,260	– 1,260
	5,661	**– 24,338**
Cash flows from operating activities	**144,929**	**61,353**
Proceeds from disposal of intangible assets	9	1,778
Payments to acquire intangible assets	– 14,447	– 13,932
Proceeds from disposal of property, plant and equipment	5,654	2,263
Payments to acquire property, plant and equipment	– 76,595	– 69,203
Proceeds from disposal of non-current financial assets	531	6
Payments to acquire non-current financial assets	– 749	– 843
Payments to acquire consolidated companies	–	– 5,650
Proceeds from investments in Group companies that are not fully consolidated	12,063	681
Payments for investments in Group companies that are not fully consolidated	– 346	–
Proceeds from commercial papers	19,990	29,979
Payments for commercial papers	–	– 19,990
Proceeds from term deposits (maturity of more than 3 and up to 12 months)	–	596
Payments for term deposits (maturity of more than 3 and up to 12 months)	– 20,116	– 16,180
Other non-cash expenses / income	–	–
Cash flows from investing activities	**– 74,006**	**– 90,495**
Dividends paid for prior year – Shareholders of KSB SE & Co. KGaA (Notes No. 11)	– 5,583	– 13,360
Dividends paid for prior year – Non-controlling interests	– 1,983	– 2,506
Payments for loan against borrower’s note	– 26,000	–
Proceeds from financial liabilities	8,230	23,702
Payments for financial liabilities	– 21,094	– 15,757
Payments to acquire non-controlling interests	–	– 1,512
Cash flows from financing activities	**– 46,430**	**– 9,433**
Changes in cash and cash equivalents	24,493	– 38,575
Effects of exchange rate changes on cash and cash equivalents	– 364	4,585
Effects of changes in consolidated Group	1,201	–
Cash and cash equivalents at beginning of period	255,545	289,535
Cash and cash equivalents at end of period	**280,875**	**255,545**

Cash flows from operating activities include cash flows from interest received amounting to € 5,638 thousand (previous year: € 4,618 thousand) and cash flows from income taxes totalling € – 36,754 thousand (previous year: € – 23,780 thousand). Cash flows from investing activities for the 2019 financial year include cash flows from dividends received amounting to € 575 thousand (previous year: € 1,029 thousand). Cash flows from financing activities include cash flows from interest expense of € – 5,322 thousand (previous year: € – 4,888 thousand).
Cash flows from operating activities and cash flows from financing activities were impacted by the first-time adoption of IFRS 16 in the year under review. Accordingly, cash flows from operating activities in the 2019 financial year include payments for expenses for leases of low-value assets of € 2,347 thousand, for expenses for short-term leases of € 7,591 thousand, for variable lease payments of € 668 thousand, and payments for interest expenses from the subsequent measurement of lease liabilities of € 1,556 thousand. Cash flows from financing activities include payments for the repayment of lease liabilities of € 16,142 thousand.

For more information see the Notes, section VII. Statement of Cash Flows.

Notes

I. GENERAL INFORMATION ON THE GROUP

KSB SE & Co. KGaA, Frankenthal / Pfalz, Germany, is a capital market-oriented partnership limited by shares [Kommanditgesellschaft auf Aktien] under the law of the Federal Republic of Germany. The company is registered with the Handelsregister [German Commercial Register] of the Amtsgericht [Local Court] Ludwigshafen am Rhein, registration No. HRB 65657, and has its registered office in Frankenthal / Pfalz, Germany. KSB SE & Co. KGaA was formed from KSB Aktiengesellschaft by entry in the German Commercial Register on 17 January 2018. The general partner is KSB Management SE, a European public limited company. The shares in this company are wholly owned (100 %) by Klein, Schanzlin & Becker GmbH, Frankenthal / Pfalz, a subsidiary of the non-profit KSB Stiftung [KSB Foundation] and the non-profit Kühborth-Stiftung GmbH [Kühborth Foundation]. KSB SE & Co. KGaA and thus the KSB Group are managed via KSB Management SE, which has four Managing Directors and a five-member Administrative Board.

KSB SE & Co. KGaA is the ultimate and immediate parent company whose consolidated financial statements include the single-entity financial statements of KSB SE & Co. KGaA. The consolidated financial statements of KSB SE & Co. KGaA prepared in accordance with International Financial Reporting Standards as adopted by the EU are published in the *Bundesanzeiger* [German Federal Gazette].

The KSB Group is a global supplier of high-quality pumps, valves and related systems and also provides a wide range of support services to users of these products. The Group's operations are divided into three segments: Pumps, Valves and Service.

Basis of preparation of the consolidated financial statements

The accompanying consolidated financial statements of KSB SE & Co. KGaA were prepared in accordance with the International Financial Reporting Standards (IFRSs) as adopted by the European Union (EU) and the additional requirements of German commercial law under section 315e(1) of the HGB [*Handelsgesetzbuch* – German Commercial Code]. To do so, the Conceptual Framework and all Standards applicable at the reporting date and adopted by the European Commission for use in the EU that are of relevance to the KSB Group as well as the interpretations of the IFRS Interpretations Committee were applied. For the purposes of this document, the term IFRSs includes applicable International Accounting Standards (IASs). The consolidated financial statements of KSB SE & Co. KGaA therefore meet the requirements of the IFRSs as adopted by the EU. The consolidated financial statements were prepared on a going concern basis in accordance with IAS 1.25. On principle, the historical cost is the measurement basis used for the consolidated financial statements, unless Section III. Accounting Policies provides otherwise.

Amounts in this report are generally presented in thousands of euros (€ thousands) using standard commercial rounding rules. Due to rounding, there may be minor differences in the totals and percentages presented in this report.

The financial year of the companies consolidated is the calendar year.

The income statement as part of the statement of comprehensive income has been prepared using the nature of expense method.

All material items of the balance sheet and the income statement are presented separately and explained in these Notes.

The main accounting policies used to prepare the consolidated financial statements are presented below. The policies described were applied consistently for the reporting periods presented unless stated otherwise.

The consolidated financial statements, the annual financial statements and the combined management report are submitted to and published in the *Bundesanzeiger*.

These consolidated financial statements will be approved by the Managing Directors of KSB Management SE on 12 March 2020 for forwarding to the Supervisory Board. The Supervisory Board is expected to approve the financial statements on 19 March 2020.

New accounting principles

a) Accounting principles applied for the first time in the 2019 financial year

The new or revised accounting Standards and Interpretations listed below which were adopted for the first time in the reporting year had no or no material impact on the Group's net assets, financial position and results of operations, except for IFRS 16 Leases. The effects resulting from the first-time adoption of IFRS 16 Leases are presented in Section III. Accounting Policies in the "Changes in accounting policies due to the first-time adoption of IFRS 16" sub-section.

b) Accounting principles that have been published but that are not yet mandatory

The new or revised Accounting Standards and Interpretations listed below were not yet mandatory and were not applied in the 2019 financial year.

As a matter of principle, the new or revised Standards or Interpretations shown in the table have not been adopted early. We expect no or no material effects on our net assets, financial position or results of operations from these amendments.

Accounting principles applied for the first time in the 2019 financial year

	First-time adoption in the EU
IFRS 16 Leases	1 Jan. 2019
Amendments to IFRS 9 Financial Instruments – Prepayment Features with Negative Compensation	1 Jan. 2019
Amendments to IAS 28 Investments in Associates and Joint Ventures – Long-term Interests in Associates and Joint Ventures	1 Jan. 2019
Amendments to IAS 19 Employee Benefits – Plan Amendment, Curtailment or Settlement	1 Jan. 2019
Annual improvements to IFRSs (2015-2017 cycle) with respect to amendments to IFRS 3 Business Combinations, IFRS 11 Joint Arrangements, IAS 12 Income Taxes and IAS 23 Borrowing Costs	1 Jan. 2019
IFRIC 23 Uncertainty over Income Tax Treatment	1 Jan. 2019

Accounting principles that have been published but that are not yet mandatory

	First-time adoption in the EU
Amendments to the cross-references in the Conceptual Framework in IFRS	1 Jan. 2020
Revision of **IFRS 3** Business Combinations	1 Jan. 2020
Amendments to IAS 1 Presentation of Financial Statements and IAS 8 Accounting Policies	1 Jan. 2020
Amendments to IFRS 9 Financial Instruments, IAS 39 Financial Instruments: Recognition and Measurement and IFRS 7 Financial Instruments: Disclosures (Interest Rate Benchmark Reform)	1 Jan. 2020
IFRS 17 Insurance Contracts	1 Jan. 2021

II. CONSOLIDATION PRINCIPLES

Consolidated Group

In addition to KSB SE & Co. KGaA, 9 German and 76 foreign companies (previous year: 9 German and 74 foreign companies) were fully consolidated. A majority interest is held, either directly or indirectly, in the voting power of these subsidiaries which the KSB Group has the option to control under IFRS 10.

Subsidiaries are companies controlled by the Group. The Group controls a company if it is exposed, or has rights, to variable returns from its involvement with the company and has the ability to affect those returns through its power of disposition over the company. The financial statements of subsidiaries are included in the Group's financial statements from the date on which control begins until the date on which control ends. Changes in the investment ratio that do not result in a loss of control are treated as a transaction between shareholders and recognised directly in equity. Such transactions do not result in the recognition of goodwill or the realisation of disposal profits.

The consolidation principles apply accordingly to joint ventures and associates accounted for using the equity method. Upon the loss of joint control or significant influence any retained interest in the investee is remeasured at fair value through profit or loss.

Associates are companies in which the Group has significant influence but does not have control or joint control over financial and business policy. A joint venture is an agreement through which the Group exercises joint control, in that it has rights to the net assets of the agreement rather than rights to its assets and obligations for its liabilities. The shares in companies included at-equity are measured at cost of acquisition plus or minus cumulative changes in net assets, with recognised goodwill reported in the carrying amount of the investment.

The Thai company KSB Pumps Co. Ltd., Bangkok, and the Indian company KSB Limited, Pimpri (Pune), are included in the group of fully consolidated affiliates despite the fact that KSB holds less than 50 % of the voting rights. KSB does, however, have the power to determine their business and financial policies and thus the level of variable returns.

KSB gained control over KSB Limited, Pimpri (Pune), in which KSB owns 40.54 % of the shares, through contractual agreements with other shareholders. These agreements ensure that KSB has the majority of voting rights in management committees and also exer-cises control over the budget.

Likewise, KSB exercises control over KSB Pumps Co. Ltd., Bangkok, in which it owns 40 % of the shares, through additional agreements which give KSB the majority of voting rights in management committees and control over the budget.

Companies that were not consolidated due to there being no material impact are reported as other investments under non-current other financial assets.

The following table shows the subsidiaries with non-controlling interests that are material subsidiaries of the KSB Group. "Seat" refers to the country in which the main activity is performed.

→ Material subsidiaries with non-controlling interests

Material subsidiaries with non-controlling interests

Name and seat	Non-controlling interest in capital	Earnings after income tax attributable to non-controlling interests		Accumulated non-controlling interests	
€ thousands	2019 / 2018	31 Dec. 2019	31 Dec. 2018	31 Dec. 2019	31 Dec. 2018
PAB, Germany / USA (subgroup)	49.00 %	5,604	6,312	89,340	81,920
KSB Limited, India	59.46 %	7,435	5,059	60,284	55,116
KSB Shanghai Pump Co., Ltd., China	20.00 %	626	− 254	10,913	10,222
Individually immaterial fully consolidated subsidiaries with non-controlling interests		1,750	1,501	21,673	20,342
Total amount of non-controlling interests		**15,415**	**12,618**	**182,210**	**167,600**

Composition of the PAB subgroup as at 31 Dec. 2019

Cons. No.	Name and seat	Country	Capital share in %	Held by No.
1	PAB Pumpen- und Armaturen-Beteiligungsges. mbH, Frankenthal	Germany	51.00	–
2	KSB America Corporation, Richmond / Virginia	USA	100.00	1
3	GIW Industries, Inc., Grovetown / Georgia	USA	100.00	2
4	KSB Dubric, Inc., Comstock Park / Michigan	USA	100.00	2
5	KSB, Inc., Richmond / Virginia	USA	100.00	2
6	KSB, Inc. – Western Division, Bakersfield / California	USA	100.00	2
7	Standard Alloys Incorporated, Port Arthur / Texas	USA	100.00	2

Information on the subgroup that comprised the subsidiaries of the KSB Group listed in the following table as at 31 December 2019 is summarised under the name “PAB”.

→ Composition of the PAB subgroup as at 31 Dec. 2019

The summarised financial information regarding the KSB Group’s material subsidiaries with non-controlling interests and the PAB subgroup considered here is provided below. Except for the details on the PAB subgroup, this information corresponds to the amounts shown in the subsidiaries’ financial statements prepared in accordance with IFRS prior to intercompany eliminations.

The required intercompany eliminations were taken into consideration for the PAB subgroup. The details on the PAB subgroup in the 2018 financial year also included financial information of KSB AMRI Inc., Houston / Texas, in which KSB America Corporation, Richmond / Virginia, held an 89.97 % stake until the company was liquidated on 6 December 2018.

→ Summarised balance sheet

→ Summarised statement of comprehensive income

→ Condensed statement of cash flows

Summarised balance sheet

	PAB		KSB Limited		KSB Shanghai Pump Co., Ltd.	
€ thousands / 31 Dec.	**2019**	**2018**	**2019**	**2018**	**2019**	**2018**
Non-current assets	85,024	69,422	49,374	47,404	28,485	27,851
Current assets	154,508	150,681	128,272	107,463	125,965	145,085
Non-current liabilities	– 17,764	– 13,140	– 2,794	– 2,340	– 768	–
Current liabilities	– 39,442	– 39,779	– 73,466	– 59,832	– 99,116	– 121,824
Net assets	**182,326**	**167,184**	**101,386**	**92,695**	**54,566**	**51,112**

Summarised statement of comprehensive income

	PAB		KSB Limited		KSB Shanghai Pump Co., Ltd.	
€ thousands	**2019**	**2018**	**2019**	**2018**	**2019**	**2018**
Sales revenue	243,635	212,570	163,138	133,180	168,006	158,278
Earnings after income tax	11,436	12,882	12,820	9,365	3,132	– 1,269
Other comprehensive income	3,706	8,496	– 1,480	– 3,890	322	2,934
Comprehensive income	15,142	21,378	11,340	5,475	3,454	1,665
Other comprehensive income attributable to non-controlling interests	1,816	4,163	– 880	– 2,313	64	587
Comprehensive income attributable to non-controlling interests	7,420	10,475	6,555	3,255	691	333
Dividends paid to non-controlling interests	–	–	– 1,575	– 1,538	–	–

Condensed statement of cash flows

	PAB		KSB Limited		KSB Shanghai Pump Co., Ltd.	
€ thousands	**2019**	**2018**	**2019**	**2018**	**2019**	**2018**
Cash flows from operating activities	20,264	9,286	24,398	9,883	6,896	11,210
Cash flows from investing activities	– 19,995	– 20,722	– 4,660	– 7,597	10,740	2,250
Cash flows from financing activities	– 1,270	– 1,178	– 163	325	1,340	– 3,179
Changes in cash and cash equivalents	**– 1,001**	**– 12,614**	**19,575**	**2,611**	**18,976**	**10,281**
Cash and cash equivalents at beginning of period	7,400	19,486	12,493	10,264	12,730	2,258
Effects of exchange rate changes	145	528	– 404	– 382	– 84	191
Cash and cash equivalents at end of period	**6,544**	**7,400**	**31,664**	**12,493**	**31,622**	**12,730**

Changes in the consolidated Group

TOV "KSB Ukraine", Kiev, Ukraine, IOOO "KSB BEL", Minsk, Belarus and KSB Ltd., Tokyo, Japan, previously not consolidated due to there being no material impact, were included in the group of consolidated companies on 1 January 2019. These affiliates, which were consolidated for the first time, were established in previous years. First-time consolidations contributed € 4,682 thousand to sales revenue and also had the following impact on the consolidated balance sheet:

First-time consolidations – Impact on balance sheet

€ thousands	2019
Non-current assets	– 306
Current assets	1,790
Assets	**1,484**
Equity	344
Non-current liabilities	–
Current liabilities	1,140
Equity and liabilities	**1,484**

The contribution by the three aforementioned companies to consolidated earnings after income tax for the consolidation period was € 759 thousand. Other effects resulting from the consolidation of companies were not material.

The 2019 financial year saw the establishment of the new company KSB PUMPS AND VALVES LIMITED, Nairobi, Kenya. KSB Pumps (S.A.) (Pty) Ltd., Germiston (Johannesburg), South Africa, which is already fully consolidated, holds 100 % of the shares. Due to reasons of materiality the newly established company will not be consolidated.

The previously fully consolidated company KSB Verwaltung (Schweiz) AG, Reinach, Switzerland, was liquidated in November 2019. This did not have any material impact on the consolidated financial statements.

A full list of the shareholdings held by the KSB Group is provided at the end of these Notes to the Consolidated Financial Statements.

Consolidation methods

For the purposes of consolidation, the effects of any intercompany transactions are eliminated in full. Any receivables and liabilities between the consolidated companies are offset against each other, and any unrealised gains and losses recognised in fixed assets and inventories are eliminated. Any revenues from intercompany sales are offset against the corresponding expenses.

Capital consolidation is based on the purchase method of accounting pursuant to IFRS 3. This means that the amortised cost of the parent's shares in the subsidiary is eliminated against the remeasured equity attributable to the parent at the date of acquisition.

Any goodwill created from the application of the purchase method denominated in a currency other than the functional currency of the KSB Group is measured at the relevant current closing rate. Goodwill is reported under intangible assets and tested for impairment at least once a year. If an impairment is identified, an impairment loss is recognised. Any excess of our interest in the fair values of net assets acquired over cost remaining after reassessment is recognised in profit or loss in the year it occurred.

Those shares of subsidiaries' equity not attributable to KSB SE & Co. KGaA are reported as non-controlling interests.

Currency translation

The consolidated financial statements have been prepared in euro (€). Unless otherwise stated, amounts in this report are presented in thousands of euros (€ thousands) using standard commercial rounding rules.

Currency translation is effected on the basis of the functional currency of the consolidated companies. As in the previous year, the functional currency is exclusively the local currency of the company consolidated, as it operates as a financially, economically and organisationally independent entity.

Transactions denominated in foreign currencies are translated at the individual companies at the rate prevailing when the transaction is initially recognised. Monetary assets and liabilities are subsequently measured at the closing rate. Measurement effects are recognised in the income statement.

When translating financial statements of consolidated companies that are not prepared in euro, assets and liabilities are translated at the closing rate; the income statement accounts are translated at average exchange rates (modified closing rate method). The sole exception as at 31 December 2019 was the translation of the financial statements of KSB Compañía Sudamericana de Bombas S.A., Carapachay (Buenos Aires), Argentina, where income statement items were translated at the closing rate, as in the previous year. Gains and losses from the translation of items of assets and liabilities compared with their translation in the previous year are taken directly to equity in other comprehensive income and reported under currency translation differences. They amount to € – 113,940 thousand (previous year: € – 117,763 thousand). The effect of currency translation adjustments taken directly to equity on intangible assets, property, plant and equipment, and non-current financial assets was € 4,434 thousand (previous year: loss of € 6,885 thousand).

→ Exchange rates for the most important currencies

Exchange rates for the most important currencies

	Closing rate		Average rate	
	31 Dec. 2019	31 Dec. 2018	2019	2018
US dollar	1.1234	1.1450	1.1195	1.1810
Brazilian real	4.5157	4.4440	4.4126	4.3085
Indian rupee	80.1870	79.7298	78.8269	80.7332
Chinese yuan	7.8205	7.8751	7.7348	7.8081

Hyperinflation

Argentina has been rated as a hyperinflation country for accounting purposes since 2018. As such, KSB is following the information of the International Practices Task Force (IPTF) of the Center of Audit Quality (CAQ). Based on this assessment, activities in Argentina have been reported under IAS 29 Financial Reporting in Hyperinflationary Countries. No further information was provided as the impact on the Group's net assets, financial position and result of operations was not material.

III. ACCOUNTING POLICIES

Acquisition and production costs

In addition to the purchase price, acquisition cost includes attributable incidental costs (except for costs associated with the acquisition of a company) and subsequent expenditure. Purchase price reductions are deducted.

As well as directly allocated costs, production costs also include reasonable proportions of material and production overheads based on standard capacity utilisation of the relevant production facilities, if and to the extent these were incurred as part of the production process. This also includes production-related administrative expenses. General administrative expenses, research costs and selling expenses are not capitalised.

Borrowing costs as defined in IAS 23 that can be directly allocated to the acquisition or production of qualifying assets are capitalised. As in the previous year no such borrowing costs were incurred.

Fair value

Fair value is the price that independent market participants would, under standard market conditions, receive when selling an asset or pay when transferring a liability at the measurement date. This applies irrespectively of whether the price is directly observable or has been estimated using a measurement method.

The KSB Group defined a monitoring framework concept for determining fair value. This includes the monitoring of all material measurements at fair value and the direct communication of material facts to Management and, if necessary, to the audit committee. For the purposes of calculating fair value, KSB makes use wherever possible of estimates from market participants or estimates derived from these. As an initial step, regular checks are made to ascertain if there are current prices on active markets for an identical transaction. If no quoted market prices are available, the preference is to use the market-based approach (deriving the fair value from the market or transaction prices of comparable assets, for example multipliers) or the income-based approach (calculation of fair value as a future value by discounting future cash surpluses).

Based upon the input factors used in the measurement methods, fair values are assigned to different levels of the fair value hierarchy.

- Level 1: Quoted prices (unadjusted) on active markets for identical assets and liabilities

- Level 2: Measurement parameters that are not the quoted prices taken into account for level 1, but that are observable for the asset or the liability either directly as a price or indirectly derived from prices
- Level 3: Measurement parameters for assets or liabilities that are not based on observable market data

If input factors categorised into different levels are included in the fair value measurement, the measurement must be categorised in its entirety in the level of the lowest level input factor that is material for the entire measurement.

Reclassifications between different levels in the fair value hierarchy are recognised at the end of the reporting period during which the change has occurred. There were no reclassifications carried out in the year under review.

Financial assets and financial liabilities

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

Financial assets and financial liabilities are recognised in the consolidated balance sheet at the time when KSB becomes a contractual party. When the contractual right to payments from financial assets expires, these are derecognised. Financial liabilities are derecognised at the time when the contractual obligations are settled or cancelled or have expired. The acquisition and sale of financial instruments on an arm's length basis are recognised at the value at the date of settlement. This applies to primary financial instruments, such as trade receivables and financial receivables. Only derivative financial instruments are recognised at the value at the trade date.

a) Primary financial instruments

In the KSB Group, primary financial instruments are allocated to the following measurement categories as financial assets and financial liabilities based on the requirements of IFRS 9:

Financial assets:

- Financial assets at amortised cost – Receivables, credits, cash and cash equivalents, loans and other financial assets
- Financial assets at fair value through profit or loss (FVPL) – Financial instruments

Financial liabilities:

- Financial liabilities at amortised cost – Loans, trade payables and other financial liabilities

Financial assets and liabilities are reported at fair value on initial recognition. Financial assets and liabilities that are not measured at fair value are recognised after adjustment for transaction costs. Subsequent measurement is in line with the measurement category allocated to the financial asset or financial liability.

The fair value option is not being used at the moment.

b) Derivatives

Derivatives are exclusively used for hedging purposes. Future cash flows and existing recognised underlyings are hedged against foreign currency and interest rate risks (cash flow hedges). The hedging instruments used are exclusively currency forwards and interest rate derivatives entered into with prime-rated banks. Currency risks are hedged primarily for transactions in US dollars (USD). Interest rate risks are minimised for long-term borrowings at floating rates of interest. Group guidelines govern the use of these instruments. These transactions are also subject to continuous risk monitoring.

In the case of cash flow hedges, changes in the fair value of the effective portions of the currency derivatives are recognised under other comprehensive income and reported under "Changes in the fair value of financial instruments" in equity for as long as the underlying transaction is not recognised in the income statement. Only the spot element of the derivative hedging instrument is designated, while the forward element and currency basis spreads are excluded from the hedge and reported separately in the hedging cost reserve in other comprehensive income. Any hedge ineffectiveness is reported through the income statement.

Changes in the fair value of interest rate derivatives used to hedge against interest rate risks in liabilities are recognised under other comprehensive income and reported under "Changes in the fair value of financial instruments" in equity.

The carrying amounts equal fair value and are determined on the basis of input factors observable either directly (as a price) or indirectly (derived from prices). Fair values may be positive or negative. Fair value is the amount that KSB would receive or have to pay at the reporting date to settle the financial instrument. This amount is determined using the relevant exchange rates, interest rates and counterparty credit ratings at the reporting date. Information is obtained solely from recognised external sources.

Currency forwards and interest rate swaps are reported under other financial assets, and under other financial liabilities.

As in the previous year, maturities of the currency derivatives used are mostly between one and two years; there are no interest rate derivatives for the financial year in the Group. The maturities of the hedging instruments are matched to the period in which the forecast transactions are expected to occur. In the year under review, almost all hedged forecast transactions occurred as expected.

Intangible assets

Intangible assets are measured at (acquisition or production) cost and reduced by straight-line amortisation. Depreciation / amortisation is reported under "Depreciation / amortisation" in the income statement. The underlying useful lives of intangible assets – excluding goodwill (indefinite useful life) – is between 2 and 15 years. If the reasons for an impairment loss in a previous period no longer apply, it is reversed (write-up) up to a maximum of amortised cost.

Goodwill is tested for impairment once a year. The test relates to cash-generating units (CGUs), which at KSB are generally the legal entities. Occasionally a group of cash-generating units may also serve as the basis, provided these units reflect the lowest level on which goodwill is monitored. The goodwill (and, if necessary, other assets) is reduced by the difference in value if the value in use is lower than the carrying amount of the CGU. Reversal of an impairment loss from an earlier period is not possible. In addition, a review of impairment is always carried out when events or circumstances ("trigger events") suggest that the value could be impaired.

The discounted cash flow model is used to determine the recoverable amount (value in use). The future earnings (EBIT in accordance with IFRS) applied were taken from a multi-year financial plan (covering a maximum of five years), based on the 30 September reporting date taking into account the medium-term strategy approved by Management for the respective cash-generating unit. This planning was carried out based on certain assumptions which were drawn from both forecasts from external sources, e.g. current German Mechanical Engineering Industry Association (VDMA) publications, and our own experience-based knowledge of markets and competitors. The earnings of the last plan year were consistently extrapolated as a constant, considering that level to be achievable in the long term. Growth rates were derived taking account of the estimates with regard to economic circumstances. The Group regularly tests goodwill for impairment in the fourth quarter of every year based on the figures as per 30 September of the year in question.

As part of the assessment, the Group conducts sensitivity analyses to estimate the risk of impairment. The following assumptions are used in the process: a 15 % increase in the cost of capital (Sensitivity 1), a reduction of the growth rate to 0.00 % (Sensitivity 2; previous year: 0.25 % reduction in the growth rate) and a 10 % reduction in sales revenue with the corresponding impact on expense items and performance indicators (Sensitivity 3). Sensitivity 3 is only applied to the material goodwills of the KSB Group.

When companies are acquired, purchase price allocations are made and the fair value of the assets and liabilities acquired is determined. In addition to the assets and liabilities already recognised by the selling party, account is also taken of marketing-related aspects (primarily brands or trademarks and competitive restrictions), customer-related aspects (primarily customer lists, customer relations and orders on hand), contract-related aspects (mainly particularly advantageous service, work, purchasing and employment contracts) as well as technology-related aspects (primarily patents, know-how and databases). The residual value method, the excess earnings method and cost-oriented procedures are primarily applied to determine values.

Development costs are capitalised as internally generated intangible assets at cost where the criteria described in IAS 38 are met and reduced by straight-line amortisation as from the time the asset becomes operational. Research costs are expensed as incurred. Where research and development costs cannot be reliably distinguished within a project, no costs are capitalised.

Leases

In the reporting year, KSB applied the new provisions of IFRS 16 Leases for the first time.

For leases where KSB is the lessee this requires that lease liabilities and right-of-use assets (rights to use leased assets) be recognised on the balance sheet. Leases of low value assets and short-term leases are exempt from this provision as KSB has elected to make use of the practical expedient of accounting for lease payments as an expense.

Further details on the effects resulting from the first-time adoption of IFRS 16 and the associated accounting policies are presented in the following sub-section "Changes in accounting policies due to the first-time adoption of IFRS 16".

Property, plant and equipment
In accordance with IAS 16, property, plant and equipment is measured at cost and reduced by straight-line depreciation over its useful life. If an asset's recoverable amount is lower than its carrying amount, an impairment loss is recognised. If the reasons for an impairment loss recognised in a previous period no longer apply, the impairment loss is reversed (write-up) up to a maximum of amortised cost.

Government grants relating to property, plant and equipment are transferred to an adjustment item on the liabilities side. This adjustment item is reversed over a defined utilisation period. As far as government grants recognised which are to be held for specific periods of time are concerned, these periods are expected to be complied with.

Maintenance expenses are recognised as an expense in the period in which they are incurred, unless they lead to the expansion or material improvement of the asset concerned.

The following useful lives are applied:

Useful life of property, plant and equipment

Buildings	10 to 50 years
Plant and machinery	5 to 25 years
Other equipment, operating and office equipment	3 to 25 years

Non-current financial assets
Interest-bearing loans are recognised at amortised cost, whereas non-current financial instruments are reported in the income statement at fair value on the balance sheet date. Financial assets such other cash deposits are subject to an expected default risk. The impairment loss is calculated based on the loan amount on the closing or balance sheet date, the loss ratio of the loan amount and the term-weighted credit default spreads as a benchmark for probability of failure. Furthermore, partial or complete impairment is recognised as soon as there are signs of an increase in default risk. No significant default risks of counterparties were determined during the year. They were within investment grade as a whole.

Non-current other non-financial assets
Investments in non-consolidated subsidiaries are measured at amortised cost.

Investments accounted for using the equity method
Investments accounted for using the equity method are companies in which the parties exercise joint control (joint venture) or have the power to exercise significant influence over the companies' operating and financial policies (associate); this is usually the case where an entity holds between 20 % and 50 % of the voting power. These assets are recognised at cost at the time of acquisition. If the costs of acquisition exceed the share of the net assets, adjustments are made on the basis of the fair value (pro rata hidden reserves and liabilities). The remaining amount is recognised as goodwill. It forms part of the carrying amount of the joint venture or associate and is not amortised. For subsequent measurement, the carrying amounts are increased / reduced annually by the pro-rata earnings, distributed dividends or other changes in equity of the joint venture or the associate. If local accounting principles differ from the Group's standard accounting policies, adjustments are made accordingly. The share of earnings is reported in the consolidated income statement in a separate line (earnings from investments accounted for using the equity method), and changes such as currency translation effects are taken directly to Group equity. If the losses attributable to the KSB Group correspond to the carrying amount of the company or exceed this, they are not recognised unless KSB has entered into obligations or has made payments for the company. Intercompany gains and losses from transactions between Group companies and investments accounted for using the equity method are offset against the carrying amount in profit or loss. At each reporting date, a review is carried out to determine whether there are any objective indications of impairment, and the amount of such impairment is calculated if required. If the carrying amount exceeds the recoverable amount of an investment, it is written down to the recoverable amount. Any impairments or reversals of impairments are reported in the consolidated income statement under finance income / expense.

Inventories
Pursuant to IAS 2, inventories are recognised at the lower of cost and net realisable value as at the reporting date. Cost is measured using the weighted average method. KSB takes account of the inventory risks resulting from slow-moving goods or impaired marketability through write-downs to the net realisable value. This also applies if the selling price is lower than production cost plus costs still to be incurred. If the reasons for an impairment loss charged in a previous period no longer apply, the impairment loss is reversed (write-up).

Advance payments made on inventories are also presented under inventories because of the correlation and expected realisation of these advances (through conversion into inventories) within the normal business cycle.

Contract assets and contract liabilities
A contract asset shows KSB's claim to consideration in exchange for goods or services transferred to customers, with the right to payment being not only conditional on the passage of

time but also on the satisfaction of an overall contractual performance obligation by KSB. By contrast, receivables reflect KSB's unqualified claim to consideration. A contract liability also represents KSB's obligation to transfer goods or services to a customer. However, in these cases KSB has already received consideration from a customer that exceeds the amount of the goods or services provided. Any impairment of contract assets is recognised using the simplified impairment model. Contract assets relate to ongoing projects that have not yet been invoiced and are subject to similar credit risks as trade receivables for the same types of contract. Against this background, the expected loss rates of trade receivables are also applied to the impairment of contract assets.

Trade receivables

Trade receivables and other current assets are subsequently recognised at amortised cost. Low-interest or non-interest-bearing receivables are discounted. In addition, identifiable risks are taken into account by charging individual impairment losses. Individual impairment allowances are to be applied if insolvency or collection proceedings have been instigated, on the default or failure to meet agreed repayment plans and on overdue payments. Receivables are derecognised if it is reasonably certain that payment cannot be expected. A risk provision for expected credit losses (ECL) is set aside under the simplified impairment model according to IFRS 9 for receivables that are not individually impaired. To measure expected credit losses, trade receivables are summarised on the basis of common credit risk features (risk classes) and number of days overdue. The expected default rates stem from the historic payment profiles of sales revenues over the last three financial years before the reporting date. The historic and forward-looking information forms the basis for the expected probability of failure, adjusted for future-oriented macroeconomic factors.

Most of the default risk exposure of trade receivables is hedged. For more information, please refer to Section VI. Additional Information on Financial Instruments" – sub-section "Financial risks – Credit risk".

Trade receivables for which collateral, such as credit insurance, has been provided or letters of credit have been opened are recognised as impaired, taking account of default risks of the provider of the security and the company's macroeconomic factors.

If the reasons for an impairment loss charged in a previous period no longer apply, the impairment loss is reversed (write-up).

Other non-financial assets

The prepayments made that are presented in this item relate to accrued expenditure prior to the reporting date that will only be classified as an expense after the reporting date.

Cash and cash equivalents

Cash (cash and sight deposits) and cash equivalents (short-term, highly liquid financial investments that are readily convertible to defined amounts of cash, and that are subject to only immaterial fluctuations in terms of their value) are recognised at amortised cost. Cash and cash equivalents are subject to an expected credit default risk. The impairment allowance under IFRS 9 is calculated based on the loan amount on the closing date, the loss ratio of the loan amount and the term-weighted credit default spreads as a benchmark for probability of failure. Furthermore, partial or complete impairment allowances are recognised as soon as there are signs of an increase in default risk. No significant default risks of counterparties were determined during the year. They were within investment grade as a whole.

Non-current assets and disposal groups held for sale

Pursuant to IFRS 5, non-current assets or disposal groups are classified as held for sale if it is highly likely that the carrying amount will be realised primarily by a sales transaction and not through continued use of that asset. It must be assumed that the sale will be completed within one year. If the Group is committed to a sale that involves loss of control of a subsidiary, all assets and liabilities of that subsidiary will be classified as held for sale, provided the above conditions are met. The intangible assets, right-of-use assets for leases, and property, plant and equipment of the held-for-sale assets are no longer amortised / depreciated, but instead are recognised at the lower of the carrying amount and fair value less costs to sell.

Taxes on income

Current taxes on income are recognised in income tax liabilities to the extent that they have not yet been paid. If the amount already paid exceeds the amount owed, an income tax receivable is recognised and reported in other tax assets under other non-financial assets.

Deferred taxes are accounted for in accordance with IAS 12 using the balance sheet liability method on the basis of the enacted or substantively enacted local tax rates. This means that deferred tax assets and liabilities generally arise when the tax base of assets and liabilities differs from their carrying amount in the IFRS financial statements, and this leads to future tax expense or income. Deferred tax assets from tax loss carryforwards are recognised in those cases where it is more likely than not that there will be sufficient taxable profit available in the near future against which these tax loss carryforwards can be utilised. Deferred taxes are also recognised for consolidation adjustments. Deferred taxes are not discounted. Deferred tax assets and liabilities are always offset where they relate to the same tax authority. Changes to deferred taxes in the consolidated balance sheet generally result in deferred tax expense or income. If, however, a direct entry is made in other comprehensive income in equity, the change in deferred taxes is also taken directly to equity.

Provisions

a) Provisions for pensions and similar obligations

Provisions for pensions and similar obligations pursuant to IAS 19 are calculated on the basis of actuarial reports. They are based on defined benefit pension plans. They are measured using the projected unit credit method.

Actuarial gains and losses are taken directly to other comprehensive income and reported in equity under "Remeasurement of defined benefit plans". The actuarial demographic assumptions and the setting of the discount rate (based on senior, fixed-income corporate bonds) and other measurement parameters (for example income and pension trends) are based on best estimates.

Net interest is calculated by multiplying the discount rate with the net liability (pension obligation minus plan assets) or the net asset value that results if the plan assets exceed the pension obligation.

The defined benefit costs include the service cost, which is included in staff costs under pension costs, and the net interest income or expense on the net liability or net asset value, which is recognised in finance income / expense under interest and similar expenses or under interest and similar income.

No provisions are set aside for defined contribution pension plans. In these cases, the premium payments are recognised directly in the income statement as pension costs in the staff costs. Other than an obligation to pay premiums, KSB has no further obligations. Consequently, the insurance risk remains with the insured parties.

b) Other provisions

Provisions are recognised if a past event results in a present legal or constructive external obligation that the company has no realistic alternative to settling, where settlement of this obligation is expected to result in an outflow of resources embodying economic benefits, and the amount of the obligation can be estimated reliably. The amount of the provision corresponds to the best estimate of the settlement amount of the current obligation on the reporting date. Any more or less secure recourse or reimbursement claims are recognised as separate assets.

If customer contracts are expected to be loss-making, a gross statement is drawn up of contract assets and provisions for the expected losses.

Provisions for restructurings are recognised only if the criteria set out in IAS 37 are met.

Non-current provisions are discounted if the effects are material.

Contingent liabilities

Contingent liabilities, which are not recognised, are potential obligations that arise from past events and whose existence will be confirmed only by the occurrence or non-occurrence of uncertain future events. Contingent liabilities may also be present obligations that arise from past events where it is possible but not probable that there will be an outflow of resources embodying economic benefits.

Contingent liabilities correspond to the extent of liability at the reporting date.

Revenue from contracts with customers

KSB generates sales revenue from the sale of goods and goods purchased and held for resale from the production, sale and trade of machinery, systems and other industrial products, particularly pumps and valves and related support services. KSB generates most of its sales revenue in the Pumps segment. The breadth of these orders ranges from the supply of an individual pump to customised pump sets, including drive and control systems. These goods and services are sold to engineering contractors, OEMs and end users or, in some cases, distributed via dealers. Some customer contracts contain several service components, such as manufacture of a pump and the related installation and commissioning. These installation services cover integration services and can only be carried out by specifically trained and qualified staff. They are not accounted for as independent performance obligations and the transaction price is not split.

Sales revenue is recognised in the amount of the consideration expected by KSB based on the transfer of goods or provision of services to the customer. Depending on the type of performance and contractual structure, sales revenue is recognised either over time or at a point in time in line with satisfaction of the performance obligation by KSB.

If a performance obligation meets the criteria for recognising sales revenue over time under IFRS 15 and the progress towards completion and expected consideration can be reliably estimated, the sales revenue is recognised based on progress towards complete satisfaction of the performance obligation. KSB specifically recognises sales revenue over time for contracts covering the production of customised pumps and valves as well as contracts for the provision of services. By contrast, standard products in the pumps and valves areas are typically subject to sales revenue recognition at a point in time. KSB applies the input-oriented method to determine progress that is measured by the factors used. The percentage of completion of contracts is determined on the basis of the proportion that contract costs incurred for work performed up to the reporting date bear to the estimated total contract costs at the reporting date and thus follows the cost-to-cost method. Contract revenue consists of all contractually agreed revenues, as well as additional claims and incentive payments that are likely to result in revenue and are capable of being reliably measured. Contract revenue may vary, for instance because of cost escalation clauses, renegotiations or penalties. Sales revenue is accounted for based on the amount fixed in the contract less expected consideration. Variable considerations (cost escalation clauses, penalties, bonuses) are estimated at the most likely value. Restrictions on estimate options are taken into account. Estimates on costs and contract progress are corrected if circumstances change. Any resultant increases or reductions in the estimated proceeds or costs are reflected in the profit and loss account for the period in which the circumstances giving rise to the correction occurred. If the earnings from a service or production order with sales revenue recognition over time cannot be reliably estimated, revenue will only be recognised in the amount of the contract costs incurred that are likely to be covered and the contract costs recognised as an expense for the period in which they are incurred.

Sales revenue is recognised at a point in time for performance obligations that do not meet the criteria for recognising sales revenue over time under IFRS 15. At KSB, this typically applies in particular to standard products without any significant customer-specific characteristic in the Pumps and Valves segments. The point in time at which KSB satisfies its performance obligations from contracts with customers subject to sales revenue recognition at a point in time is based on the agreed supply terms and conditions or acceptance by the customers. At the time of revenue recognition, receipt of the consideration must be probable and the amount of sales revenue must be reliably measurable. A reliable estimation of the associated costs and potential return of the goods must also be possible. Sales revenue from delivery is as a rule recognised in line with the agreed INCOTERMS. For standard products, FCA or EXW terms and conditions apply in most cases. For some international deliveries, the contractual risk transfer takes place when the goods are loaded onto a cargo ship in the port or delivered to the customer in the destination country. In these cases, sales revenue is also recognised on the basis of the contractually agreed INCOTERMS. For certain deliveries and services, a declaration of acceptance by the customer is required for the recognition of sales revenue. For customer contracts based on sales revenue recognised at a point in time, sales reductions also reduce sales revenue.

KSB agrees payment terms and conditions for customer contracts that allow for payment in a reasonable period after the invoice has been issued. Extended payment terms are not usually granted to customers. There are usually no long-term financing components.

In individual cases and in compliance with the statutory requirements of IFRS 15, a customer may ask to obtain control of a product prior to delivery of the goods (bill-and-hold arrangements). This can result in earlier sales revenue recognition.

For regular fixed-price contracts, the customer pays a fixed amount using a payment plan. Depending on the ratio of the customer payments received to the claim to consideration acquired by KSB based on the transfer of goods and services to the customer, there is an advance or subsequent type of payment on the reporting date for the respective customer contract. Contract assets are reported reduced by advances received, if the amount of the goods and services provided by KSB exceed the payment amount. Payments received from the customer that exceed the amount of the goods and services provided by KSB for the respective customer contract result in the reporting of a contract liability.

Interest income and expense are recognised in the period in which they occur. **Dividend income** from investments is collected when the legal entitlement to payment is created. **Operating expenses** are recognised when they are incurred or when the services are utilised. **Income tax** is calculated in accordance with the statutory tax rules in the countries in which the Group operates. Deferred taxes are accounted for on the basis of the enacted or substantively enacted income tax rates.

Estimates and assumptions

The preparation of consolidated financial statements in accordance with the IFRSs as adopted by the EU requires management to make estimates and assumptions that affect the accounting policies to be applied. When implementing such accounting policies, estimates and assumptions affect the assets, liabilities, income and expenses recognised in the consolidated financial statements, and their presentation. These estimates and assumptions are based on past experience and a variety of other factors deemed appropriate under the circumstances. Actual amounts may differ from these estimates and assumptions. The estimates and assumptions made are constantly reviewed. If more recent information and additional knowledge are available, recognised amounts are adjusted to reflect the new circumstances. Any changes in estimates and assumptions that result in material differences are explained separately.

Impairment tests for goodwill, which are conducted at least once per year, require an estimate of the recoverable amounts for each cash-generating unit (CGU). These correspond to the higher amount from the fair value less costs to sell and value in use. The earnings forecast on the basis of these estimates are affected by various factors, which may include exchange rate fluctuations, progress in Group integration or the expectations for the economic development of these units. Although management believes that the assumptions used to calculate the recoverable amount are appropriate, any unforeseen changes in these assumptions could lead to an impairment loss.

Estimates and assumptions must also be made to review the *value of assets*. For each asset it must be verified to what extent there are indications of an impairment. When determining the recoverable amount of property, plant and equipment, the estimation of the relevant useful life is subject to uncertainty.

Contract assets are subject to the impairment rules of IFRS 9. Any impairment of contract assets is recognised using the simplified impairment model. Contract assets relate to ongoing projects that have not yet been invoiced and are subject to similar credit risks as trade receivables for the same types of contract. Against this background, the expected loss rates of trade receivables are also applied to the impairment of contract assets.

If performance obligations meet the relevant criteria of IFRS 15, KSB recognises revenue from customer contracts over time in line with progress towards completion. The latter is determined according to the percentage of completion. This requires estimates regarding the total contract costs and revenue (including the variable considerations based on experience), contract risks as well as other relevant factors. These estimates are reviewed regularly by those with operative responsibility and adjusted where necessary.

Provisions for employee benefits, especially pensions and similar obligations, are determined according to actuarial principles which are based on statistical and other factors so as to anticipate future events. Material factors are the reported market discount rates and life expectancy. The actuarial assumptions made may differ from actual developments as a result of changing market and economic conditions, and this can have material effects on the amount of provisions and thus on the company's overall net assets, financial position and results of operations. For the material pension plans of the German companies, every employee is entitled to apply at any time during the ongoing employment contract for payment in annual instalments, as a one-time payment or as a pension for life. KSB's estimate as to how the specific workforce is likely to decide on exercising the lump-sum option remains unchanged over the previous year and is reflected accordingly in the measurement of pension provisions.

Other provisions are recognised for uncertain liabilities with a probability of occurrence of more than 50 %. The provision corresponds to the best estimate of the expenditure to fulfil the current obligation on the reporting date. The later, actual outflow can, however, differ from the estimate as a result of changed economic, political or legal conditions. This will be reflected in additional expenses or income from reversals.

The global scope of activities must be taken into account in relation to *taxes on income*. Based on operative activities in numerous countries with varying tax laws and administrative interpretation, differentiated assessment is required for determining tax liabilities. Uncertainty may arise due to different interpretations by taxable entities on the one hand and local finance authorities on the other. Uncertain tax assets and liabilities are recognised if their probability of occurrence exceeds 50 %. The best estimate of the expected tax payment is used for reporting purposes; depending on the case in question this will take the form of the most probable result or of the expected value. Although KSB believes it has made a reasonable estimate regarding any tax uncertainties, it is possible that the actual tax obligation will differ from the original estimate. With regard to future tax benefits, KSB assesses their realisability as of every reporting date. For this reason, deferred tax assets are only recognised if sufficient taxable income is available in future. In assessing this future taxable income within the planning horizon of three to five years it must be taken into account that expected future business developments are subject to uncertainties and are in some cases excluded from control by company management (for example changes to applicable tax legislation). If KSB comes to the conclusion that previously reported deferred tax assets cannot be realised because of changed assumptions, then the assets will be written down by the appropriate amount.

Maturities

Maturities of up to one year are classified as current.

Assets that can only be realised after more than twelve months, as well as liabilities that only become due after more than twelve months, are also classified as current if they are attributable to the operating cycle defined in IAS 1. An operating cycle of more than 12 months typically applies to made-to-order production (construction contracts).

Assets and liabilities not classified as current are non-current.

Changes in accounting policies and the impact resulting from the first-time adoption of IFRS 16 Leases

In January 2016, the IASB published the IFRS 16 Leases accounting standard superseding IAS 17 Leases, IFRIC 4 Determining Whether an Arrangement Contains a Lease, SIC 15 Operating Leases – Incentives and SIC 27 Evaluating the Substance of Transactions Involving the Legal Form of a Lease. IFRS 16 includes new rules on recognising, measuring, presenting and disclosing leases on a more detailed basis compared with IAS 17. According to IFRS 16, a contract is, or contains, a lease if it conveys the right to control the use of an identified asset for a period of time in exchange for consideration. Under IFRS 16, all leases must be presented by the lessee on the balance sheet in the form of a right-of-use asset (right to use the leased asset) and a corresponding lease liability (liability from lease obligations) for the payment of lease instalments. The interest expense for the lease liability and depreciation / amortisation expense for the right-of-use asset must be recognised separately.

KSB applied IFRS 16 for the first time as of 1 January 2019 using the modified retrospective method without restatement of prior periods, which continue to be presented in accordance with IAS 17. The capitalised right of use was taken into account in the amount of the lease liability, which had no effect on equity. Initial direct costs were excluded when measuring the right of use at the time of first-time adoption. KSB has made use of the practical expedient in connection with lease agreements for low-value assets and for contracts with a term of up to twelve months, i.e. for short-term leases. Existing lease agreements with a lease term ending in 2019 were also classified as short-term leases irrespective of their original total term. Accordingly, no right-of-use assets and lease liabilities were recognised for such leases. Leased assets with a fair value of up to € 5,000 were defined as low-value assets. For existing agreements classified as finance leases, only property, plant and equipment capitalised to date was reclassified as right-of-use assets. The related lease liabilities continued to be recognised without change.

The effects resulting from the first-time adoption of IFRS 16 on the opening balance sheet are presented in summary form in the following table:

→ Restatement of opening balance sheet as at 1 January 2019

A reconciliation of obligations from operating leases as at 31 December 2018 to lease liabilities as at 1 January 2019 is presented in the following table:

→ Reconciliation of lease obligations

The weighted average incremental borrowing rate at which the lease liabilities were discounted as at 1 January 2019 was 2.5 %. This interest rate is used as the basis for determining the discounting effect in the reconciliation from 31 December 2018 to 1 January 2019.

Lease liabilities and right-of-use assets are generally recognised at the time at which the leased asset is made available to KSB by the lessor for use. The carrying amount of the two items is essentially based on the present value of the future minimum lease payments. It is discounted using the incremental borrowing rate of KSB if no interest rate implicitly underlying the lease is available. Extension and termination options are included in the term and the carrying amounts of a lease if it is deemed reasonably certain that they will be exercised by KSB. Only lease components and in particular no separate service components are taken into account in the measurement of lease payments. The right-of-use assets are depreciated over the economic useful life of the leased asset or over the term of the lease, whichever is shorter. Lease liabilities are subsequently measured at amortised cost using the effective interest rate method in the form of a redemption and interest portion. Changes in lease payments are taken into account through remeasurements of lease liabilities. Moreover, the practical expedients for leases with low-value underlying assets and short-term leases are applied unchanged beyond the date of first adoption. The result is that for these leases the lease payments are recognised as an expense in the income statement.

There was no material effect on KSB's EBIT from the amended presentation in the income statement showing interest expenses from lease liabilities and depreciation of the right-of-use assets compared with the expenses for operating leases shown under IAS 17 in the previous year.

The redemption component included in the lease payments is allocated to cash flows from financing activities. The interest component is recognised in cash flows from operating activities, as is the case for lease payments for short-term leases, leases for low-value assets and variable lease payments.

The new rules for lessors under IFRS 16 have minor significance for KSB and did not have any material effect on the consolidated financial statements.

Restatement of opening balance sheet as at 1 January 2019

€ thousands	31 Dec. 2018	Additions	Reclassification	1 Jan. 2019
Assets				
Rights of use to land and buildings	–	34,631	4,137	38,768
Rights of use to plant and machinery	–	1,660	–	1,660
Rights of use to other equipment, operating and office equipment	–	13,596	816	14,412
Intangible assets	91,089	–	– 3,489	87,600
Property, plant and equipment	496,659	–	– 1,464	495,195
Total	**587,748**	**49,887**	**–**	**637,635**

€ thousands	31 Dec. 2018	Additions	Reclassification	1 Jan. 2019
Equity and liabilities				
Equity	856,791	–	–	856,791
Liabilities from lease obligations	1,230	49,887	–	51,117
Total	**858,021**	**49,887**	**–**	**907,908**

Reconciliation of lease obligations

€ thousands	
Obligations from operating leases as at 31 Dec. 2018	63,060
- Practical expedient for leases of low-value assets	– 8,470
- Practical expedient for short-term leases	– 2,445
- Discounting	– 2,258
+ Liabilities from lease obligations (finance leases) as at 31 Dec. 2018	1,230
Liabilities from lease obligations as at 1 Jan. 2019	51,117
of which current liabilities from lease obligations	12,972
of which non-current liabilities from lease obligations	38,145

IV. BALANCE SHEET DISCLOSURES

1. Intangible assets

Statement of changes in intangible assets

€ thousands	Concessions, industrial property and similar rights and assets, as well as licences in such rights and assets		Goodwill		Internally generated intangible assets		Advance payments		Intangible assets Total	
Historical cost	2019	2018	2019	2018	2019	2018	2019	2018	2019	2018
Balance at 1 Jan. (application of IAS 17)	74,781	71,883	105,571	103,210	30,745	–	773	25,311	211,870	200,404
Restatement under IFRS 16	– 5,572	–	–	–	–	–	–	–	– 5,572	–
Balance at 1 Jan. (application of IFRS 16)	69,209	71,883	105,571	103,210	30,745	–	773	25,311	206,298	200,404
Changes in consolidated Group	2	1,241	–	2,254	–	–	–	–	2	3,495
Currency translation adjustments	74	– 552	– 283	– 167	–	–	–	–	– 209	– 719
Other	158	2,093	–	274	–	–	–	– 72	158	2,295
Additions	2,844	2,596	–	–	9,585	9,187	2,735	1,228	15,164	13,011
Disposals	– 499	– 5,780	– 33,713	–	–	–	–	– 1,000	– 34,212	– 6,780
Reclassifications	774	3,300	1	–	– 175	21,558	– 600	– 24,694	–	164
Reclassification to assets held for sale	– 29	–	– 1,376	–	–	–	–	–	– 1,405	–
Balance at 31 Dec.	72,533	74,781	70,200	105,571	40,155	30,745	2,908	773	185,796	211,870
Accumulated depreciation and amortisation	2019	2018	2019	2018	2019	2018	2019	2018	2019	2018
Balance at 1 Jan. (application of IAS 17)	59,027	59,680	61,191	32,670	563	–	–	–	120,781	92,350
Restatement under IFRS 16	– 2,083	–	–	–	–	–	–	–	– 2,083	–
Balance at 1 Jan. (application of IFRS 16)	56,944	59,680	61,191	32,670	563	–	–	–	118,698	92,350
Currency translation adjustments	37	– 481	– 353	395	1	–	–	–	– 315	– 86
Other	41	301	–	– 68	–	–	–	–	41	233
Additions	4,309	4,513	–	28,194	163	563	–	–	4,472	33,270
Disposals	– 488	– 5,002	– 33,711	–	–	–	–	–	– 34,199	– 5,002
Reclassifications	–	16	–	–	–	–	–	–	–	16
Reclassification to assets held for sale	– 29	–	–	–	–	–	–	–	– 29	–
Balance at 31 Dec.	60,814	59,027	27,127	61,191	727	563	–	–	88,668	120,781
Carrying amount at 31 Dec.	11,719	15,754	43,073	44,380	39,428	30,182	2,908	773	97,128	91,089

In the context of the first-time adoption of IFRS 16 in the reporting year contractual rights of use to land and building elements were reclassified from intangible assets to right-of-use assets for leases. These reclassifications are presented in the “Statement of changes in intangible assets” table as “Restatement under IFRS 16”.

The additions to intangible assets amounting to € 15.2 million (previous year: € 13.0 million) primarily concerned, as in the previous year, own work capitalised and advance payments. The own work capitalised relates in particular to the KSBase sales software, which is the new selection software for the standard pump programme.

The “Concessions, industrial property and similar rights and assets, as well as licences in such rights and assets” item includes € 10.0 million (previous year: € 10.6 million) of software including software licences valid for a limited period. As in the previous year, there are no restrictions on ownership or use.

KSB reported internally generated intangible assets of € 39,428 thousand (previous year: € 30,182 thousand). This resulted essentially from the above-mentioned KSBase selection software, which was made operational in December 2019.

In the year under review, no impairment losses were recognised on intangible assets. In the previous year, advance payments for intangible assets of € 1,000 thousand were derecognised; in addition to this, no impairment losses were recognised on intangible assets.

As in the previous year, no product-related development costs were capitalised in the year under review because not all of the comprehensive recognition criteria defined in IAS 38 were met.

Further information on the reclassification from intangible assets to held-for-sale assets in the year under review is provided in Note 10 “Assets held for sale and liabilities in connection with assets held for sale”.

When assessing the indications for impairment of assets as at 31 December 2019, it was found that the carrying amount of net assets at KSB exceeds market capitalisation. As a result, the assets within the scope of IAS 36 were tested for impairment. As at 31 December 2019 this test did not show a need for impairment.

Goodwill impairment test

The carrying amounts of the cash-generating units in connection with the impairment testing of goodwill do not contain any items relating to taxes or financing activities.

To determine the discount factor, the weighted average cost of capital (WACC) method is applied in conjunction with the capital asset pricing model (CAPM), taking into account a peer group. Under this method, first the cost of equity is determined using CAPM and the borrowing costs are defined, and then the individual capital components are weighted in accordance with the capital structure taking account of the peer group. The peer group information includes aspects like beta factors, capital structure data and borrowing costs. The peer group includes companies that are similar to the KSB Group in terms of industry, size and activity. To account for changes in market parameters, the composition of the peer group is reviewed at regular intervals and adjusted if necessary (e.g. changes in the business model of either the company, the cash-generating unit or the comparable company being looked at).

The interest rate for risk-free 30-year Bunds was used as a base rate. This rate was 0.1 % in the year under review (previous year: 1.0 %). The market risk premium was set at 6.75 % (previous year: 5.75 %), with a beta factor of 1.04 (previous year: 0.90). In addition, country-specific tax rates and country risk premiums are taken into account individually for each cash-generating unit (CGU). The growth rate in the year under review for all companies was set at 0.5 % (previous year: 0.00 % to 1.25 %). The regular review of the peer group did not generate any new findings in relation to the business models of comparative companies. The peer group for examining the weighted capital cost factor therefore remained the same as in the previous year.

Discount rates

Before taxes in % (value in use)	30 Sep. 2019	30 Sep. 2018
Companies in Germany	9.5 – 9.9	7.9 – 8.4
Companies in The Netherlands	9.3	7.7
Companies in the USA	8.6 – 9.7	7.8
Companies in South Africa	14.4	11.4
Companies in South Korea	9.6	8.2
Companies in the other European countries	8.8 – 15.7	7.5 – 11.1

Goodwill

Name of CGU / € thousands	31 Dec. 2019	31 Dec. 2018
DP industries B. V., The Netherlands	18,285	18,285
Dynamik-Pumpen GmbH, Germany	3,150	3,150
Uder Elektromechanik GmbH, Germany	2,980	2,980
KSB Finland Oy, Finland	2,603	2,603
KSB Dubric, Inc. (USA)	2,451	2,405
KSB Pumps (S.A.) (Pty) Ltd., South Africa	1,886	1,808
	31,355	**31,231**
Other 15 (previous year: 18) companies	11,718	13,149
Total	**43,073**	**44,380**

The reference date for carrying out the goodwill impairment test is 30 September every year. The impairment test as at 30 September 2019 did not show a need for impairment.

For the goodwill impairment test, the assumptions listed in the "Detailed information on key goodwill items (30 September 2019)" and "Basic assumptions for goodwill considered material" tables were made for the goodwill considered material. Among other things, this relates to the assumptions made regarding order intake figures, sales revenue and operating earnings.

→ Detailed information on material goodwill items (30 September 2019)

→ Basic assumptions for goodwill considered material

As well as impairment testing, sensitivity analyses were conducted for each cash-generating unit. No need for impairment would have resulted here for any cash-generating units in the year under review.

After adjusting all required parameters, the discount factors as at 31 December 2019 were within the range of the sensitivity calculations performed as at 30 September 2019.

The need for goodwill impairment as at 31 December of the previous year is shown in the "Impairment loss on goodwill (31 December 2018)" table.

→ Impairment loss on goodwill (31 December 2018)

The "Sensitivities" table shows the amounts of goodwill that would have resulted from the sensitivity analyses as at 31 December of the previous year.

→ Sensitivities

Detailed information on material goodwill items (30 September 2019)

Name of CGU	Method	Carrying amount of goodwill (€ million)	Percentage of total goodwill	Discount rate	Growth rate	Underlying assumptions, corporate planning	Method for assessing the value of the underlying assumption
DP industries B.V., The Netherlands	Value in use	18.3	42 %	9.3 % before tax	0.50 %	Low to significant market growth rates	Consideration of macroeconomic key data and internal estimates of the relevant purchasing and sales departments.

Basic assumptions for goodwill considered material

Name of CGU	Order intake	Sales revenue	EBIT	Planning time horizon
DP industries B.V., The Netherlands	Constant growth, on average	Constant growth, on average	Moderate growth, on average, as a result of sales revenue and cost planning	5 years

Impairment loss on goodwill (31 December 2018)

Name of CGU	Segment	Discount factor	Recoverable amount € thousands	Impairment loss € thousands
Total 31 Dec. 2018				
Société de travaux et Ingénierie Industrielle (ST II) / KSB SERVICE COTUMER, France	Service	8.8 %	1,433	6,188
KSB Service Energie S.A.S.U., France	Service	8.7 %	4,538	1,412
KSB Seil Co., Ltd., South Korea	Valves	8.7 %	16,371	20,599

In the 2019 financial year, no need for impairment relating to goodwill was identified.

Sensitivities

Name of CGU / € thousands	Sensitivity 1	Sensitivity 2	Sensitivity 3
31 Dec. 2018			
Société de travaux et Ingénierie Industrielle (ST II) / KSB SERVICE COTUMER, France	6,676	6,257	n / a
KSB Service Energie, France	2,040	1,466	n / a
KSB Seil, Busan, South Korea	23,290	21,066	31,714
KSB Italia S.p.A., Italy	2,737	–	n / a
SPI Energie, France	332	–	n / a
Dynamik-Pumpen GmbH, Germany	132	–	n / a
KAGEMA Industrieausrüstungen GmbH, Germany	135	–	n / a

The sensitivity analyses for the 2019 financial year did not reveal any imputed impairment losses for goodwill.

2. Right-of-use assets

€ thousands	31 Dec. 2019	31 Dec. 2018
Right-of-use assets for leases	**50,096**	**–**
of which land and buildings	34,210	–
of which technical equipment and machinery	1,139	–
of which other equipment, operating and office equipment	14,747	–

The new balance sheet item “Right-of-use assets” results from the first-time adoption of IFRS 16 in the year under review.

Additions to right-of-use assets in the reporting year amounted to € 12,956 thousand.

Depreciation on right-of-use assets in the year under review was as follows:

€ thousands	2019	2018
Depreciation on right-of-use assets	**15,893**	**–**
of which land and buildings	8,807	–
of which technical equipment and machinery	604	–
of which other equipment, operating and office equipment	6,482	–

3. Property, plant and equipment

Statement of changes in property, plant and equipment

€ thousands	Land and buildings		Plant and machinery		Other equipment, operating and office equipment		Advance payments and assets under construction		Property, plant and equipment	
Historical cost	2019	2018	2019	2018	2019	2018	2019	2018	2019	2018
Balance at 1 Jan. (application of IAS 17)	416,831	381,587	594,186	593,154	228,153	225,103	25,125	24,071	1,264,295	1,223,915
Restatement under IFRS 16	– 1,100	–	–	–	– 1,861	–	–	–	– 2,961	–
Balance at 1 Jan. (application of IFRS 16)	**415,731**	**381,587**	**594,186**	**593,154**	**226,292**	**225,103**	**25,125**	**24,071**	**1,261,334**	**1,223,915**
Changes in consolidated Group	–	1,282	–	25	325	109	–	–	325	1,416
Currency translation adjustments	1,394	– 1,991	874	– 822	304	– 3,481	607	– 1,092	3,179	– 7,386
Other	823	25,324	–	– 22,901	486	225	–	– 4	1,309	2,644
Additions	10,130	8,660	19,794	21,472	19,615	20,315	29,322	16,146	78,861	66,593
Disposals	– 3,983	– 641	– 6,913	– 9,168	– 9,183	– 12,894	– 52	– 20	– 20,131	– 22,723
Reclassifications	10,960	2,610	6,948	12,426	2,365	– 1,224	– 20,273	– 13,976	–	– 164
Reclassification to assets held for sale	–	–	– 2,555	–	– 289	–	–	–	– 2,844	–
Balance at 31 Dec.	**435,055**	**416,831**	**612,334**	**594,186**	**239,915**	**228,153**	**34,729**	**25,125**	**1,322,033**	**1,264,295**
Accumulated depreciation and amortisation	2019	2018	2019	2018	2019	2018	2019	2018	2019	2018
Balance at 1 Jan. (application of IAS 17)	188,906	156,455	416,445	402,104	162,285	159,142	–	–	767,636	717,701
Restatement under IFRS 16	– 452	–	–	–	– 1,045	–	–	–	– 1,497	–
Balance at 1 Jan. (application of IFRS 16)	**188,454**	**156,455**	**416,445**	**402,104**	**161,240**	**159,142**	–	–	**766,139**	**717,701**
Currency translation adjustments	516	315	680	1,013	254	– 2,152	–	–	1,450	– 824
Other	514	18,540	– 62	– 17,846	568	277	–	–	1,020	971
Additions	11,484	13,712	31,343	38,417	18,659	19,092	–	–	61,486	71,221
Disposals	– 2,181	– 285	– 6,454	– 8,685	– 8,579	– 12,447	–	–	– 17,214	– 21,417
Reclassifications	702	169	– 862	1,442	160	– 1,627	–	–	–	– 16
Reclassification to assets held for sale	–	–	– 1,975	–	– 154	–	–	–	– 2,129	–
Balance at 31 Dec.	**199,489**	**188,906**	**439,115**	**416,445**	**172,148**	**162,285**	–	–	**810,752**	**767,636**
Carrying amount at 31 Dec.	**235,566**	**227,925**	**173,219**	**177,741**	**67,767**	**65,868**	**34,729**	**25,125**	**511,281**	**496,659**

Assets resulting from finance leases were capitalised under property, plant and equipment in the previous year pursuant to IAS 17. With the first-time adoption of IFRS 16 at the start of 2019 they were reclassified as right-of-use assets. These reclassifications are presented in the "Statement of changes in property, plant and equipment" table as "Restatement under IFRS 16".

Disposals of intangible assets and items of property, plant and equipment resulted in book gains of € 3,190 thousand (previous year: € 1,618 thousand) and book losses of € 453 thousand (previous year: € 661 thousand). The book gains and losses are reported in the income statement under other income and other expenses.

In the year under review, impairment losses of € 512 thousand (previous year: € 10,580 thousand) were recognised on property, plant and equipment to take account of lower expected cash inflows from a foundry. This impairment is reported in the income statement under depreciation and amortisation. The impairment loss recorded in the year under review relates to the Pumps segment. The impairments in the previous year related to two valve ranges in the Valves segment.

Further information on the reclassification from property, plant and equipment to held-for-sale assets in the year under review is provided in Note 10 "Assets held for sale and liabilities in connection assets held for sale".

4. Financial assets

€ thousands	31 Dec. 2019	31 Dec. 2018
Loans	1,265	1,113
Financial instruments	697	660
	1,962	1,773

€ 778 thousand of the loans are loans to equity investments (previous year: € 535 thousand).

5. Other non-financial assets

€ thousands	31 Dec. 2019	31 Dec. 2018
Other investments	2,840	2,914
	2,840	2,914

Other investments are investments in affiliates that were not consolidated due to there being no material impact. As in the previous year, there was no depreciation / amortisation applied in the year under review.

6. Investments accounted for using the equity method

The following table lists the KSB Group's material joint ventures. "Seat" refers to the country in which the main activity is performed. All joint ventures and associates are accounted for using the equity method and can also be found in the list of shareholdings in these Notes to the Consolidated Financial Statements. The share of capital corresponds to the share of voting rights.

→ Material joint ventures

Neither of the two material joint ventures is listed on a stock market, which is why there is no active market.

Summarised financial information on these material joint ventures of the KSB Group and a combined summary for all the individually immaterial joint ventures and associated companies are provided in the following tables:

→ Summarised balance sheet

→ Summarised statement of comprehensive income

→ Reconciliation to carrying amount of Group share in joint ventures

→ Summarised information on joint ventures and associates that are immaterial individually

As in the previous year, there are no pro rata losses that have not been recognised from the consolidation at equity.

Material joint ventures

Name and seat	Capital share	Nature of the entity's relationship
KSB Pumps Arabia Ltd., Saudi Arabia	50.00 %	KSB Pumps Arabia Ltd. in Riyadh, Saudi Arabia, offers a wide range of services and activities for the energy market as well as in water, waste water and building services applications. The portfolio includes business development and marketing, supply chain management, production of pressure booster systems and pump sets, sale of pumps, valves and systems and technical service activities. KSB Pumps Arabia Ltd. is important for the growth of the Group in the Saudi Arabian market.
Shanghai Electric-KSB Nuclear Pumps and Valves Co., Ltd. (China)	45.00 %	Shanghai Electric-KSB Nuclear Pumps and Valves Co., Ltd. in Shanghai, China, produces suitable auxiliary pumps for the secondary coolant circuits and modern reactor coolant pumps for the primary cooling circuits of nuclear power stations. Shanghai Electric-KSB Nuclear Pumps and Valves Co., Ltd. is a strategic partnership on the part of the Group, through which KSB is participating in the expansion of energy capacity in China and other Asian markets.

Summarised balance sheet

	KSB Pumps Arabia Ltd.		Shanghai Electric-KSB Nuclear Pumps and Valves Co., Ltd.	
€ thousands	**2019**	**2018**	**2019**	**2018**
Non-current assets	10,718	10,678	81,209	73,907
Current assets	38,101	39,143	125,483	126,679
of which cash and cash equivalents	3,115	263	28,718	17,928
Non-current liabilities	– 2,981	– 4,896	– 21,733	– 25,523
of which non-current financial liabilities (excluding trade payables and provisions)	– 1,189	– 3,487	– 12,787	– 25,523
Current liabilities	– 27,889	– 26,634	– 154,337	– 145,667
of which current financial liabilities (excluding trade payables and provisions)	– 7,172	– 5,090	– 19,321	– 26,793
Net assets	**17,949**	**18,291**	**30,622**	**29,396**

Summarised statement of comprehensive income

	KSB Pumps Arabia Ltd.		Shanghai Electric-KSB Nuclear Pumps and Valves Co., Ltd.	
€ thousands	**2019**	**2018**	**2019**	**2018**
Sales revenue	33,572	34,916	61,934	55,840
Depreciation / amortisation	989	782	4,323	4,116
Interest income	–	–	70	62
Interest expense	– 397	– 553	– 2,149	– 2,613
Earnings from continuing operations	– 755	2,591	1,032	775
Taxes on income	–	– 46	–	–
Earnings after taxes from continuing operations	**– 755**	**2,545**	**1,032**	**775**
Earnings after taxes from discontinued operations	–	–	–	–
Other comprehensive income	413	861	194	– 266
Comprehensive income	**– 342**	**3,406**	**1,226**	**509**
Dividends received from joint ventures	**–**	**201**	**–**	**–**

Reconciliation to carrying amount of Group share in joint ventures

	KSB Pumps Arabia Ltd.		Shanghai Electric-KSB Nuclear Pumps and Valves Co., Ltd.	
€ thousands	**2019**	**2018**	**2019**	**2018**
Net carrying amount at 1 January	18,291	15,287	29,396	28,887
Earnings after income tax	– 755	2,545	1,032	775
Distribution of dividends	–	– 402	–	–
Other comprehensive income	413	861	194	– 266
Net carrying amount at 31 December	**17,949**	**18,291**	**30,622**	**29,396**
Investment in joint venture (50 % / 45 %)	8,975	9,145	13,780	13,228
Elimination of intercompany profit and loss	–	–	– 3,874	– 3,349
Goodwill	–	–	–	–
Carrying amount at 31 December	**8,975**	**9,145**	**9,906**	**9,879**

Summarised information on joint ventures and associates that are immaterial individually

€ thousands	Joint ventures 2019	Associates 2019	Total 2019	Joint ventures 2018	Associates 2018	Total 2018
Group share of earnings from continuing operations	241	751	992	140	592	732
Group share of other comprehensive income	74	–	74	144	23	167
Group share of comprehensive income	315	751	1,066	284	615	899
Total carrying amounts of Group shares in these companies	**3,946**	**1,376**	**5,322**	**3,631**	**1,200**	**4,831**

7. Inventories

€ thousands	31 Dec. 2019	31 Dec. 2018
Raw materials and production supplies	192,740	182,134
Work in progress	168,871	184,158
Finished goods and goods purchased and held for resale	165,221	162,128
Advance payments	17,871	16,010
	544,703	**544,430**

€ 88,827 thousand (previous year: € 61,614 thousand) of the inventories is carried at net realisable value. The impairment losses recognised as an expense in the reporting period amount to € 12,426 thousand (previous year: € 10,513 thousand). Due to new estimates, write-downs totalling € 649 thousand (previous year: € 810 thousand) were reversed where the current net realisable value was higher than the prior-period value. Inventories amounting to € 994,103 thousand (previous year: € 911,991 thousand) were recognised as an expense in the reporting period.

8. Contract assets, trade receivables and other financial and non-financial assets

€ thousands	31 Dec. 2019	31 Dec. 2018
Contract assets	**76,428**	**74,499**
Trade receivables	**504,101**	**518,116**
Trade receivables from third parties	473,873	483,626
Trade receivables from other investments, associates and joint ventures	30,228	34,490
thereof from other investments	5,800	5,384
thereof from associates	460	7
thereof from joint ventures	23,968	29,098
Other financial assets	**90,938**	**103,388**
Receivables from loans to other investments, associates and joint ventures	348	12,661
Currency forwards	850	1,070
Other receivables and other current assets	89,740	89,657
Other non-financial assets	**39,613**	**49,504**
Other tax assets	31,237	40,124
Deferred income	8,376	9,380

At € 76,428 thousand (previous year: € 74,499 thousand), the balance of contract assets at the end of the reporting year was at a comparable level to the previous year. Impairment losses on contract assets amounted to € 204 thousand (previous year: € 190 thousand).

In addition, impairment losses on trade receivables from third parties amounted to € 35,000 thousand (previous year: € 33,943 thousand). There were no impairment losses on trade receivables from other investments (previous year: € 499 thousand).

Impairment losses on receivables from loans to other investments amounted to € 320 thousand (previous year: € 3.172 thousand). No impairment losses were applied on receivables from joint ventures or associates, as in the previous year.

Impairment losses on trade receivables include the individual impairment allowance (EWB) and risk provisions for expected credit losses (ECL). For contract assets, impairment losses include risk provisions for expected credit losses (ECL).

→ Reconciliation of impairment losses

Reconciliation of impairment losses 2019

	Trade receivables from third parties			Contract assets
€ thousands	Total	EWB	ECL	ECL
Opening balance at 1 January	**– 33,943**	**– 29,359**	**– 4,584**	**– 190**
Additions	– 9,493	– 8,107	– 1,386	– 30
Utilised	1,561	1,561	–	–
Reversals	6,478	4,306	2,172	15
Currency translation	396	371	26	1
Closing balance at 31 December	**– 35,000**	**– 31,228**	**– 3,772**	**– 204**

Reconciliation of impairment losses 2018

	Trade receivables from third parties			Contract assets
€ thousands	Total	EWB	ECL	ECL
Opening balance at 1 January	**– 35,481**	**– 27,746**	**– 7,735**	**– 79**
Additions	– 7,399	– 7,399	–	– 111
Utilised	3,616	3,616	–	–
Reversals	5,321	2,170	3,151	–
Currency translation	–	–	–	–
Closing balance at 31 December	**– 33,943**	**– 29,359**	**– 4,584**	**– 190**

Risk provisions for expected credit losses of contract assets are determined as follows:

Risk provisions for expected credit losses of contract assets

		Not overdue	
		31 Dec. 2019	31 Dec. 2018
Expected default risk	in %	0.3	0.3
Gross contract assets	€ thousands	76,632	74,689
ECL	€ thousands	– 204	– 190

The expected default risk of trade receivables from third parties, calculated using the simplified impairment model, is distributed across the age structure of the unhedged gross trade receivables, as shown in the “Risk provision for expected credit losses by maturity of trade receivables” table.

→ Risk provision for expected credit losses by maturity of trade receivables

Furthermore, the balance of risk provisions for expected credit losses from trade receivables against third parties includes an amount of € 407 thousand (previous year: € 555 thousand) which relates to hedged receivables.

Risk provision for expected credit losses by maturity of trade receivables

31 Dec. 2019		Not overdue	Up to 30 days	Up to 90 days	Up to 180 days	Up to 360 days	Over 360 days	Total
Expected default risk	in %	0.2	1.3	1.8	2.1	2.6	2.9	–
Gross trade receivables from hird parties excluding hedged receivables	thousands	336,985	38,129	25,232	14,430	16,913	33,898	465,587
ECL	thousands	– 682	– 504	– 462	– 307	– 437	– 973	– 3,365
31 Dec. 2018								
Expected default risk	in %	0.3	1.1	2.0	3.0	3.2	4.2	–
Gross trade receivables from third parties excluding hedged receivables	thousands	323,241	52,016	37,208	18,870	13,754	21,254	466,343
ECL	thousands	– 830	– 554	– 753	– 560	– 439	– 893	– 4,029

Other receivables and other current assets include hedges of credit balances prescribed by law for partial retirement arrangements and long-term working time accounts of the German Group companies in the amount of € 19,600 thousand.

€ 29,242 thousand (previous year: € 20,964 thousand) of total provisions and other assets are due after more than one year.

9. Cash and cash equivalents

Cash and cash equivalents are term deposits with short maturities and call deposits, and also current account balances.

10. Assets held for sale and liabilities in connection with assets held for sale

Assets held for sale

€ thousands	31 Dec. 2019	31 Dec. 2018
Non-current assets	**3,455**	**–**
Intangible assets	1,376	–
Right-of-use assets	1,208	–
Property, plant and equipment	715	–
Non-current financial assets	41	–
Deferred tax assets	115	–
Current assets	**4,298**	**–**
Inventories	1,036	–
Trade receivables	2,375	–
Other financial assets	597	–
Other non-financial assets	97	–
Cash and cash equivalents	193	–
Total	**7,753**	**–**

Liabilities in connection with assets held for sale

€ thousands	31 Dec. 2019	31 Dec. 2018
Non-current liabilities	**1,361**	**–**
Provisions for employee benefits	398	–
Financial liabilities	963	–
Current liabilities	**2,606**	**–**
Other provisions	7	–
Financial liabilities	252	–
Contract liabilities	35	–
Trade payables	1,030	–
Other financial liabilities	6	–
Other non-financial liabilities	1,237	–
Income tax liabilities	39	–
Total	**3,967**	**–**

As far as the assets and liabilities of subsidiary SPI Energie S.A.S., La Ravoire, France, from the Service segment were concerned, KSB as at the reporting date expected a highly likely disposal as defined by IFRS 5 through the sale of shares. This assessment was based on advanced negotiations with a potential buyer. Accordingly, the assets and liabilities of this subsidiary are presented as a disposal group held for sale in the reporting year and recognised in separate balance sheet items.

Within the scope of reclassification, no impairment losses were recognised for the assets of the disposal group because the net carrying amount of the assets and liabilities in question was below the fair value less costs to sell.

The sale of assets and liabilities took place as part of the sale of shares in January 2020.

11. Equity

There was no change in the share capital of KSB as against the previous year. In accordance with the Articles of Association, it totals € 44,771,963.82 and, as in the previous year, is composed of 886,615 ordinary shares and 864,712 preference shares. Each no-par-value share represents an equal notional amount of the share capital. The preference shares carry separate cumulative preferred dividend rights and progressive additional dividend rights. All shares are no-par-value bearer shares. The individual shares have no par value.

The capital reserve results from the appropriation of premiums from capital increases in previous years.

In addition to revenue reserves from previous years, the revenue reserves include currency translation adjustments, consolidation effects, remeasurements of defined benefit plans under IAS 19 and changes in the fair value of interest rate derivatives taken directly to equity. These issues resulted in deferred tax assets in the amount of € 96,957 thousand (previous year: € 75,366 thousand) and deferred tax liabilities in the amount of € 8 thousand (previous year: € 24 thousand).

A total of € 5,583 thousand (dividend of € 3.00 per ordinary share and € 3.38 per preference share) was paid from equity by resolution of the Annual General Meeting of the Group's parent company KSB SE & Co. KGaA, Frankenthal, on 29 May 2019.

Non-controlling interests relate primarily to PAB GmbH, Frankenthal / Pfalz, and the interests it holds, as well as to the companies in India and China. KSB FINANZ S.A., Echternach, Luxembourg, holds a 51 % interest in PAB GmbH, while Johannes und Jacob Klein GmbH, Frankenthal, holds a 49 % interest.

Details of the changes in equity accounts and non-controlling interests are presented in the Statement of Changes in Equity.

The proposal on the appropriation of the net retained earnings of KSB SE & Co. KGaA calculated in accordance with HGB [*Handelsgesetzbuch* – German Commercial Code] is shown at the end of these Notes.

Capital disclosures

Sufficient financial independence is a key requirement for safeguarding KSB's continued existence in the long term. Obtaining the necessary funds for ongoing business operations is also extremely important for KSB. KSB regularly monitors the development of the net financial position that is derived from the balance of interest-bearing financial liabilities and interest-bearing financial assets (current and non-current financial instruments, interest-bearing loans to companies accounted for using the equity method as well as companies that were not consolidated due to there being no material impact, cash and cash equivalents and receivables from deposits). One objective is to avoid net debt. The net financial position at the end of the year under review was € 246 million (previous year: € 255 million). The decline over the previous year is due, in particular, to the rise in lease liabilities from the first-time adoption of IFRS 16 in the year under review.

12. Provisions

Composition of provisions

	31 Dec. 2019			31 Dec. 2018		
€ thousands	**Total**	**Non-current**	**Current**	**Total**	**Non-current**	**Current**
Employee benefits	**658,529**	**646,340**	**12,190**	**587,927**	**578,640**	**9,287**
Pensions and similar obligations	629,617	629,617	–	553,573	553,573	–
Other employee benefits	28,912	16,722	12,190	34,354	25,067	9,287
Other provisions	**69,742**	**1,366**	**68,376**	**84,934**	**1,377**	**83,557**
Warranty obligations and contractual penalties	44,304	–	44,304	45,582	–	45,582
Provisions for restructuring	410	–	410	1,023	–	1,023
Miscellaneous other provisions	25,028	1,366	23,662	38,329	1,377	36,952
	728,271	**647,706**	**80,565**	**672,861**	**580,017**	**92,844**

Development of individual provision categories

€ thousands	1 Jan. 2019	Changes in consolidated Group / CTA* / Other	Utilisation / Prepayments	Reversals	Additions	31 Dec. 2019
Employee benefits	**587,927**	**– 238**	**– 30,770**	**– 151**	**101,761**	**658,529**
Pensions and similar obligations	553,573	– 218	– 17,379	– 10	93,652	629,617
Other employee benefits	34,354	– 21	– 13,390	– 141	8,109	28,912
Other provisions	**84,934**	**– 449**	**– 35,945**	**– 4,235**	**25,439**	**69,742**
Warranty obligations and contractual penalties	45,582	99	– 19,508	– 3,030	21,162	44,304
Provisions for restructuring	1,023	3	– 610	– 13	7	410
Miscellaneous other provisions	38,329	– 551	– 15,827	– 1,192	4,270	25,028
	672,861	**– 688**	**– 66,715**	**– 4,386**	**127,200**	**728,271**

* CTA = Currency translation adjustments

Provisions for pensions and similar obligations

The pension obligations in the KSB Group include defined contribution and defined benefit plans and contain both obligations from current pensions and future pension benefit entitlements.

Total expenses for defined benefit pension plans in the year under review amounted to € 41,138 thousand (previous year: € 34,655 thousand). Of this figure, € 27,655 thousand (previous year: € 26,778 thousand) resulted from contributions into the statutory pension insurance scheme in Germany.

The obligations for defined benefit pension plans for employees of the Group are mainly due to pension obligations in Germany, as well as in France, the United States and Switzerland.

More than 90 % of the defined benefit pension plans are attributable to the German Group companies. These relate to direct commitments by the companies to their employees. The commitments are based on salary and length of service. Contributions from employees themselves are also considered. This pension provision can be broken down into purely company-financed basic provision and the top-up provision from the employer. The latter is based on the amount of own contributions and the generated return on sales before taxes on income. Both components take account of the general pension contribution (the amount of which partially depends on company performance), personal income (the relationship between pensionable income and maximum income threshold) and the annuity conversion factor (based on age). For the material pension plans of the German companies, every employee is entitled to apply at any time during the ongoing employment contract for payment in annual instalments, as a one-time payment or as a pension for life.

Pension schemes in France are governed by the provisions of the respective collective agreements. The obligations are basically covered by assets that have been paid in to an external fund. At the beginning of the final quarter of each year, an actuarial report is prepared to calculate the current scope of obligation. If there is a shortfall, a compensation payment is made to the fund. Differences in the calculation parameters under local and international law ultimately result in a surplus of obligations in the Group. Upon retirement, the employees concerned receive a one-off payment from the fund.

The defined benefit pension plans in the United States are closed to new entrants. The pension benefit amount is derived from the average salary and years of service before closure of the plan. The retirement age is 65 years; from this point a monthly payment is made to the beneficiaries. The pension benefits are financed by external funds.

Pension obligations in Switzerland are predominantly based on statutory obligations. This also includes details on a minimum pension which all employees with uninterrupted contributions are entitled to by law. The employer is therefore required to pay in contributions which are high enough for the respective pension fund or insurance company to pay out these minimum amounts. As well as pension benefits, the plans encompass other benefits such as disability or survivors' benefits. Both employer and employee contributions are paid to the pension fund, with the company having to make contributions that at least match the employee contributions specified in the terms and conditions of the plan. The retirement benefits are paid out in monthly instalments, but all employees have the option to receive a (partial) capital payment.

In addition, employees in other countries are also entitled to a limited extent to retirement and partly to medical care benefits, depending mainly on the length of service and salary.

These defined benefit plans harbour actuarial risks, such as the longevity risk and interest rate risk. The payments associated with the pension obligations are mostly serviced through liquidity. Plan assets are also partially available for financing these obligations. Most of the plan assets are managed by insurers who set their own appropriate investment policies.

The actuarial valuations of the present value of the defined benefit obligation (and the related current service cost and the past service cost) are measured and calculated annually on the basis of actuarial reports using the projected unit credit method (IAS 19). Plan assets are measured at fair value.

→ Balance sheet figures for defined benefit plans

→ Change in cash value of defined benefit obligations

Balance sheet figures for defined benefit plans

	Defined benefit obligations (DBOs)	Fair value of plan assets	Net liability from defined benefit plans	Defined benefit obligations (DBOs)	Fair value of plan assets	Net liability from defined benefit plans
€ thousands	**31 Dec. 2019**	**31 Dec. 2019**	**31 Dec. 2019**	**31 Dec. 2018**	**31 Dec. 2018**	**31 Dec. 2018**
Germany	599,720	–	599,720	529,188	–	529,188
France	18,150	5,373	12,777	16,332	7,279	9,053
USA	14,278	13,237	1,041	13,411	11,253	2,158
Switzerland	13,890	12,364	1,526	12,794	11,721	1,073
Other countries	41,462	26,909	14,553	39,458	27,357	12,101
Balance sheet values	**687,500**	**57,883**	**629,617**	**611,183**	**57,610**	**553,573**

Change in cash value of defined benefit obligations

€ thousands	2019	2018
Opening balance of the defined benefit obligation (DBO) – 1 Jan.	**611,183**	**650,465**
Current service cost	12,236	8,011
Interest cost	11,735	12,837
Employee contributions	265	3,190
Remeasurements		
– / + Gain / loss from the change in demographic assumptions	490	4,718
– / + Gain / loss from the change in financial assumptions	75,323	1,278
– / + Experience-based gain / loss	– 1,024	818
Benefit payments	– 20,357	– 20,935
Past service cost (incl. effects of settlements and curtailments)	– 20	– 46,174
Transfer of assets	14	– 433
Currency translation differences	1,642	192
Changes in consolidated Group / Other	– 3,987	– 2,784
Closing balance of the defined benefit obligation (DBO) – 31 Dec.	**687,500**	**611,183**

The current and past service cost is recognised in staff costs under pension costs, and the interest cost is recognised in finance income / expense under interest and similar expenses.

The past service cost amounting to € 46,174 thousand reported in the previous year essentially resulted from the introduction of a lump-sum option in the pension plans of German companies concluded before 2009.

In the following year, employer contributions to plan assets are expected to be at the level seen in the 2019 financial year. The amounts in 2019 came to € 1,638 thousand.

→ Changes in the fair value of the plan assets

Interest income is recognised in the income statement net of the DBO interest expense under interest and similar expenses and thus reported under finance income / expense.

→ Changes to the net liability of the defined benefit obligations

→ Composition of plan assets

The pension funds are endowed with the amount needed to meet the respective statutory minimum requirements.

The actual income from plan assets amounted to € 6,266 thousand (previous year: expense of € 1,093 thousand).

→ Actuarial assumptions

A mean fluctuation rate (2.0 %) continues to be applied to staff turnover for the German plans, as in the previous year. The biometric assumptions are based on the 2018G mortality tables published by Prof. Klaus Heubeck, and the retirement age used for the calculations is based on the *Rentenversicherungs-Altersgrenzenanpassungsgesetz* 2007 [RVAGAnpG – German Act Adapting the Standard Retirement Age for the Statutory Pension Insurance System]. Other measurement parameters (e.g. cost trends in the medical care area) are not material.

The discount rate and future mortality were identified as key actuarial assumptions. As in the previous year the basis for the calculation of the sensitivities is the same method which was used for the calculation of the provisions for pensions and similar obligations.

Were the discount factor to increase by 100 basis points, the DBO would fall by € 84,718 thousand (previous year: € 86,364 thousand). A 100 basis point reduction in the discount factor would increase the DBO by € 143,166 thousand (previous year: € 113,422 thousand). It should be noted that a change in the discount factor due to particular financial effects (such as compound interest) does not affect the development of the DBO on a straight-line basis. Were life expectancy to increase by 1 year, the DBO would increase by € 20,554 thousand (previous year: € 22,242 thousand).

Additionally, the individual actuarial assumptions are mutually dependent, but these interdependencies are not taken into account in the sensitivity analysis.

On 31 December 2019 the weighted average term of the DBO was 25 years (previous year: 24 years).

Changes in the fair value of the plan assets

€ thousands	2019	2018
Opening balance of the plan assets measured at fair value – 1 Jan.	**57,610**	**63,604**
Interest income	1,711	2,019
Remeasurements		
+ / – Gain / loss from plan assets excluding amounts already recognised in interest income	4,310	– 3,922
Contributions by the employer	1,638	1,787
Contributions by the beneficiary employees	191	197
Currency translation differences	1,111	131
Paid benefits	– 3,788	– 4,096
Changes in consolidated Group / Other	– 4,900	– 2,110
Closing balance of the plan assets measured at fair value – 31 Dec.	**57,883**	**57,610**

Changes to the net liability of the defined benefit obligations

€ thousands	2019	2018
Opening balance of the net liability from defined benefit plans – 1 Jan.	**553,573**	**586,861**
Current service cost	12,236	8,011
Net interest expense	10,024	10,818
Employee contributions	74	2,993
Contributions by the employer	– 1,638	– 1,787
Remeasurements		
– / + Gain / loss from plan assets excluding amounts already recognised in interest income	– 4,310	3,922
– / + Gain / loss from the change in demographic assumptions	490	4,718
– / + Gain / loss from the change in financial assumptions	75,323	1,278
– / + Experience-based gain / loss	– 1,024	818
Benefit payments	– 16,569	– 16,839
Past service cost (incl. effects of settlements and curtailments)	– 20	– 46,174
Transfer of assets	14	– 433
Currency translation differences	531	61
Changes in consolidated Group / Other	913	– 674
Closing balance of the net liability from defined benefit plans – 31 Dec.	**629,617**	**553,573**

Composition of plan assets

€ thousands	Quoted market price in an active market 31 Dec. 2019	No quoted market price in an active market 31 Dec. 2019	Total 31 Dec. 2019	Quoted market price in an active market 31 Dec. 2018	No quoted market price in an active market 31 Dec. 2018	Total 31 Dec. 2018
Equity instruments (shares)	23,777	–	**23,777**	20,746	–	**20,746**
Debt instruments (loans)	19,822	–	**19,822**	21,824	70	**21,894**
Government bonds	5,031	–	**5,031**	6,625	–	**6,625**
Corporate bonds	14,791	–	**14,791**	15,199	70	**15,269**
Currency forwards	–	–	**–**	–	–	**–**
Money market investments	285	327	**612**	1,606	277	**1,883**
Real estate	3,785	–	**3,785**	3,377	–	**3,377**
Insurance contracts	–	7,175	**7,175**	–	6,098	**6,098**
Bank credit balances	1,484	–	**1,484**	792	12	**804**
Other investments	1,228	–	**1,228**	1,528	1,280	**2,808**
	50,381	**7,502**	**57,883**	**49,873**	**7,737**	**57,610**

Actuarial assumptions

	Discount rate		Assumed rate of salary increase		Assumed rate of pension increase	
in %	31 Dec. 2019	31 Dec. 2018	31 Dec. 2019	31 Dec. 2018	31 Dec. 2019	31 Dec. 2018
Germany	1.1	1.8	2.7	2.7	1.9	1.9
France	0.9	1.6	2.8	2.8	1.9	–
USA	3.0	4.0	–	–	–	–
Switzerland	0.2	1.0	1.0	1.0	–	–

Expected pension benefit payments

€ thousands at 31 Dec. 2019	2020	2021	2022	2023	2024
Expected payments	22,759	26,055	23,133	23,687	23,852

€ thousands at 31 Dec. 2018	2019	2020	2021	2022	2023
Expected payments	27,711	23,953	25,900	23,630	25,576

Other employee benefits

Provisions for other employee benefits relate primarily to anniversary and partial retirement obligations.

Other provisions

The provisions for warranty obligations and contractual penalties cover the statutory and contractual obligations to customers and are based on estimates prepared using historical data for similar products and services. They amount to € 44,304 thousand (previous year: € 45,582 thousand) in the year under review.

Other provisions primarily contain provisions for expected losses of € 13,226 thousand (previous year: € 25,900 thousand). These include, as in the previous year, provisions for a legacy project in the United Kingdom as well as provisions set aside due to the political situation in Iran. Furthermore, to a lesser extent provisions for litigation risks amounting to € 1,771 thousand are included in miscellaneous other provisions.

€ 16,134 thousand (previous year: € 16,571 thousand) of the other provisions are expected to become cash-effective after more than one year.

13. Liabilities

Non-current liabilities

€ thousands	31 Dec. 2019	31 Dec. 2018
Financial liabilities	**56,750**	**30,099**
Loan against borrower's note	21,988	21,976
Bank loans and overdrafts	2,410	6,967
Finance lease liabilities	32,036	826
Other	316	330

Current liabilities

€ thousands	31 Dec. 2019	31 Dec. 2018
Financial liabilities	**44,318**	**48,777**
Loan against borrower's note	–	26,000
Bank loans and overdrafts	28,698	21,990
Finance lease liabilities	15,015	404
Liabilities to other investments, associates and joint ventures	–	320
Other	605	63
Contract liabilities	**165,463**	**157,389**
Trade payables	**252,741**	**270,212**
Trade payables to third parties	251,382	264,675
Liabilities to other investments, associates and joint ventures	1,359	5,537
Other financial liabilities	**31,226**	**32,767**
Currency forwards	3,336	3,731
Miscellaneous other financial liabilities	27,890	29,036
Other non-financial liabilities	**161,528**	**154,689**
Social security and liabilities to employees	126,117	116,674
Tax liabilities (excluding income tax)	23,760	23,734
Prepaid expenses	6,419	9,629
Investment grants and subsidies	5,232	4,652
Income tax liabilities	**9,050**	**8,326**
Liabilities in connection with assets held for sale	**3,967**	–

In 2012, to safeguard liquidity in the medium term, KSB SE & Co. KGaA took the precaution of placing a loan against borrower's note with a total volume of € 175 million. This loan is divided into repayment tranches of 3, 5, 7 and 10 years. Tranches of € 127 million in total were repaid in 2017 and 2015, some early. As the different repayment tranches have different terms, different rates of interest apply, some of which are fixed and some variable. A repayment of € 26 million was made in the year under review. € 13.5 million (previous year: € 27.5 million) of the liabilities arising from the loan against borrower's note are classified as bank loans and overdrafts, and € 8.5 million (previous year: € 20.5 million) as other financial liabilities.

The weighted average interest rate on bank loans and overdrafts as well as on an open-market credit (loan against borrower's note) was 5.34 % (previous year: 3.94 %).

The increase in current and non-current liabilities from lease obligations compared with the prior-year figures results from the first-time adoption of IFRS 16 in 2019. The maturity analysis of lease obligations at the reporting date is as follows:

Maturity analysis of liabilities from lease obligations

€ thousands	31 Dec. 2019
Due within 1 year	15,015
Due between 1 and 5 years	29,054
Due after more than 5 years	2,982
	47,051

At € 165,463 thousand (previous year: € 157,389 thousand), the balance of contract liabilities at the end of the year was at a comparable level to the previous year. In the year under review, KSB reported sales revenue of € 78,828 thousand (previous year: € 61,797 thousand) which was contained in the balance of contract liabilities at the beginning of the year under review.

The reported investment grants and subsidies largely comprise funding from the European Union and German entities for new buildings and development aid projects.

Assets amounting to € 10,168 thousand (previous year: € 11,939 thousand) have been pledged as security in the KSB Group for liabilities on the basis of standard terms and conditions. Of these, € 3,416 thousand (previous year: € 5,239 thousand) relate to property, plant and equipment, € 504 thousand (previous year: € 1,442 thousand) to cash and cash equivalents and € 6,248 thousand (previous year: € 5,258 thousand) to other securities.

As in the previous year, no liabilities were secured by land charges or similar rights in the year under review.

There were no covenant agreements for loans in the year under review, as was the case in the previous year.

Liabilities in connection with held-for-sale assets form part of the disposal group detailed in Note 10 "Assets held for sale and liabilities in connection with assets held for sale".

V. INCOME STATEMENT DISCLOSURES

14. Sales revenue

Sales revenue by contract type

€ thousands	2019	2018
Revenue from the sale of goods and goods purchased and held for resale	2,109,370	1,984,508
Services sales revenue	273,815	261,440
Sales revenue	**2,383,185**	**2,245,948**

KSB generates income from the transfer of goods and services over time or at a point in time in the segments presented.

Spare parts used for repairs are also included in the Service segment.

Unsatisfied performance obligations

€ thousands	2019	2018
Total transaction price of unsatisfied performance obligations as at the closing date (orders on hand)	**1,409,339**	**1,353,910**
of which expected sales revenue within the next 12 months	1,004,543	1,004,119
of which expected sales revenue in more than 12 months	404,796	349,791

Sales revenue by segment and timing of revenue recognition in 2019

€ thousands	Pumps segment	Valves segment	Service segment	Total
Revenue from contracts with customers	1,562,462	364,365	456,358	**2,383,185**
Timing of revenue recognition				
At a point in time	1,328,011	337,870	–	**1,665,881**
Over time	234,451	26,495	456,358	**717,304**

Sales revenue by segment and timing of revenue recognition in 2018

€ thousands	Pumps segment	Valves segment	Service segment	Total
Revenue from contracts with customers	1,469,443	340,771	435,734	**2,245,948**
Timing of revenue recognition				
At a point in time	1,307,639	319,957	–	**1,627,596**
Over time	161,804	20,814	435,734	**618,352**

15. Other income

€ thousands	2019	2018
Income from the reversal of provisions	–	8,507
Income from the reversal of impairment losses	6,533	5,321
Income from disposal of assets	3,190	1,618
Currency translation gains	740	1,146
Miscellaneous other income	22,950	16,458
	33,413	33,050

Income from current assets is primarily from the reversal of impairment losses on receivables. Other income includes income from government grants in the amount of € 4,177 thousand (previous year: € 3,855 thousand) and income from insurance compensations of € 2,745 thousand (previous year: € 2,549 thousand). Furthermore, income from claims for damages amounting to € 3,476 thousand was included in this item in the year under review.

In the 2019 financial year the presentation was changed and income from the reversal of provisions, which was previously reported under other income, is now shown under the expense items originally used to create the provisions. The reversal of provisions in the year under review totalled € 4,386 thousand.

16. Cost of materials

The cost of materials amounted to € 984,787 thousand (previous year: € 934,545 thousand) in the year under review. This item includes expenses for raw materials, consumables and supplies and for goods and services purchased.

17. Staff costs

€ thousands	2019	2018
Wages and salaries	685,412	655,614
Social security contributions and employee assistance costs	131,083	126,650
Pension costs	31,800	– 16,802
	848,295	765,462

Pension costs are reduced by the interest component included in the allocation of provisions that is reported in financial income / expense. In the previous year, pension costs included income from past service cost in the amount of € 46,434 thousand as a result of the introduction of a lump-sum option.
→ Employees

The first-time inclusion of the fully consolidated companies TOV “KSB Ukraine”, Kiev, Ukraine, IOOO “KSB BEL”, Minsk, Belarus, and KSB Ltd., Tokyo, Japan, led to an increase of 27 in the average number of employees over the year and to an increase of 26 at the closing date.

In the year under review the calculation of the average headcount and the headcount at the reporting date was changed in that employees are included irrespective of their level of employment. By contrast, the number of trainees is no longer included in the figure. The prior-year figures were restated accordingly.

Employees

	Average for the year		At reporting date	
	2019	2018*	31 Dec. 2019	31 Dec. 2018*
Wage earners	7,220	7,099	7,200	7,134
Salaried employees	8,371	8,259	8,445	8,348
	15,591	15,358	15,645	15,482

* Restated compared with presentation in the 2018 annual report

18. Other expenses

€ thousands	2019	2018
Repairs, maintenance, third-party services	129,012	118,983
Administrative expenses	97,793	89,703
Selling expenses	64,553	68,370
Rents and leases	12,547	26,640
Other staff costs	26,905	26,001
Impairment losses on trade receivables and contract assets	9,493	7,510
Currency translation losses	210	2,546
Losses from current assets	1,979	2,142
Losses from asset disposals	453	661
Miscellaneous other expenses	29,252	74,313
	372,198	416,869

The decline in expenses for rents and leases results from the first-time adoption of IFRS 16 in the year under review. In 2019, this item included expenses for leases with low-value underlying assets of € 2,347 thousand, expenses for short-term leases in the amount of € 7,591 thousand, expenses from variable lease payments of € 668 thousand and expenses for rents and other leases in the amount of € 1,941 thousand.

Other expenses essentially include expenses from the addition to provisions in connection with customer orders. Income from the reversal of such provisions is also included in this item in the year under review.

19. Finance income / expense

Interest and similar expenses include the net interest expense for pension provisions amounting to € 10,024 thousand (previous year: € 10,818 thousand). In 2019, the item included interest expense of € 1,556 thousand from the subsequent measurement of lease liabilities resulting from the adoption of IFRS 16. The negative performance of the finance income / expense compared with the previous year is principally attributable to this new feature.

Finance income / expense

€ thousands	2019	2018
Finance income	**5,741**	**4,893**
Income from equity investments	–	248
thereof from other investments	–	248
Interest and similar income	5,638	4,618
thereof from other investments	8	30
thereof from investments accounted for using the equity method	814	767
Other finance income	103	27
Finance expense	**– 17,098**	**– 16,544**
Interest and similar expenses	– 16,802	– 15,432
thereof to other investments	–	–
Write-downs on other investments	–	–
Other finance expense	– 296	– 1,112
Income / expense from / to investments accounted for using the equity method	**1,186**	**2,510**
Finance income / expense	**– 10,171**	**– 9,141**

20. Taxes on income

All income-related taxes of the consolidated companies and deferred taxes are reported in this item. Other taxes are reported in the income statement after other expenses.

Taxes on income

€ thousands	2019	2018
Effective taxes	37,478	27,663
Deferred taxes	7,454	13,981
	44,932	41,644

€ 289 thousand (previous year: € 1,376 thousand) of the effective taxes in the year under review relate to tax refunds and € 715 thousand (previous year: € 889 thousand) to tax arrears.

Contingent liabilities from income tax issues amount to € 2,627 thousand (previous year: € 1,536 thousand). At present, there are no indications that any claims will be asserted under these obligations.

Reconciliation of deferred taxes

€ thousands	2019	2018
Change in deferred tax assets	– 14,710	11,345
Change in deferred tax liabilities	894	– 4,451
Change in deferred taxes recognised in balance sheet	**– 13,816**	**6,894**
Change in deferred taxes taken directly to equity	21,564	5,024
Changes in consolidated Group / CTA* / Other	– 294	2,063
Deferred taxes recognised in income statement	**7,454**	**13,981**

* CTA = Currency translation adjustments

→ Allocation of deferred taxes

As at the reporting date, deferred tax assets of € 80,830 thousand (previous year: € 67,579 thousand) were recognised, arising from companies posting a loss in the year under review or previous year, whose realisation exclusively depends on the creation of future profit. Based on the planning figures available, KSB expects realisation to take place.

Income tax included under equity

€ thousands	2019	2018
Remeasurement of defined benefit plans	– 70,479	– 10,736
Taxes on income	21,389	3,341
Currency translation differences	3,982	– 13,276
Taxes on income	–	–
Changes in the fair value of financial instruments	– 575	– 5,624
Taxes on income	175	1,683
Other comprehensive income	**– 45,508**	**– 24,612**

Allocation of deferred taxes

	Deferred tax assets		Deferred tax liabilities	
€ thousands	**2019**	**2018**	**2019**	**2018**
Non-current assets	**3,882**	**4,191**	**49,408**	**36,708**
Intangible assets	412	608	11,978	9,089
Right-of-use assets	–	–	10,460	–
Property, plant and equipment	3,470	3,583	26,964	27,618
Non-current financial assets	–	–	6	1
Current assets	**40,408**	**41,999**	**20,801**	**20,957**
Inventories	35,147	34,997	318	51
Receivables and other current assets	5,268	7,002	20,821	20,906
Assets held for sale	– 7	–	– 338	–
Non-current liabilities	**112,271**	**84,364**	**68**	**7**
Provisions	105,127	84,167	68	–
Other liabilities	7,144 *	197	–	7
Current liabilities	**17,332**	**18,600**	**19,873**	**22,475**
Provisions	7,219	12,055	1,182	931
Other liabilities	10,559 *	6,545	18,691	21,544
Liabilities in connection with assets held for sale	– 446	–	–	–
Tax loss carryforwards	**212**	**1,132**	**–**	**–**
Gross deferred taxes – before offsetting	**174,105**	**150,286**	**90,150**	**80,147**
Offset under IAS 12.74	– 79,004	– 69,895	– 79,004	– 69,895
Net deferred taxes – after offsetting	**95,101**	**80,391**	**11,146**	**10,252**

* Deferred tax assets from non-current lease liabilities amount to 7,124 thousand and those from current lease liabilities total 3,449 thousand. They are reported under deferred taxes for other liabilities (non-current and current).

Reconciliation of income tax

€ thousands	**2019**	**2018**
Earnings before income tax (EBT)	103,432	65,561
Calculated income tax on the basis of the applicable Group tax rate (30 % as in the previous year)	31,030	19,668
Differences in tax rates	– 4,829	16
Unused tax loss carryforwards	13,852	14,124
Impairment losses on deferred taxes on tax loss carryforwards	950	–
Impairment loss on goodwill	–	6,659
Impairment losses on deferred taxes for temporary differences	–	–
Tax-exempt income	– 3,750	– 7,243
Non-deductible expenses	6,236	11,957
Prior-period taxes	1,761	– 1,587
Other tax credits	– 1,219	– 1,695
Non-deductible foreign income tax	2,746	2,471
Investments accounted for using the equity method	– 228	– 579
Miscellaneous	– 1,617	– 2,147
Current taxes on income	**44,932**	**41,644**
Current tax rate	43 %	64 %

The unchanged applicable tax rate of 30 % is a composite rate resulting from the current German corporation tax, solidarity surcharge and trade tax rates.

The introduction of new local taxes had no effects (previous year: minor effects) in the year under review. Changes in foreign tax rates led to an increase in the total tax expense of € 938 thousand (previous year: increase of € 185 thousand).

As far as net income from affiliates and other equity investments is concerned, withholding taxes incurred in connection with distributions and German taxes incurred are recognised as deferred taxes if these gains are expected to be subject to corresponding taxation, or there is no intention of reinvesting them in the long term. No deferred tax liabilities were recognised for temporary differences of € 83,098 thousand (previous year: € 71,440 thousand) in relation to affiliates and associates as it is unlikely that these temporary differences will be reversed in the foreseeable future.

No deferred tax assets were recognised for loss carryforwards amounting to € 147,818 thousand (previous year: € 124,041 thousand) because it is unlikely that there will be sufficient taxable profit available in the near future against which these deferred tax assets can be utilised. The loss carryforwards are largely available for an indefinite period. The income resulting from the use of loss carryforwards for which no deferred tax liabilities have been recog-nised was € 2,791 thousand (previous year: € 250 thousand).

Deductible temporary differences for which no deferred tax assets had to be set up amounted to € 32,586 thousand (previous year: € 34,339 thousand).

→ Reconciliation of income tax

21. Earnings after income tax – Non-controlling interests

The net profit attributable to non-controlling interests amounts to € 16,353 thousand (previous year: € 13,569 thousand) and the net loss attributable to non-controlling interests amounts to € 938 thousand (previous year: € 951 thousand). Non-controlling interests relate primarily to PAB GmbH, Frankenthal, and the interests it holds, as well as to the companies in India and China.

22. Earnings per share

Earnings per share are calculated using the weighted average number of shares as the denominator.

Earnings per share

		2019	2018
Earnings after income tax attributable to KSB SE & Co. KGaA shareholders	thousands	43,085	11,299
Additional dividend attributable to preference shareholders (0.26 per preference share) (previous year: 0.38 per preference share)	thousands	– 225	– 329
	€ thousands	**42,861**	**10,970**
Number of ordinary shares		886,615	886,615
Number of preference shares		864,712	864,712
Total number of shares		**1,751,327**	**1,751,327**
Diluted and basic earnings per ordinary share	**€**	**24.47**	**6.26**
Diluted and basic earnings per preference share	**€**	**24.73**	**6.64**

VI. ADDITIONAL DISCLOSURES ON FINANCIAL INSTRUMENTS

Financial instruments – Carrying amounts and fair values by measurement category:

Financial instruments by measurement category – Assets

Balance sheet item / Class € thousands	Measurement category	Carrying amount 31 Dec. 2019	Fair value 31 Dec. 2019	Carrying amount 31 Dec. 2018	Fair value 31 Dec. 2018
Non-current assets					
Non-current financial instruments	FVPL	697	697	660	660
Loans	Amortised cost	1,265	1,265	1,113	1,113
Current assets					
Trade receivables from third parties	Amortised cost	473,873	–	483,626	–
Trade receivables from other investments, associates and joint ventures	Amortised cost	30,228	–	34,490	–
Trade receivables from other investments, associates and joint ventures	Amortised cost	348	–	12,661	–
Currency forwards used as hedges	n / a	850	850	1,070	1,070
Other receivables and other current assets	Amortised cost	89,740	–	89,657	–
Cash and cash equivalents	Amortised cost	280,875	–	255,545	–

Financial instruments by measurement category – Equity and liabilities

Balance sheet item / Class € thousands	Measurement category	Carrying amount 31 Dec. 2019	Fair value 31 Dec. 2019	Carrying amount 31 Dec. 2018	Fair value 31 Dec. 2018
Non-current liabilities					
Financial liabilities excluding lease obligations	Amortised cost	24,714	26,510	29,274	31,621
Lease obligations	n / a	32,036	–	826	832
Current liabilities					
Financial liabilities excluding lease obligations	Amortised cost	29,303	–	48,373	–
Lease obligations	n / a	15,015	–	404	–
Trade payables	Amortised cost	252,741	–	270,211	–
Currency forwards used as hedges	n / a	3,336	3,336	3,731	3,731
Miscellaneous other financial liabilities	Amortised cost	27,890	–	29,036	–

Carrying amounts aggregated by category under IFRS 9

Balance sheet item / Class € thousands	Measurement category	31 Dec. 2019	31 Dec. 2018
Assets	Amortised cost	876,329	877,092
Equity and liabilities	Amortised cost	334,648	376,894
FVPL	FVPL	697	660

The carrying amount of financial assets measured at amortised cost approximates fair value. This is also the case for all financial liabilities shown on the balance sheet, with the exception of non-current financial liabilities. This is mainly due to the short maturities of these financial instruments.

The fair values of non-current financial liabilities and loans are determined as the present value of level 2 cash flows associated with the liabilities and loans. KSB applies an appropriate yield curve to arrive at this present value.

The fair values of the current and non-current financial instruments presented in the table above are based on prices quoted in active markets (level 1). Fair values within level 2 are determined based on a discounted cash flow method. Future cash flows from currency forwards are estimated on the basis of forward exchange rates (observable rates on the reporting date) and the contracted forward exchange rates, and are discounted with an adequate interest rate. Level 3 includes financial instruments whose fair value is determined on the basis of inputs not based on observable market data. Foreign exchange derivatives are measured using forward exchange rates. For interest rate swaps the fair value is determined through discounting the future expected cash flows based on the market interest rates and yield curves that apply to the remaining term of the contracts.

The following table shows the financial assets and liabilities measured at fair value on a recurring basis, broken down into measurement categories and the previously described hierarchy levels. There were no reclassifications carried out during the year under review.

→ Hierarchy levels

The net gains and losses from financial instruments, after taking into account the relevant tax effect, are presented in the following table:

→ Net results by measurement category

The interest shown is a component of finance income / expense. The effect from the application of the effective interest rate method is immaterial here as the interest expenses are virtually offset by the resulting interest income. The other gains and losses are partly reported in other income and other expenses.

The amount of financial assets and liabilities subject to offsetting agreements is not material.

Hierarchy levels 2019

€ thousands	Level 1	Level 2	Level 3	Total
Financial assets recognised at fair value				
Current financial instruments	697	–	–	697
Currency forwards	–	850	–	850
Financial liabilities recognised at fair value				
Currency forwards	–	3,336	–	3,336

Hierarchy levels 2018

€ thousands	Level 1	Level 2	Level 3	Total
Financial assets recognised at fair value				
Current financial instruments	660	–	–	660
Currency forwards	–	1,070	–	1,070
Financial liabilities recognised at fair value				
Currency forwards	–	3,731	–	3,731

Net results by measurement category in 2019

€ thousands	From interest and dividends	From subsequent measurement: At fair value	From subsequent measurement: Currency translation	From subsequent measurement: Impairment losses	From disposal	Net results
Amortised cost (assets)	5,741	–	– 286	– 3,395	–	2,060
Amortised cost (equity and liabilities)	– 6,819	–	– 427	–	–	– 7,246
FVPL	16	–	–	–	–	16
	– 1,062	**–**	**– 713**	**– 3,395**	**–**	**– 5,170**

Net results by measurement category in 2018

€ thousands	From interest and dividends	From subsequent measurement: At fair value	From subsequent measurement: Currency translation	From subsequent measurement: Impairment losses	From disposal	Net results
Amortised cost (assets)	4,645	–	500	– 1,997	–	3,148
Amortised cost (equity and liabilities)	– 5,992	–	43	–	–	– 5,949
FVPL	12	–	–	–	–	12
	– 1,335	**–**	**543**	**– 1,997**	**–**	**– 2,789**

Financial risks

KSB is exposed to certain financial risks as a consequence of its business activities. These risks can be classified into three areas:

KSB is firstly exposed to credit risk. Credit risk is defined as the potential default or delays in the receipt of contractually agreed payments. KSB is also exposed to liquidity risk which is the risk that an entity will be unable to meet its financial obligations, or will be unable to meet them in full. In addition, KSB is exposed to market price risk. The risk of exchange rate or interest rate changes may adversely affect the economic position of the Group. Risks from fluctuations in the prices of financial instruments are not material for KSB.

KSB limits all these risks through an appropriate risk management system, defining how these risks are addressed through guidelines and work instructions. In addition, KSB continuously monitors the current risk characteristics and regularly provides the information obtained in this way to the Managing Directors and the Supervisory Board in the form of standardised reports and individual analyses.

The three risk areas are described in detail in the following. Additional information is also provided in the group management report, in particular in the Economic Review, Report on Expected Developments, Opportunities and Risks Report sections.

Credit risk

The primary credit risk is that there is a delay in settling a receivable, or that it is not settled either in full or in part. KSB minimises this risk using a variety of measures. As a matter of principle, KSB runs credit checks on potential and existing counterparties. KSB only enters into business relationships if the results of these checks are positive. Additionally, European companies in particular take out trade credit insurance policies. As in the previous year, this applies to around 10 % of the Group's trade receivables in total. In exceptional cases KSB accepts other securities (collateral) such as guarantees. The insurance policies primarily cover the risk of loss of receivables. Moreover, cover is also taken out against political and commercial risks in the case of specific customers in selected countries. For both types of insurance, KSB has agreed deductibles, which represent significantly less than 50 % of the insured volume. As part of receivables management, KSB continuously monitors outstanding items, performs maturity analyses and establishes contact with customers at an early stage if delays in payment occur. In the case of major projects, the terms and conditions provide for prepayments, guarantees and – for export transactions – letters of credit. These also mitigate risk. KSB recognises impairment losses for the residual risk remaining in trade receivables. It regularly examines the extent to which individual receivables need to be written down for impairment. Indications of this are significant financial difficulties of the debtor, such as insolvency or bankruptcy. Receivables are derecognised when it is reasonably certain that payment cannot be expected.

The maximum default risk, excluding collateral received, corresponds to the carrying amount of the financial assets. These all have an investment grade rating.

There is no concentration of risk because the diversity of KSB's business means that it supplies a considerable number of customers in different sectors.

Liquidity risk

Liquidity management ensures that the liquidity risk is minimised in the Group and that solvency is ensured at all times. There are no concentrations of risk because KSB works with a number of credit institutions, on which strict creditworthiness requirements are imposed.

KSB generates its financial resources primarily from its operating business. These are used to finance investments in non-current assets. KSB also uses them to cover our working capital requirements. To keep these as low as possible, KSB monitors changes in inventories, contract assets, trade receivables, trade payables and contract liabilities regularly using a standardised Group reporting system.

The reporting system additionally ensures, with the help of monthly rolling cash flow planning , that the Group's centralised financial management is continuously informed about liquidity surpluses and requirements. This enables KSB to optimally meet the needs of the Group as a whole and of the individual companies. For selected companies KSB uses a cash pooling system to ensure that available cash is deployed optimally within the Group. A worldwide receivables netting procedure is also applied within the KSB Group so as to minimise both the volume of cash flows and the associated fees. In order to be able to provide the necessary collateral in the project business, KSB makes corresponding guarantee volumes available. In addition, it is always ensured that credit facilities are sufficient; KSB identifies the need for these on the basis of regular liquidity planning. This way, it can react at any time to fluctuating liquidity requirements. Approved cash loans and credit lines total approximately € 1,319.4 million (previous year: approx. € 1,283.9 million), of which € 814.9 million (previous year: € 1,012.4 million) has not yet been utilised.

Cash loans and credit lines included amounts from a syndicated loan agreement signed in December 2018 whose credit line can be used at any time. The credit line has a fixed term of five years with the option to renew twice by one year each time. In the year under review, KSB availed itself of this option for the first time and extended the fixed term of the line early, until the end of 2024.

The utilisation of cash loans and credit lines from the syndicated loan agreement by the Group was as follows at the end of the year under review:

€ thousands / Type of line	Maximum amount of line	Use as at 31 Dec. 2019
Loans	300,000	6,687
Sureties	350,000	90,723

The following tables show the contractually agreed non-discounted future cash flows of the financial liabilities (primary financial instruments) and derivative financial instruments. Interest payments on fixed-rate liabilities are determined on the basis of the fixed rate. Floating-rate interest payments are based on the last floating interest rates fixed before 31 December. Projections for future new liabilities are not included in the presentation. Based on the current state of knowledge, it is neither expected that the cash flows will take place significantly earlier, nor that the amounts will differ significantly.

Cash flows of financial liabilities 2019

€ thousands	Total	Up to 1 year	1 – 5 years	> 5 years
Financial liabilities	106,589	47,318	55,875	3,396
of which from lease obligations	49,803	16,211	30,357	3,235
Trade payables	252,741	252,741	–	–
Miscellaneous other financial liabilities	27,890	25,343	2,547	–
Derivative financial instruments – Incoming payments	– 849	– 750	– 99	–
Derivative financial instruments – Outgoing payments	3,335	3,081	254	–
	389,706	327,733	58,577	3,396

Cash flows of financial liabilities 2018

€ thousands	Total	Up to 1 year	1 – 5 years	> 5 years
Financial liabilities	**84,419**	56,101	28,005	313
Trade payables	**270,212**	270,212	–	–
Miscellaneous other financial liabilities	**29,036**	26,320	2,716	–
Derivative financial instruments – Incoming payments	**– 1,190**	– 1,062	– 128	–
Derivative financial instruments – Outgoing payments	**3,851**	3,498	353	–
	386,328	**355,069**	**30,946**	**313**

Market price risk

Global business activities expose KSB primarily to currency and interest rate risk. Any changes in market prices can affect fair values and future cash flows. Sensitivity analyses are used to determine the hypothetical impact of such market price fluctuations on earnings and equity. In doing so, KSB assumes that the portfolio at the reporting date is representative of the full year.

KSB reduces the risks resulting from changes in prices on the procurement side for orders with extended delivery dates by agreeing cost escalation clauses or, in the case of fixed-price contracts, by including the expected rate of cost increases in the sales price.

Currency risk mainly affects cash flows from operating activities. It arises when Group companies settle transactions in currencies that are not their functional currency. KSB minimises this risk using currency forwards. Further information is presented in Section III. Accounting Policies under “Financial assets and liabilities – b) Derivative financial instruments”. KSB uses micro hedges with regard to transactions already recognised and transactions that are expected in the future. The hedging instruments used share the essential terms and conditions with the underlying transactions, i.e. with regard to amount, term and quality. Internal guidelines govern the use of financial instruments. Such transactions are also subject to ongoing risk control measures. The effectiveness of hedges is determined at the beginning of the hedge and through regular prospective assessment. The aim is to ensure that there is a financial relationship between the hedge underlying and hedging instrument. The hedging instruments used are exclusively currency forwards entered into with prime-rated banks. To hedge forward exchange transactions, the Group takes out hedges where the contractual modalities of the hedging instrument essentially match those of the hedged underlying. The hedge ratio for hedges is 1:1, i.e. the volume of hedge transactions matches the designated underlyings. In order to measure the effectiveness or ineffectiveness of hedges, KSB compares the fair value of the underlying and the hedge transactions. Changes in the fair value of the derivatives are almost completely offset by changes in the fair value of the cash flows from the underlyings (dollar offset method). The change in fair value of the underlyings and hedges in the financial year therefore match the unrealised profits and losses recorded under equity. As a rule, KSB does not hedge currency risks from the translation of foreign operations into the Group currency (€). Ineffectiveness can arise from hedging currency risk if the material measurement parameters of the underlying and hedge no longer match. There was no ineffectiveness in the KSB Group in respect of currency hedges in the 2019 and 2018 financial years.

At the reporting date, the notional volume of all currency forwards was € 251,878 thousand (previous year: € 238,300 thousand). The contractual maturities of payments for currency forwards are as follows:

→ Notional volumes

The weighted average rate of hedging instruments for the main foreign currencies was:

Hedging of currency risk in 2019

Average rate USD / EUR	1.14
Average rate CNY / EUR	7.99
Average rate CHF / EUR	1.10

Hedging of currency risk in 2018

Average rate USD / EUR	1.19
Average rate GBP / EUR	0.90
Average rate SEK / EUR	10.32

The “Changes in the fair value of derivatives” table shows the change in the hedging reserve and in the cost of the hedging reserve for currency hedges before tax.

→ Changes in the fair value of derivatives

Notional volumes in 2019

€ thousands	Total	Up to 1 year	1 - 5 years	> 5 years
Currency forwards	251,878	228,453	23,425	–

Notional volumes in 2018

€ thousands	Total	Up to 1 year	1 - 5 years	> 5 years
Currency forwards	238,300	231,947	6,353	–

Fair value changes in derivatives in 2019

	OCI	
€ thousands	Cash flow hedges – Hedging reserve	Cash flow hedges – Hedging cost reserve
Currency risk		
Opening balance at 1 January	– 4,149	– 823
Effective portion of changes in fair value	4,863	965
Realisation of underlying recognised in income	– 5,434	– 1,010
Closing balance at 31 December	**– 4,719**	**– 868**

Fair value changes in derivatives in 2018

	OCI	
€ thousands	Cash flow hedges – Hedging reserve	Cash flow hedges – Hedging cost reserve
Currency risk		
Opening balance at 1 January	1,384	– 770
Effective portion of changes in fair value	– 6,272	– 459
Realisation of underlying recognised in income	739	406
Closing balance at 31 December	**– 4,149**	**– 823**

The key foreign currencies in the KSB Group are the US dollar (USD) and Chinese yuan (CNY). For the currency sensitivity analysis, KSB simulates the effects based on the notional volume of existing foreign exchange derivatives and foreign currency receivables and liabilities at the reporting date. For the analysis, a 10 % increase (decrease) in the value of the euro versus the other currencies is assumed. In the reporting year, this would have amounted to approximately € – 1.6 million (previous year: € – 0.4 million) for CNY, € 1.7 million (previous year: € 2.4 million) for USD and € 3.0 million (previous year: € 1.5 million) for the remaining currencies.

→ Currency volumes

Based on the measurement of derivatives, at the reporting date, equity and the fair value of the derivatives would have been € 12.7 million lower (higher), with € 8.0 million resulting from USD and € 4.7 million from the other currencies. At the previous year's reporting date, equity and the fair value of the derivatives would have been € 11.2 million lower (higher), with € 8.1 million resulting from USD and € 3.1 million from the other currencies.

KSB regularly monitors the interest rate risks associated with its financing activities. To avoid the negative effects of interest rate fluctuations on the international capital markets, KSB concludes interest rate hedges (interest rate swaps) where necessary, generally for long-term loans. These are used exclusively to hedge floating rate loans against rising interest rates. In the year under review, as in the previous year, no such transactions or other interest rate derivatives were recognised.

As part of the interest rate sensitivity analysis, KSB simulates a 50 basis point increase (decrease) in market interest rates and analyses the impact on the floating rate financial instruments. In the 2019 reporting year, the net interest balance would have been € 1.6 million (€ 1.1 million) (previous year: € 1.5 million (€ 1.0 million)) higher (lower).

VII. STATEMENT OF CASH FLOWS

In the statement of cash flows, KSB classifies cash flows by operating, investing and financing activities. Effects of changes in the consolidated Group and in exchange rates are eliminated in the relevant items. The effect of exchange rate changes (based on annual average rates) and changes in the consolidated Group on cash and cash equivalents is presented separately.

Changes in the presentation of the cash flow statement compared with the previous year resulting from the first-time adoption of IFRS 16 in the year under review are explained in Section III. Accounting Policies in the “Changes in accounting policies due to the first-time adoption of IFRS 16” sub-section.

Cash flows from operating activities additionally include a “cash flow” subtotal that merely comprises the net profit for the year; depreciation, amortisation and impairment losses as well as reversals of impairment losses; changes in non-current provisions; and non-cash effects, for example, of the disposal of fixed assets. This subtotal is combined with the changes in the other operating components of assets (including current financial instruments) and liabilities to determine cash flows from operating activities. Only those changes that are recognised in the income statement are taken into account.

Cash flows from investing activities exclusively reflect cash-effective acquisitions and disposals of investments in intangible assets, property, plant and equipment, non-current financial assets, and changes in term deposits with a maturity of more than 3 months, including commercial papers.

In addition to cash flows resulting from equity items (capitalisation measures and dividend payments), cash flows from financing activities also comprise cash flows arising from changes in financial liabilities.

If cash and cash equivalents include restricted cash, this is reported separately. Cash equivalents include short-term deposits with an original maturity of less than three months.

→ Changes in cash flows from financing activities

Currency volumes

€ thousands	CNY 31 Dec. 2019	CNY 31 Dec. 2018	USD 31 Dec. 2019	USD 31 Dec. 2018
Trade receivables	49,508	53,335	26,584	22,740
Trade payables	33,676	49,074	13,326	15,558
Balance	**15,832**	**4,261**	**13,258**	**7,182**

Changes in cash flows from financing activities in 2019

		Cash-effective	Not cash-effective		
€ thousands	1 Jan. 2019		Additions / Disposals / Acquisitions / Other	Exchange-rate-related changes	31 Dec. 2019
Non-current liabilities	29,274	– 4,487	–	– 73	24,714
Current liabilities	48,053	– 18,229	–	– 521	29,303
Lease liabilities	51,117 *	– 16,142	12,104	– 28	47,051
Total liabilities from financing activities	**128,444**	**– 38,858**	**12,104**	**– 622**	**101,068**
Dividend payments	–	– 7,566	–	–	–
Salary conversion (provisions for pensions)	–	– 5	–	–	–
Total cash flows from financing activities	**–**	**– 46,429**	**–**	**–**	**–**

* Restated compared with 31 Dec. 2018 due to first-time adoption of IFRS 16.

Changes in cash flows from financing activities in 2018

		Cash-effective	Not cash-effective		
€ thousands	1 Jan. 2018		Additions / Disposals / Acquisitions / Other	Exchange-rate-related changes	31 Dec. 2018
Non-current liabilities	53,759	– 23,862	–	– 623	29,274
Current liabilities	21,285	28,479	–	– 1,711	48,053
Lease liabilities	927	335	–	– 32	1,230
Total liabilities from financing activities	**75,971**	**4,952**	**–**	**– 2,366**	**78,557**
Dividend payments	–	– 15,866	–	–	–
Salary conversion (provisions for pensions)	–	2,993	–	–	–
Acquisition of minority interests	–	– 1,512	–	–	–
Total cash flows from financing activities	**–**	**– 9,433**	**–**	**–**	**–**

VIII. SEGMENT REPORTING

Segment reporting is prepared in accordance with IFRS 8 based on the management approach and corresponds to the internal organisational and management structure as well as the reporting lines to the Managing Directors as the chief operating decision-makers. In KSB's matrix organisation, management decisions are primarily taken on the basis of the key performance indicators – order intake, external sales revenue and earnings before finance income / expense and income tax (EBIT) – determined for the Pumps, Valves and Service segments. Reporting the relevant assets, number of employees and inter-segment sales revenue for these segments is not part of internal reporting. The managers in charge of these segments, which are geared to product groups, have profit and loss responsibility. They identify business opportunities across markets and industries and assess the options based on current and future market requirements. They also proactively encourage the development of new products and improvements to the available range of products. In this context, they work closely with the Sales organisations and with Operations.

The **Pumps** segment includes single- and multistage pumps, submersible pumps and associated control and drive systems. Applications include process engineering, building services, water and waste water transport, energy conversion and solids transport.

The **Valves** segment covers butterfly, globe, gate, control, diaphragm and ball valves, as well as associated actuators and control systems. Applications primarily include process engineering, building services, energy conversion and solids transport.

The **Service** segment covers the installation, commissioning, start-up, inspection, servicing, maintenance and repair of pumps, related systems and valves for all applications; as well as modular service concepts and system analyses for complete systems.

The companies can be allocated to one or more segments based on their business activities.

The amounts disclosed for the individual segments have been established in compliance with the accounting policies of the underlying consolidated financial statements.

Transfer prices for intercompany sales are determined on an arm's length basis.

There were no discontinued operations in the period under review, as in the comparative period of the previous year.

The **order intake** by segment presents order intake generated with third parties.

The **sales revenue** by segment presents sales revenue generated with third parties.

The table shows **earnings before finance income / expense and income tax (EBIT)** including non-controlling interests.

→ Segment reporting

Segment reporting

	Order intake		Sales revenue		EBIT	
€ thousands	**2019**	**2018**	**2019**	**2018**	**2019**	**2018**
Pumps segment	1,617,825	1,506,248	1,562,462	1,469,443	84,823	90,563
Valves segment	361,878	355,618	364,365	340,771	2,266	– 37,373
Service segment	474,060	441,670	456,358	435,734	26,514	21,512
Total	**2,453,763**	**2,303,536**	**2,383,185**	**2,245,948**	**113,603**	**74,702**

The EBIT of the Pumps segment includes depreciation and amortisation expense of € 54,079 thousand (previous year: € 48,802 thousand), the EBIT of the Valves segment includes depreciation and amortisation expense of € 11,566 thousand (previous year: € 32,292 thousand) and the EBIT of the Service segment includes depreciation and amortisation expense of € 16,206 thousand (previous year: € 23,397 thousand). Following the adoption of IFRS 16, depreciation on right-of-use assets (rights of use to leased assets) is included for the first time in these amounts in 2019.

€ 561,803 thousand (previous year: € 562,147 thousand) of the sales revenue presented was generated by the companies based in Germany, € 239,353 thousand (previous year: € 241,476 thousand) was generated by the companies based in

France, € 212,876 thousand (previous year: € 188,989 thousand) by the companies based in the USA, and € 1,369,153 thousand (previous year: € 1,253,336 thousand) by the other Group companies.

There were no relationships with individual customers that accounted for a material proportion of Group sales revenue.

At the reporting date, the total non-current assets of the KSB Group amounted to € 682,708 thousand (previous year: € 611,603 thousand), with € 240,362 thousand (previous year: € 214,857 thousand) being attributable to the companies based in Germany and € 442,346 thousand (previous year: € 396,746 thousand) being attributable to the other Group companies. They include intangible assets, property, plant and equipment, investments accounted for using the equity method and since 2019 also right-of-use assets (rights of use to leased assets) under IFRS 16. Non-current financial instruments and deferred tax assets are not included.

IX. OTHER DISCLOSURES

Contingent liabilities

Contingent liabilities to third parties and other investments are as follows at the balance sheet date:

Contingent liabilities

€ thousands	2019	2018
From legal disputes	870	23,700
From warranty agreements	1,500	–
From other tax matters	5,730	–
From other contingent liabilities	479	393
	8,579	24,093

In the context of establishing the contingent liabilities, estimates are required in particular with regard to the existence of any obligations and in relation to the probability and amount of an outflow of resources.

For the contingent liabilities from legal disputes, material estimation uncertainties result for KSB with regard to the expected outcome of current court proceedings and the potentially resultant obligations and risks. There are no insurance claims to be covered, as in the previous year.

At present, KSB does not expect a payment obligation for the total of contingent liabilities listed in the table of that name.

In addition, the KSB Group has contingent liabilities towards associates and joint ventures of € 7,800 thousand (previous year: € 7,367 thousand). The extent to which these will result in a cash outflow depends on the future business performance of the respective company.

The contingent assets of KSB at the reporting date total € 1,200 thousand (previous year: none). They relate to a reimbursement claim for the full amount towards an insurance company due to a settlement agreement to be approved by the Annual General Meeting.

Other financial obligations

As in the previous year, there are no purchase price obligations from acquisitions of companies and no payment obligations from capitalisation measures at Group companies.

The aggregate purchase obligation for investments amounts to € 29,484 thousand (previous year: € 12,418 thousand). Most of the corresponding payments are due in 2020.

Leases

KSB as lessee

Lease agreements in which KSB is the lessee mainly relate to real estate and motor vehicles. The terms of leases and additional cancellation and renewal options for one or both contracting parties are agreed individually and at different conditions.

The total cash outflow from leases, in the form of the repayment of lease liabilities, outgoings for leases relating to low-value assets and for short-term leases as well as variable lease payments, totalled € 26,748 thousand in the year under review.

KSB as lessor

KSB acts as a lessor in the context of operating leases. This relates, among other things, to the leasing of real estate.

The maturity analysis of future lease payments from operating leases is as follows:

→ Maturity analysis of future operating lease payments

Maturity analysis of future operating lease payments

€ thousands	2019
Due within 1 year	1,682
Due between 1 and 2 years	1,377
Due between 2 and 3 years	979
Due between 3 and 4 years	584
Due between 4 and 5 years	390
Due after more than 5 years	350
	5,362

The financing leases where KSB acts as a lessor have minor sig-nificance for KSB and do not have any material effect on the consolidated financial statements.

Research and development costs

Research and development costs in the year under review amounted to € 50,529 thousand (previous year: € 49,228 thousand). Most of these costs are order-related expenses.

Related party disclosures

Pursuant to section 21(1) of the 28 Dec. 2007 version of the WpHG [*Wertpapierhandelsgesetz* – German Securities Trade Act], KSB Stiftung [KSB Foundation], Stuttgart, notified us on 21 May 2008 that its voting interest in KSB SE & Co. KGaA, Frankenthal / Pfalz exceeded the 75.00 % threshold on 5 May 2008 and amounted to 80.24 % (711,453 voting shares) on this date. 0.54 % of the voting rights (4,782 voting shares) were held directly by KSB Stiftung, Stuttgart, and 79.70 % (706,671 voting shares) were attributed to KSB Stiftung, Stuttgart, pursuant to section 22(1), sentence 1, No. 1 of the 28 Dec. 2007 version of the WpHG. The voting rights attributed to KSB Stiftung, Stuttgart, were held by Johannes und Jacob Klein GmbH, Frankenthal / Pfalz. In 2018, the voting interest of Johannes und Jacob Klein GmbH increased to 83.94 %.

Related parties are KSB Management SE as general partner, KSB Stiftung, Stuttgart, and Kühborth Stiftung GmbH, Stuttgart, each with their direct and indirect interests, joint ventures and associates. These are primarily Johannes und Jacob Klein GmbH, Frankenthal / Pfalz, Palatina Versicherungsservice GmbH, Frankenthal / Pfalz, and the companies of Abacus alpha GmbH, Frankenthal / Pfalz. Furthermore, related parties also include entities controlled or jointly controlled by the Managing Directors of Johannes und Jacob Klein GmbH, the Managing Directors or members of the Administrative Board of KSB Management SE or the Managing Directors or members of the Advisory Board of Klein, Schanzlin & Becker GmbH.

The members of the Supervisory Board, the Managing Directors of KSB Management SE and the members of the Administrative Board of KSB Management SE are deemed to be related parties of KSB SE & Co. KGaA. In the year under review, two members of the Administrative Board held an immaterial share of interests in KSB SE & Co. KGaA.

As part of normal business activities, the company maintains business relationships with numerous companies, including affiliates that are deemed to be related parties.

The company maintains relationships with affiliates in the following areas:

- Buying / selling assets
- Sourcing / providing services
- Usage / transferring usage of assets

Balances and transactions between KSB SE & Co. KGaA and its subsidiaries, which are related parties, have been eliminated during the consolidation process and are not explained in further detail. Details regarding transactions between the KSB Group and other related parties are provided below.

The following table shows services provided and used, as well as pending receivables and liabilities owed from and to related parties:

→ Services, receivables and liabilities in dealings with related parties

The liabilities to KSB Management SE are due in the short term. As the legal representative, KSB Management SE provides management services and accepts KSB's liability as general partner. It receives reimbursement of its costs as a management fee and 4 % of its share capital for acceptance of liability.

Further information on joint ventures and associates (related party disclosures) is presented in Section IV. Balance Sheet Disclosures – Notes No. 6 "Investments accounted for under the equity method", Notes No. 8 "Contract assets, trade receivables and other financial and non-financial assets" and Notes No. 13 "Liabilities", and in Section IX. Other Disclosures – Contingent Liabilities.

Services, receivables and liabilities in dealings with related parties

	Sales of goods and services		Purchases of goods and services		Receivables		Liabilities	
€ thousands	2019	2018	2019	2018	31 Dec. 2019	31 Dec. 2018	31 Dec. 2019	31 Dec. 2018
KSB Management SE	1	62	5,345	5,817	–	–	4,742	3,340
Klein, Schanzlin & Becker GmbH	–	–	–	–	–	–	–	–
KSB Stiftung and Kühborth-Stiftung GmbH	–	–	–	–	–	–	–	–
Johannes und Jacob Klein GmbH	–	222	–	23	–	1	–	1
Subsidiaries of Johannes und Jacob Klein GmbH	517	665	3,280	2,933	165	163	42	34
Associates / joint ventures of Johannes und Jakob Klein GmbH	–	–	7	142	–	–	–	1
Other related parties (corporate bodies), excluding "Management remuneration"	20	24	–	–	–	–	–	–

The transactions in relation to Johannes und Jacob Klein GmbH are based on a rental and services agreement. In addition, Johannes und Jacob Klein GmbH received dividend payments.

Transactions with subsidiaries of Johannes und Jacob Klein GmbH comprise transactions with Palatina Versicherungsservice GmbH, Abacus alpha GmbH, Abacus Resale GmbH, Abacus Experten GmbH, Salinnova GmbH and airinotec GmbH). There were minor transactions with associates or joint ventures of KSB with Johannes und Jacob Klein GmbH in the year under review.

A services agreement for insurances is in place between Palatina Versicherungsservice GmbH and KSB SE & Co. KGaA. Abacus Experten GmbH concluded a number of service agreements with KSB SE & Co. KGaA; there is a framework delivery and service agreement with Abacus Resale GmbH for the purchase of returns and the provision of additional related services. In addition, products were delivered to the company as part of the normal business activities. KSB SE & Co. KGaA and Abacus alpha GmbH have also concluded service agreements. KSB products were delivered to airinotec GmbH and Salinnova GmbH as part of normal business activities. KSB purchased spare parts from Salinnova GmbH.

Transactions with related parties are performed at arm's length.

Pending balances at the year end are unsecured, do not accrue interest and are settled by means of payments. No guarantees were given or received. The receivables presented here, as in the previous year, are not subject to write-downs and no provisions have been created for this purpose.

Disclosures and information on affiliates and investments accounted for using the equity method provided in other section of these Notes refer to relations covering the supply of products and services on an arm's length basis, unless stated otherwise.

Pursuant to IAS 24, the remuneration of key management personnel of the Group must be disclosed. The following table presents the relevant information for the KSB Group on remuneration paid to the Managing Directors and the members of the Administrative Board of KSB Management SE by KSB under an expense reimbursement agreement.

Management remuneration

€ thousands	31 Dec. 2019	31 Dec. 2018
Short-term benefits (total remuneration)	3,775	3,722
Post-employment benefits	1,374	1,929
Other long-term benefits	–	–
Termination benefits	–	–
Share-based payments	–	–
Total	**5,149**	**5,651**

In the year under review, KSB Management SE received from KSB SE & Co. KGaA reimbursed expenses of € 196 thousand (previous year: € 166 thousand) for managing KSB's business in addition to the aforementioned reimbursement of expenses for remunerating the members of the governing bodies of KSB Management SE.

KSB has set aside provisions of € 784 thousand (previous year: € 684 thousand) for pension obligations to current Managing Directors of KSB Management SE, and € 43,505 thousand (previous year: € 41,648 thousand) for pension obligations to former members of the Board of Management of KSB AG (excluding the Managing Directors of KSB Management SE) and their surviving dependants as at 31 December 2019; total benefits paid to these persons amounted to € 2,648 thousand in the year under review (previous year: € 2,548 thousand).

The short-term benefits paid to members of the Supervisory Board amount to € 798 thousand for the 2019 financial year (previous year: € 932 thousand). Provisions of € 452 thousand (previous year: € 482 thousand) were set aside for members of the Supervisory Board at the end of the financial year.

The members of the Supervisory Board, the Managing Directors and the members of the Administrative Board of the general partner are listed before the information on the proposal on the appropriation of net retained earnings for KSB SE & Co. KGaA.

Auditors

PricewaterhouseCoopers GmbH Wirtschaftsprüfungsgesellschaft, based in Frankfurt am Main with an office in Mannheim, were appointed as auditors and group auditors for financial year 2019 at the Annual General Meeting of KSB SE & Co. KGaA on 29 May 2019. Overall, fees (including expenses) amounting to € 874 thousand were recognised as expenses. Of this, € 719 thousand relate to audit services, € 116 thousand to other certification services and € 39 thousand to other services.

The audit fees include costs for the audit of the consolidated financial statements and of the statutory annual financial statements of KSB SE & Co. KGaA and the German subsidiaries included in the consolidated financial statements. The fees for other certification services primarily include attestation services outside of the audit of the annual financial statements. The fees for other services mainly include fees for project-specific consultancy services in IT, risk management and compliance.

Use of exemption option

KSB Service GmbH, Frankenthal, KSB Service GmbH, Schwedt, and Uder Elektromechanik GmbH, Friedrichsthal, have made partial use of the exemption provision under section 264(3) of the HGB.

Events after the Reporting Period

The global spread of the novel coronavirus has increased steadily in the first few months of 2020. The scale and duration of any adverse effect on production as well as on KSB's procurement and sales markets both in China and in the Asian, European and American economies are impossible to predict and therefore quantify right now at the time of preparation of the consolidated financial statements. KSB assumes that the spread of the coronavirus will have a negative impact on the Group.

In addition, there were no events after the close of the financial year that are of particular significance for the Group's net assets, financial position and result of operations.

German Corporate Governance Code

The Managing Directors and the Supervisory Board of KSB SE & Co. KGaA issued the current Statement of Compliance with the recommendations of the Government Commission on the German Corporate Governance Code in accordance with section 161 AktG [*Aktiengesetz* – German Public Companies Act] on 19 December 2019. The Statement of Compliance is published on the KSB web site (www.ksb.com) and has thus been made permanently accessible.

List of Shareholdings

Affiliates (national and international)

Cons. No.	Name and seat	Country	Activity*	Capital share in %	Group share of capital in %	Held by No.
1	Canadian Kay Pump Limited, Mississauga / Ontario	Canada	H	100.00	100.00	
2	KSB Limited, Pimpri (Pune)	India	P	40.54	40.54	1
3	KSB MIL Controls Limited, Annamanada	India	P	49.00	19.86	2
				51.00	51.00	
4	Pofran Sales & Agency Limited, Pimpri (Pune)	India	S	100.00	40.54	2
5	Dynamik-Pumpen GmbH, Stuhr	Germany	SVC	100.00	100.00	
6	Hydroskepi GmbH, Amaroussion (Athens)	Greece	H	100.00	100.00	
7	KAGEMA Industrieausrüstungen GmbH, Pattensen	Germany	P	100.00	100.00	
8	KSB Armaturen Verwaltungs- und Beteiligungs-GmbH, Frankenthal	Germany	H	100.00	100.00	
9	OOO “KSB”, Moscow	Russia	S	100.00	100.00	8
10	IOOO “KSB BEL”, Minsk	Belarus	S	98.10	98.10	9
				1.90	1.90	8
11	TOV “KSB Ukraine”, Kiev	Ukraine	S	100.00	100.00	9
12	KSB, Bombas e Válvulas, SA, Albarraque	Portugal	S	92.00	92.00	
				1.00	1.00	26
				1.00	1.00	67
				1.00	1.00	15
13	KSB Chile S.A., Santiago	Chile	S	100.00	100.00	
14	KSB de Mexico, S.A. de C.V., Querétaro	Mexico	P	100.00	100.00	
15	KSB FINANZ S.A., Echternach	Luxembourg	H	100.00	100.00	
16	Aplicaciones Mecánicas Válvulas Industriales, S.A. (AMVI), Burgos	Spain	P	100.00	100.00	15
17	Dalian KSB AMRI Valves Co., Ltd., Dalian	China	P	100.00	100.00	15
18	KSB Australia Pty Ltd, Bundamba QLD	Australia	S	100.00	100.00	15
19	KSB New Zealand Limited, Albany / Auckland	New Zealand	S	100.00	100.00	18
20	KSB Belgium S.A., Bierges-lez-Wavre	Belgium	S	100.00	100.00	15
21	KSB Service Belgium S.A./N.V., Bierges-lez-Wavre	Belgium	SVC	100.00	100.00	20
22	KSB BRASIL LTDA., Várzea Paulista	Brazil	P	100.00	100.00	15
23	KSB Compañía Sudamericana de Bombas S.A., Carapachay (Buenos Aires)	Argentina	P	95.00	95.00	15
				5.00	5.00	
24	KSB Finance Nederland B.V., Zwanenburg	The Netherlands	H	100.00	100.00	15
25	DP industries B.V., Alphen aan den Rijn	The Netherlands	P	100.00	100.00	24
26	KSB Nederland B.V., Zwanenburg	The Netherlands	S	100.00	100.00	24
27	KSB Italia S.p.A., Milan	Italy	S	99.00	99.00	15
				1.00	1.00	
28	KSB ITUR Spain S.A., Zarautz	Spain	P	100.00	100.00	15
29	KSB Limited, Loughborough	United Kingdom	S	100.00	100.00	15
30	KSB Middle East FZE, Dubai	U.A.E.	S	100.00	100.00	15
31	KSB Österreich Gesellschaft mbH, Vienna	Austria	S	100.00	100.00	15
32	KSB-Pompa, Armatür Sanayi ve Ticaret A.S., Ankara	Turkey	P	100.00	100.00	15

* P = Production, S = Sales, SVC = Service, H = Holding

Cons. No.	Name and seat	Country	Activity*	Capital share in %	Group share of capital in %	Held by No.
33	KSB Pumps and valves L.t.d., Dom ale	Slovenia	S	100.00	100.00	15
34	KSB Pumps Inc., Mississauga / Ontario	Canada	S	100.00	100.00	15
35	KSB Pumps (S.A.) (Pty) Ltd., Germiston (Johannesburg)	South Africa	H	100.00	100.00	15
36	KSB Pumps and Valves (Pty) Ltd., Germiston (Johannesburg)	South Africa	P	70.00	70.00	35
37	FORTY FOUR ACTIVIA PARK (PTY) LTD, Germiston (Johannesburg)	South Africa		100.00	70.00	36
38	KSB S.A.S., Gennevilliers (Paris)	France	P	100.00	100.00	15
39	KSB POMPES ET ROBINETTERIES S.à.r.l. d'Associé unique, Casablanca	Morocco	S	100.00	100.00	38
40	KSB Service EITB-SITELEC S.A.S., Montfavet	France	SVC	100.00	100.00	38
41	KSB Service Energie S.A.S.U., Rambervillers	France	SVC	100.00	100.00	38
42	KSB SERVICE COTUMER S.A.S., Déville lès Rouen	France	SVC	100.00	100.00	41
43	Société de travaux et Ingénierie Industrielle S.A.S., Déville lès Rouen	France	SVC	100.00	100.00	42
44	SPI Energie S.A.S., La Ravoire	France	SVC	100.00	100.00	38
45	KSB Shanghai Pump Co., Ltd., Shanghai	China	P	80.00	80.00	15
46	PAB Pumpen- und Armaturen-Beteiligungsges. mbH, Frankenthal	Germany	H	51.00	51.00	15
47	KSB America Corporation, Richmond / Virginia	USA	H	100.00	51.00	46
48	GIW Industries, Inc., Grovetown / Georgia	USA	P	100.00	51.00	47
49	KSB Dubric, Inc., Comstock Park / Michigan	USA	SVC	100.00	51.00	47
50	KSB, Inc., Richmond / Virginia	USA	S	100.00	51.00	47
51	KSB, Inc. – Western Division, Bakersfield / California	USA	SVC	100.00	51.00	47
52	Standard Alloys Incorporated, Port Arthur / Texas	USA	SVC	100.00	51.00	47
53	PT. KSB Indonesia, Cibitung	Indonesia	P	94.06	94.10	15
				5.94	5.90	
54	PT. KSB Sales Indonesia, Cibitung	Indonesia	S	99.00	99.00	53
				1.00	1.00	
55	SISTO Armaturen S.A., Echternach	Luxembourg	P	52.85	52.85	15
56	KSB Finland Oy, Kerava	Finland	S	100.00	100.00	
57	KSB Hungary Kft., Budapest	Hungary	S	100.00	100.00	
58	KSB Korea Ltd., Seoul	South Korea	S	100.00	100.00	
59	KSB Limited, Hong Kong	China	S	100.00	100.00	
60	KSB Pump & Valve Technology Service (Tianjin) Co., Ltd, Tianjin	China	SVC	100.00	100.00	59
61	KSB Ltd., Tokyo	Japan	S	100.00	100.00	
62	KSB Norge AS, Ski	Norway	S	100.00	100.00	
63	KSB Polska Sp. z o.o., Ozarow-Mazowiecki	Poland	S	100.00	100.00	
64	KSB Pumps Co. Ltd., Bangkok	Thailand	S	40.00	40.00	
65	KSB Pumps Company Limited, Lahore	Pakistan	P	58.89	58.89	
66	KSB-Pumpy+Armatury s.r.o., koncern, Prague	Czech Republic	S	100.00	100.00	
67	KSB (Schweiz) AG, Oftringen	Switzerland	S	100.00	100.00	
68	KSB Seil Co., Ltd., Busan	South Korea	P	100.00	100.00	
69	KSB Service GmbH, Frankenthal	Germany	SVC	100.00	100.00	
70	KSB Service GmbH, Schwedt	Germany	SVC	100.00	100.00	
71	KSB Singapore (Asia Pacific) Pte Ltd, Singapore	Singapore	S	100.00	100.00	
72	KSB Malaysia Pumps & Valves Sdn. Bhd., Shah Alam	Malaysia	S	100.00	100.00	71
73	KSB PHILIPPINES, INC., Makati City	Philippines	S	100.00	100.00	71
74	KSB Vietnam Co., Ltd, Long Thanh District	Vietnam	S	100.00	100.00	71
75	KSB Sverige Aktiebolag AB, Gothenburg	Sweden	S	100.00	100.00	

* P = Production, S = Sales, SVC = Service, H = Holding

Cons. No.	Name and seat	Country	Activ-ity*	Capital share in %	Group share of capital in %	Held by No.
76	KSB Sverige Fastighets AB, Gothenburg	Sweden	S	100.00	100.00	75
77	PUMPHUSET Sverige AB, Sollentuna	Sweden	SVC	100.00	100.00	75
78	VM Pumpar AB, Gothenburg	Sweden	S	100.00	100.00	75
79	KSB Taiwan Co., Ltd., New Taipei City	Taiwan	S	100.00	100.00	
80	KSB Tech Pvt. Ltd., Pimpri (Pune)	India		100.00	100.00	
81	KSB Valves (Changzhou) Co., Ltd., Jiangsu	China	P	100.00	100.00	
82	PMS-BERCHEM GmbH, Neuss	Germany	SVC	100.00	100.00	
83	Pumpen-Service Bentz GmbH, Reinbek	Germany	SVC	100.00	100.00	
84	REEL s.r.l., Ponte di Nanto	Italy	P	100.00	100.00	
85	Uder Elektromechanik GmbH, Friedrichsthal	Germany	SVC	100.00	100.00	

Joint ventures (national and international)

Cons. No.	Name and seat	Country	Activ-ity*	Capital share in %	Group share of capital in %	Held by No.	Equity** € thousands	Net profit / loss for the year** € thousands
	National							
86	Nikkiso-KSB GmbH i.L., Pegnitz	Germany		50.00	50.00		–	–
	International							
87		Turkey	P	55.00	55.00	32	106	33
88	KSB Pumps Arabia Ltd., Riyadh	Saudi Arabia	S	50.00	50.00	15	17,949	– 755
89	KSB Service LLC, Abu Dhabi	U.A.E.	S	49.00	49.00		7,933	456
90	Shanghai Electric-KSB Nuclear Pumps and Valves Co., Ltd., Shanghai	China	P	45.00	45.00		30,622	1,032

Associates (national and international)

Cons. No.	Name and seat	Country	Activ-ity*	Capital share in %	Group share of capital in %	Held by No.	Equity** € thousands	Net profit / loss for the year** € thousands
	International							
91	Motori Sommersi Riavvolgibili S.r.l., Cedegolo	Italy		25.00	25.00		5,506	3,007

* P = Production, S = Sales, SVC = Service, H = Holding
** Data according to latest annual financial statements under IFRS

Companies not consolidated because of immateriality – Affiliates (national and international)

Cons. No.	Name and seat	Country	Activ-ity*	Capital share in %	Group share of capital in %	Held by No.	Equity** € thousands	Net profit / loss for the year** € thousands	
	National								
92	FluidPartner GmbH, Stein	Germany	SVC	51.00	51.00	69	11	2	■
	International								
93	KSB Algérie Eurl, Bordj el Kifane (Alger)	Algeria	S	100.00	100.00	15	1,236	281	
94		Slovakia	S	100.00	100.00		346	− 14	
95	KSB Colombia SAS, Funza (Cundinamarca)	Colombia	S	100.00	100.00	15	531	216	
96	KSB Perú S.A., Lurín	Peru	S	100.00	100.00		1,455	143	
97	KSB Pumpe i Armature d.o.o. Beograd, Bel-grade	Serbia	S	100.00	100.00	33	149	13	
98	KSB pumpe i armature d.o.o., Rakov Potok	Croatia	S	100.00	100.00	33	202	− 2	
99	KSB ZAMBIA LIMITED, Kitwe	Zambia	SVC	80.00	80.00	35	11	− 24	
100	Techni Pompe Service Maroc (TPSM), Casablanca	Morocco	SVC	100.00	100.00	39	− 563	− 6	
101	TOO "KSB Kazakhstan", Almaty	Kazakhstan	S	100.00	100.00	9	202	29	
102	KSB PUMPS AND VALVES LIMITED, Nairobi	Kenya	S	100.00	100.00	35	–	0	

* P = Production, S = Sales, SVC = Service, H = Holding
** Data according to latest annual financial statements under IFRS
■ Prior-period figures

Supervisory Board

Dr Bernd Flohr, Dipl.-Kfm., Dipl.-Soz., Geislingen
Former Executive Board Member of WMF AG (Chair)

Alois Lautner, Lathe Operator, Kirchenthumbach
Deputy Chair of the Pegnitz Works Council of KSB SE & Co. KGaA
(Member and Deputy Chair of the Supervisory Board until 31 Dec. 2019)

René Klotz, NC Programmer, Heßheim
Chair of the General Works Council of KSB SE & Co. KGaA and KSB Service GmbH
(Deputy Chair of the Supervisory Board since 17 Jan. 2020)

Claudia Augustin, Office Management Assistant, Pegnitz
Deputy Chair of the Pegnitz Works Council of KSB SE & Co. KGaA

Klaus Burchards, Dipl.-Kfm., Stuttgart
Independent Auditor

Arturo Esquinca, Dipl.-Chemieing., MBA, Forch, Switzerland
M&A and Strategy Consultant

Klaus Kühborth, Dipl.-Wirtsch.-Ing., Frankenthal
Managing Director of Johannes und Jacob Klein GmbH

Birgit Mohme, Industrial Business Management Assistant, Frankenthal
2. Delegate of IG Metall Ludwigshafen / Frankenthal

Thomas Pabst, Dipl.-Ing., Freinsheim
Head of the Energy market segment of KSB SE & Co. KGaA

Prof. Dr.-Ing. Corinna Salander, Dipl.-Physikerin, Dresden
Director of the German Centre for Railway Traffic Research at Eisenbahn-Bundesamt [Federal Railway Authority]

Harald Schöberl, Industrial Business Management Assistant, Plech
Full-time Member of the Pegnitz Works Council of KSB SE & Co. KGaA

Volker Seidel, Electrical and Electronics Installer, Münchberg
1. Delegate of IG Metall Ostoberfranken

Gabriele Sommer, Dipl.-Geol., Wörthsee[1)]
Global Head of Human Resources TÜV SÜD AG

Mandates of KSB Supervisory Board members on the Supervisory Board / Board of Directors of other companies

1) TÜV SÜD Industrie Service GmbH, Munich, Germany
TÜV SÜD Auto Service GmbH, Stuttgart, Germany

Legal Representatives

Managing Directors of KSB Management SE

Dr Stephan Jörg Timmermann, CEO, Augsburg
Strategy, Human Resources, Communications, Internal Audits, Legal & Compliance, Patents & Trademarks, as well as the Region Europe

Area of responsibility since 10 February 2020: Spokesperson for Management. Strategy, Human Resources, Communications, Internal Audits, Legal & Compliance, Patents & Trademarks, the Mining and Valves market segments, as well as the Regions Europe West and Americas North

Dr Stephan Bross, Freinsheim[1)]
Global Operations, Research and Development / Technology / Complexity, Digital Transformation, Committees and Associations, the Corporate Units Pumps and Valves, as well as the Region Asia West and the Region Middle East / Africa

Area of responsibility since 10 February 2020: Global Operations, Research and Development, Technology and Processes, Digital Transformation, Committees and Associations, the Energy and Chemicals / Petrochemicals market segments, as well as the Regions Asia South / Pacific and Asia West

Ralf Kannefass, Regensburg[2)]
Sales and Marketing, Service, Project Management, as well as the Regions Asia North and Asia South / Pacific

Area of responsibility since 10 February 2020: Sales and Marketing, as well as the Water / Waste Water, General Industry, Building Services and KSB SupremeServ market segments, and the Regions Europe North / East, Asia North, Middle East / Africa and Americas South

Dr Matthias Schmitz, Frankenthal[3)]
Taxes, Controlling KSB Group, Finance / Accounting, Coordination Shared Services, Information Technology and Procurement, as well as the Regions Americas North and Americas South

Area of responsibility since 10 February 2020: Taxes, Controlling KSB Group, Finance, Accounting, Coordination Shared Services, Information Technology and Procurement, as well as the Region Europe Central.

Mandates of the Managing Directors on the Board of Directors of KSB companies

1) KSB Pumps (S.A.) (Pty) Ltd., Germiston (Johannesburg), South Africa
KSB Pumps and Valves (Pty) Ltd., Germiston (Johannesburg), South Africa
KSB Limited, Pimpri (Pune), India
KSB MOTOR TEKNOLOJİLERİ SANAYİ VE TİCARET ANONİM ŞİRKETİ, Ankara, Turkey

2) SISTO Armaturen S.A., Echternach, Luxembourg
KSB Shanghai Pump Co., Ltd., Shanghai, China
Shanghai Electric-KSB Nuclear Pumps and Valves Co., Ltd., Shanghai, China

3) KSB FINANZ S.A., Echternach, Luxembourg
KSB Finance Nederland B.V., Zwanenburg, The Netherlands
Canadian Kay Pump Limited, Mississauga / Ontario, Canada
KSB America Corporation, Richmond / Virginia, USA
KSB Limited, Pimpri (Pune), India
KSB Shanghai Pump Co., Ltd., Shanghai, China
Shanghai Electric-KSB Nuclear Pumps and Valves Co., Ltd., Shanghai, China
GIW Industries, Inc., Grovetown / Georgia, USA
KSB BRASIL LTDA., Várzea Paulista, Brazil
KSB Pumps Arabia Ltd., Riyadh, Saudi Arabia

Members of the Administrative Board of KSB Management SE

Oswald Bubel, Chair, Saarbrücken
Managing Director of Hager Electro GmbH & Co. KG

Monika Kühborth, Deputy Chair, Homburg
Managing Director of Klein, Schanzlin & Becker GmbH

Günther Koch, Ludwigshafen

Dr Harald Schwager, Speyer[1)]
Deputy Chairman of the Executive Board of
Evonik Industries AG

Andrea Teutenberg, Berlin[2)]
Managing Director of Orange12 GmbH

Mandates on statutory Supervisory Boards

1) Evonik Nutrition & Care GmbH, Essen, Germany (Chair)
Evonik Resource Efficiency GmbH, Essen, Germany (Chair)
Evonik Performance Materials GmbH, Essen, Germany (Chair)

2) Bauer AG, Schrobenhausen, Germany

Proposal on the Appropriation of the Net Retained Earnings of KSB SE & Co. KGaA

We will propose to the Annual General Meeting on 13 May 2020 that the net retained earnings of € 67,363,764.33 of KSB SE & Co. KGaA be appropriated as follows:

Proposal for the appropriation of net retained earnings

€	
Dividend of € 8.50 per ordinary no-par-value share	7,536,227.50
Dividend of € 8.76 per preference no-par-value share	7,574,877.12
Total	**15,111,104.62**
Carried forward to new account	**52,252,659.71**
	67,363,764.33

Frankenthal, 12 March 2020

KSB Management SE

The Managing Directors

The annual financial statements of KSB SE & Co. KGaA were prepared in accordance with German accounting principles. They are published in the *Bundesanzeiger* [German Federal Gazette]. The annual financial statements can also be downloaded from our web site at www.ksb.com, or sent in print form on request.