

Group Management Report

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Basic Principles of the Group

Group Business Model

The KSB Group's mission is to supply customers around the world with top-quality pumps and valves as well as related systems. It also provides a wide range of support services to users of these products.

KSB SE & Co. KGaA (until 17 January 2018: KSB Aktiengesellschaft), Frankenthal/Pfalz, Germany, as the parent company, directly or indirectly holds the shares in the companies belonging to the Group. Besides it, 9 domestic and 74 foreign companies are fully consolidated; 6 other companies are accounted for under the equity method. KSB is currently represented in over 40 countries with its own subsidiaries.

As well as KSB SE & Co. KGaA itself, the companies in the KSB Group with the highest sales revenue are

- KSB S.A.S., Gennevilliers (Paris), France
- KSB Shanghai Pump Co., Ltd., Shanghai, China
- GIW Industries, Inc., Grovetown/Georgia, USA
- KSB Limited, Pimpri (Pune), India
- KSB Service GmbH, Frankenthal, Germany
- KSB BRASIL LTDA., Várzea Paulista (Brazil)
- KSB Italia S.p.A., Milan, Italy

The basic business model has not changed during the year under review. External economic and political changes, however, have had a partial effect on business. These are – where relevant and material to KSB – described in the following sections.

ORGANISATION, MANAGEMENT AND CONTROL

KSB AG changed its legal form to that of an SE & Co. KGaA by entry in the *Handelsregister* [German Commercial Register] on 17 January 2018. The partnership limited by shares [*Kommanditgesellschaft auf Aktien* – KGaA] is a common legal form in Germany for companies with a family- and foundation-dominated ownership structure. The Annual General Meeting of KSB AG adopted a resolution on 10 May 2017 on the announced change in the legal form of the company. 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, a subsidiary of the non-profit KSB Stiftung [KSB Foundation] and the 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.

Managers and employees implement the strategy and instructions of the Managing Directors within an organisation that is structured according to responsibilities for product groups, corporate functions and regions.

All organisational units in the KSB Group act with the aim of ensuring sustainable, profitable growth to secure both KSB's financial independence and its medium- and long-term future. KSB is monitored by a Supervisory Board consisting of twelve members. The Annual General Meeting of shareholders appoints six members of the Supervisory Board, with the remaining six being delegated by the employees under the terms of the *Mitbestimmungsgesetz* [German Co-determination Act].

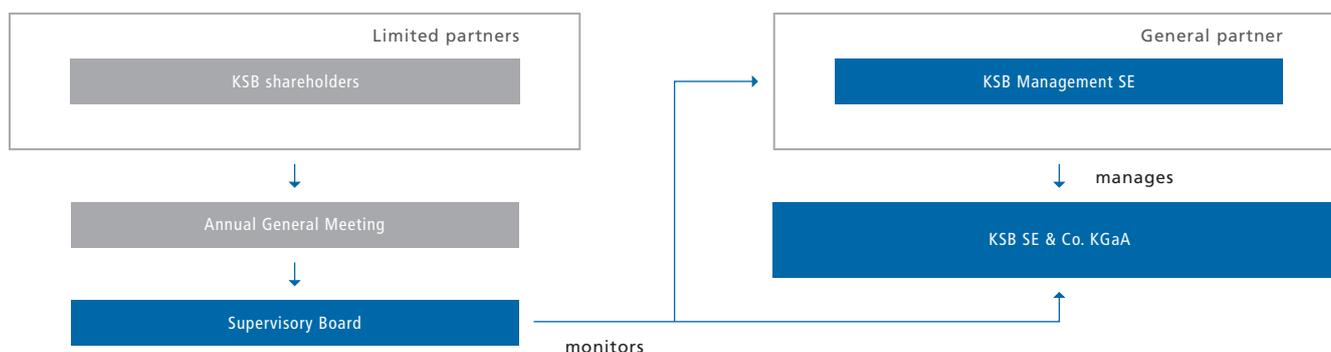
The KSB Group organises its business activities in three segments based on product groups: Pumps, Valves and Service. The Pumps segment covers single- and multistage pumps, and associated control and drive systems. Applications are industry (manufacturing, chemical/petrochemical, transport), energy supply, water transport and waste water treatment, construction/building services and the hydraulic transport of solids in mining. The Valves segment covers butterfly, globe, gate, control, diaphragm and ball valves, as well as associated actuators and control systems. The applications for these products are essentially identical to those for pumps. The Service segment, for which KSB launched its own brand, KSB SupremeServ, in May 2018, covers the installation, commissioning, start-up, inspection, servicing, maintenance and repair of pumps, related systems and valves for all these applications, as well as modular service concepts and system analyses for complete systems.

MARKETS AND LOCATIONS

Within the KSB Group, centrifugal pumps account for around two thirds of sales revenue. These pumps, as well as valves, are sold to engineering contractors, OEMs and end users or, in some cases, distributed via dealers. The same applies to control and monitoring systems, and to package units with pumps and valves.

The largest and best developed sales market for these products is Europe, where KSB operates its main manufacturing facilities in Germany and France. The main plant of the present KSB SE & Co. KGaA in Frankenthal is its largest in Europe, ahead of

Bodies / Structure



The former KSB AG is now managed in the legal form of a partnership limited by shares [*Kommanditgesellschaft auf Aktien – KGaA*]. Management is the responsibility of KSB Management SE, the individually liable general partner. The responsibilities of the bodies are governed by law and the Articles of Associations. This is the basis for efficient corporate governance, which contributes to sustainable corporate growth.

the production sites in Pegnitz (Bavaria) and Halle (Saxony-Anhalt) in Germany, and La Roche-Chalais in France.

The second-largest market for KSB products is currently the Region Asia/Pacific, followed by the Region Americas and the Region Middle East/Africa. Outside Europe, KSB's biggest production sites are in Brazil, China, India and the USA.

KSB manufactures products and components in a total of 17 countries; they are sold through the Group's own companies or agencies in more than 100 countries. With their products, the Group companies serve customers in industry including the chemical and petrochemical industries, customers in the energy and construction/building services sectors, transport equipment manufacturers and operators (e.g. ships, rail vehicles), water and waste water utilities, and mining companies. Once again in 2018, the top-selling markets for KSB products were industry and the energy supply sectors.

In order to be able to offer KSB products at favourable prices, the Group's purchasing requirements are combined and affordable suppliers sourced around the world who meet the relevant quality standards. The focus is currently upon Asian companies. The KSB Group is able to maintain its market position as one of the leading pump and valve manufacturers

through its good and long-term relationships with customers and suppliers. Highly trained and motivated employees as well as the high quality of products have also helped cement this reputation.

Control System

Based upon a matrix organisation, KSB determines its key financial performance indicators as follows:

Management decisions are made primarily on the basis of key indicators determined for the Pumps, Valves and Service segments: order intake, sales revenue and EBIT. EBIT is defined as earnings before financial income/expense and income tax. The definition of this earnings indicator changed in the 2018 financial year. Until the 2017 year-end, EBIT was defined as the earnings before interest and income tax. In the comments in these consolidated financial statements, the new definition of the key indicator is used; prior-year figures were restated accordingly.

For more information on these key indicators see the Notes to the Consolidated Financial Statements, Section VIII. Segment Reporting.

For the control of the entire Group, the key indicators of order intake, sales revenue, earnings before income tax (EBT), pre-tax return on sales as well as the net financial position are used, and from the 2018 financial year onwards also the EBIT. The pre-tax return on sales describes the ratio between earnings before income tax (EBT) and sales revenue; the net financial position is 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, receivables from deposits). Starting in the 2019 financial year, the key indicators of earnings before income tax (EBT), pre-tax return on sales as well as the net financial position will no longer be used. When specifying and evaluating these key indicators, KSB is guided on the one hand by developments in the market, and on the other by the performance of its key competitors.

No non-financial performance indicators are consulted for controlling the Group and for making decisions regarding management issues.

Research and Development

Innovations are a fundamental pillar of KSB's activities and are part of the core elements of its strategy. They are defined as solutions that create added value for customers and translate into new products, services or business models.

Finding creative solutions is the most successful where developers have a high degree of freedom in choosing the approaches or methods. With this objective in mind, KSB has set up the off-site Business Innovation Lab² to abandon the traditional paths of research and development. In this think tank, digital natives work together with experienced specialists to realise the

digital transformation in the production and marketing of pumps, valves and hydraulic systems.

Beyond these innovation approaches, the integration of hydraulic and electronic systems is a focus of activities. It opens access to new business models. As many product components come into contact with fluids that are corrosive or abrasive, materials research is another key area of the developers' work.

49.2

Research and development
expenses in € millions

In these activities, the KSB Group is primarily drawing on its strong research and development expertise in Europe and India. In addition, it cooperates with external institutes and research facilities. Overall, the KSB Group spent around € 49 million on research and development in the year under review. This equates to about 2 % of our sales revenue. A large portion of the development work was on customer projects.

Economic Review

Macroeconomic Environment and Sector View

The global business cycle lost momentum in the course of 2018. The International Monetary Fund (IMF), whose forecast provided the basis for the planning, predicted growth of 3.9 % at the start of the year. At +3.7 %, the actual performance fell short of this forecast. Causes included trade policy restrictions of the traffic of goods and above all the increasing difficulties experienced by a number of emerging markets and developing countries. They had to contend with an increase in the price of loans and energy together with political tensions, primarily in the Middle East, which put a brake on public-sector and private investments.

Europe was once again of primary importance for the KSB business in 2018. However, compared with the IMF ² forecast the growth of the economy on the home market weakened more sharply than it did on a global scale. Nevertheless, at +1.8 % it reached a satisfactory level. The export business in Germany weakened. Taken together with lower industrial production, this meant that the economy, at +1.5 %, fell considerably short of forecasts. France, Italy and the United Kingdom also fell short of expectations, albeit for different reasons. By contrast, the economy in Spain recorded above-average growth, which improved the conditions for local selling, production and support services.

Among the traditional industrialised nations the USA reported stronger growth than expected at +2.9 % due to the policy of tax cuts and the favourable underlying financial conditions. The KSB Group produces its slurry pumps in the country and continued to expand its service and spare parts business in 2018.

Of the emerging markets in Asia, China and India performed particularly well with growth rates of 6.6 % and 7.3 %, respectively, in 2018. But whereas the Chinese economy failed to reach the previous year's growth, also on account of the trade dispute with the USA, economic expansion in India exceeded that seen in 2017. As well as higher private consumer spending, increased investment activities, which directly benefited mechanical engineering companies such as KSB, which have their own production base, contributed to this development.

The five economically most significant countries in South East Asia – Indonesia, Malaysia, the Philippines, Thailand and Vietnam – also showed a good performance with a growth rate totalling 5.2 %. Here, too, KSB is represented with its own companies.

The Region South America, which includes the important markets for KSB in Argentina, Brazil and Chile, remained considerably weaker with a growth of +1.1 %. The economic and currency crisis in Argentina severely restricted demand; the recovery on the market in Brazil was also slow.

The economic performance of the countries in the Region Middle East/Africa was primarily marked by the international tensions in the context of the Syrian war, the US embargo against Iran and the political crises in Qatar, Yemen and Saudi Arabia. In South Africa, where KSB operates a factory in Johannesburg, the upcoming elections caused unrest and an investment climate shaped by uncertainty. This set narrow limits to the growth of companies operating in the country. But KSB South Africa additionally served further countries in sub-Saharan Africa, some of which recorded a stronger business performance.

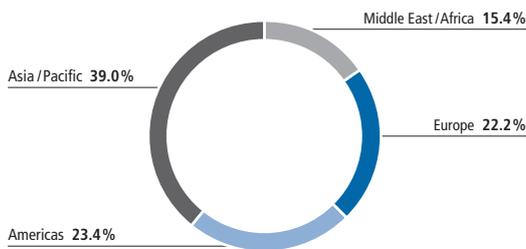
Russia does not yet see any signs of an overall economic improvement due to the continuing sanctions and the lack of foreign investments. In view of the preferential use of domestic sources, it was important for foreign companies to expand their production base in the country. KSB achieved this by establishing a new production and service site.

POSITIVE DEMAND TREND OVERALL

The more upbeat forecasts on the economy at the start of the year initially prompted companies to tackle new industry and infrastructure projects, some of which had been postponed for some time. This benefited the relevant suppliers in various industries, including KSB. But the risks to international trade that became more apparent in the course of the year put an increasing damper on the willingness to invest, particularly in regions affected by trade restrictions including sanctions or experiencing political tensions.

Demand in industry, the most important market for KSB, nevertheless showed a positive trend overall. This was particularly pronounced in the chemical and petrochemical industries. Alongside maintenance investments, an increase in new refinery projects in the oil processing industry was observed.

World market of centrifugal pumps and valves



Source: KSB estimate (February 2019), European Industrial Forecasting

The water and waste water sector, which is prioritised in strategic terms, similar to the industrial sector, saw marked regional differences in demand. A number of emerging economies and the growth market of China continued the expansion of their infrastructures. North America, too, recorded an increase in demand for products and services for safe drinking water supply and reliable waste water disposal. By contrast, the countries in the Middle East and North Africa, in particular, planned substantially fewer new plants for these purposes. Here, the uncertain political situation put a brake on investment.

Energy supply proved to be a persistently difficult market for all suppliers and service providers. The decline in demand for equipment and support services for coal-fired power plants continued. Alternative business options, such as the supply of combined cycle power plants, were unable to offset these structural losses.

In mining, the increase in commodity prices entailed brisk investment activity in some countries. This applied, for example, to copper mines in South America and to the mining of gold and lithium in Asia and Australia. In addition to replacement investments that had been postponed until then, the mine operators in some countries decided to expand their systems, which strengthened demand for equipment goods.

The construction industry recorded a good performance on the whole. In Western Europe this continued to apply to both residential and commercial construction. Here, the fact that interest rates remain very low in some countries had a beneficial effect. Investment activity also remained high in several Asian countries, such as China and India. One focus was on the con-

struction of commercial buildings where KSB's building services products are primarily used.

The new shipbuilding market including LNG carriers recorded no more than a minor increase, according to Macquarie Research. The biggest share is accounted for by container ships, bulk carriers and tankers, followed by LNG and LPG carriers by a considerable margin.

ENGINEERING STILL ON THE UPSWING

According to the German Mechanical Engineering Industry Association (VDMA), global sales in the mechanical engineering sector rose by 3 % in real terms for the second time in a row. Engineering posted above-average growth in Switzerland, Austria, the Netherlands, Germany, Sweden and the United Kingdom. Sales growth in 2018 was between 4 % and 7 %, with Switzerland, Sweden and the Netherlands reporting a particularly good sales performance of 7 %. In the Netherlands, business with semiconductor production equipment was extremely good, and in Sweden the public sector increasingly invested in smart city projects.

In Germany the previous year's level was exceeded by just under 5 %, due to a good order situation.

In China, companies are struggling with declining export orders on account of the trade conflict with the USA, which led to sales growth of only 2 % in 2018. By contrast, growth in India was unexpectedly strong at around 10 %. Mechanical engineering demand in Latin America rose significantly, reflected in an increase in sales revenue of 5 % in real terms.

In the liquid pumps sector, the VDMA [\[2\]](#) recorded real sales revenue growth of 5 % among German pump manufacturers. Industrial valves also reported a positive sales revenue trend of 6 % whereas the order intake declined by 1 %.

Segment reporting

€ thousands	Order intake		Sales revenue		EBIT		
	2018	2017	2018	2017	2018	2017 (restated)	
Pumps segment	1,506,248	1,473,628	1,469,443	1,444,392	90,563	79,284	
Valves segment	355,618	343,505	340,771	338,849	-37,373	51	
Service segment	441,670	448,179	435,734	421,717	21,512	37,020	
Total	2,303,536	2,265,312	2,245,948	2,204,958	74,702	116,355	
					Finance income / expense	-9,141	-12,175
					Earnings before income tax (EBT)	65,561	104,180

Business Development and Results of Operations

The business position continued to improve owing to increased investment activity of customers in key sales markets. This applied, in particular, to the industry and transport markets and to the construction/building services sector.

KSB made the most of market opportunities via the global KSB sales organisation, supported by its global manufacturing network, its service organisation and national dealership networks.

Translation-related exchange rate effects had a significantly negative impact in the 2018 financial year.

ORDER INTAKE

The volume of incoming orders booked was increased by € 38.2 million (+1.7%) to € 2,303.5 million in the financial year. This growth was weighed down by an exchange rate effect of € -96.8 million over the previous year. Adjusted for currency translation effects, growth comes to 6%.

Significant increases were recorded, in particular, with customers in the following markets: manufacturing at € +58.3 million – mainly in the Pumps segment – and transport at € +19.9 million. € 14.7 million of the performance in the transport market segment alone was accounted for by the Valves segment. Moreover, the order intake grew by € +9.9 million in the construction/building services market and by € +9.6 million in the chemicals/petrochemicals sector. This equates to growth of 4%.

In regional terms, the companies in the Region Asia/Pacific made a significant contribution to growth at € +35.8 million (+7.5%). The development in India was outstanding at € 32.1 million (+21.9%). This growth is supported by an Indian large power plant in the energy supply market with € +22.9 million in the Pumps segment. The companies in Europe also reported slight increases (+1.3%). However, the order intake of KSB SE & Co. KGaA declined by € -15.1 million. Compared with the previous year, a lower project volume in the project-driven energy market, in particular, had a significant impact. The companies in the Americas closed the financial year with a stable result compared with the previous period, with full growth offset by a negative currency translation effect of € -45.7 million. The same applies to the companies in the Region Middle East/Africa, whose modest growth was € -14.0 million below the previous year's figure due to currency translation effects. The restricted Iran business also had a pronounced negative effect on the Region's growth.

Pumps

In the Pumps segment, sales revenue was € 1,506.2 million, up by € 32.6 million (+2.2%). A key driver was double-digit growth of € +47.1 million (+11.6%) in the general industry market, primarily in the European companies. Taken together with the growth in building services of € +8.9 million (+5.5%) and in transport of € 3.5 million (+18.5%), the substantial decline of € -14.2 million in the energy supply market was more than offset in the European companies, in particular. The mining market was stable at the previous year's level while customer orders in the water/waste water and chemicals markets were more muted.

Valves

In the Valves segment, order intake was € 355.6 million, up by € 12.1 million (+3.5%). This development was primarily attributable to the resurgence of the transport market, which posted growth of € 14.7 million. A significant increase was also recorded by the mining market at € +3.6 million (+42.4%) and the chemicals/petrochemicals market at € +3.0 million (+7.7%). In the Valves segment, too, the lower demand from the energy sector had an effect of € -16.4 million. This was due to the substantial decline in activity in the area of major projects.

Service

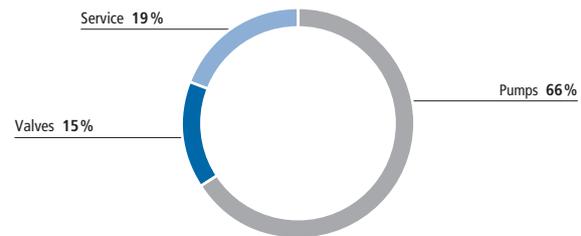
At € 441.7 million (-1.5%), the order intake in the Service segment was slightly below the previous year. Here, too, a major decline in the energy supply market of € -21.9 million (-16.2%) was observed, which is making itself felt primarily in the European companies. Strong growth was reported in the general industry market at € +10.9 million (+10.2%) and the chemicals/petrochemicals market at € +8.3 million (+12.4%).

SALES REVENUE

Consolidated sales revenue grew by € +40.9 million (+1.9%) to € 2,245.9 million. Growth was also significantly burdened by currency translation effects of € -92.6 million. Excluding the effects from exchange rates, the increase would have amounted to € 133.5 million (+6.1%).

Europe remains the region with the strongest sales revenue at 56%. The European companies' sales revenue was down 0.6% from the previous year. The decline of € -18.8 million to € 762.0 million in the largest unit, KSB SE & Co. KGaA, which serves the European market and the market outside Europe, was for the most part offset by growth in other parts of Europe, in particular Europe West. The companies in Asia/Pacific recorded the strongest growth with an increase of € +29.7 million (+6.6%) followed by the legal units in the Americas with a gain of € 18.9 million (+5.8%). The companies in the Region Middle East/Africa fell slightly short of the prior-year level by € -0.5 million, essentially due to the negative currency translation effects.

Sales revenue by segment



Pumps

Sales revenue in the Pumps segment increased by € 25.1 million (+1.7%) to € 1,469.4 million. Substantial growth compared with the previous year was recorded by the Region Americas with € +18.9 million and the Region Asia/Pacific with € +14.8 million. Growth in the Region Americas was supported primarily by the US company GIW with its main business in the mining market. Growth in Asia/Pacific was spread across several units. Sales revenue of the European companies fell short of the previous year by € -10.3 million.

Valves

In the Valves segment, order intake growth could not yet be translated into sales revenue of the same volume. Growth of € 2.0 million (+0.6%) was posted here. The financial year closed with sales revenue of € 340.8 million. Whereas the companies in the Regions Asia/Pacific and Americas recorded an increase of € +3.1 million and € +2.0 million, respectively, despite significant currency translation effects, the companies in Europe and in the Middle East/Africa fell short of the previous year's figures by € -2.1 million and € -1.0 million, respectively.

Service

The Service segment showed the largest relative growth (+3.3%) and closed the year with an increase of € 14.0 million to € 435.7 million. The Regions Asia/Pacific and Europe posted growth in the segment over the previous year. The largest absolute increase was generated by the companies in Asia/Pacific with € +11.8 million. By contrast, the Regions Middle East/Africa and Americas posted an overall decline of € -3.0 million.

EARNINGS BEFORE FINANCE INCOME / EXPENSE AND INCOME TAX (EBIT)

The KSB Group achieved earnings before finance income/expense and income tax (EBIT) of € 74.7 million (previous year: € 116.4 million). The Pumps segment contributed € 90.6 million to this figure, the Valves segment € -37.4 million and the Service segment € 21.5 million.

The previous year's forecasts referred to earnings before interest and income tax; consequently, the comparative figures in the year under review are also presented below according to the previous year's definition. Earnings before interest and income tax total € 76.4 million (previous year: € 117.2 million). The development of earnings before interest and income tax in the Pumps segment had a positive effect at € 85.8 million (previous year: € 79.9 million). This means that the forecast made in the previous year's report (considerable increase) was accurate as an increase of 7.4 % was recorded. As reported in the half-year financial report, EBIT was weighed down by expenses in the amount of € 25 million from an additional provision for a legacy project in the United Kingdom. The pension plans of German companies concluded before 2009 solely provided for the payment of accumulated amounts in the form of a monthly pension for life upon retirement. A lump-sum option was introduced for these plans in December 2018. Under this, every employee is entitled to apply at any time during the ongoing employment relationship for payment in capital, either as a single payment or in ten annual instalments. Recognition of the exercising of this lump-sum option has resulted in one-off income of € 46.4 million in total based on past service cost, resulting in a reduction of provisions for pensions and similar obligations. The Pumps segment accounts for income from the lump-sum option of € 32.4 million. Contrary to the forecast of a stable performance, earnings before interest and income tax in the Valves segment fell from € 0.1 million in the previous year to € -37.1 million in the year under review. Among other factors, this is due to the impairment on the goodwill of

KSB Seil Co., Ltd., South Korea, amounting to € 20.6 million. The impairment is attributable to the generally limited business performance of the company owing to the economic development of the long-cycle shipbuilding industry. Impairment losses on property, plant and equipment of the French production company KSB S.A.S. totalling € 10.6 million also weighed on earnings. The impairments relate to two valve ranges from which no long-term cash flows are expected any longer. Income from the lump-sum option of € 5.9 million had the opposite effect. A substantial increase had been forecast for EBIT of the Service segment, instead of which it recorded a decline of 25.7 % to € 27.7 million. A key reason for this was the goodwill impairments of two French cash-generating units amounting to € 7.6 million due to their dependence on a single major customer. Income of € 8.1 million resulting from the introduction of the lump-sum option is included.

TOTAL OUTPUT OF OPERATIONS

The above increase in sales revenue is also reflected in a higher total output of operations, totalling € 2,275.8 million compared with € 2,210.5 million in the previous year. Work in progress and inventories of finished goods increased by € 22.6 million. Other work performed and capitalised amounts to € 7.3 million and is therefore 30.4 % up on the previous year.

INCOME AND EXPENSES

Other income declined from € 69.2 million to € 33.1 million, essentially due to high insurance compensations included in the previous year and lower income from the disposal of assets.

The cost of materials increased more sharply than the total output of operations, resulting in an increase in the cost of materials as a percentage of total output of operations from 40.2 % in the previous year to 41.1 % in the year under review. Overall, the cost of materials increased to € 934.5 million compared with € 887.8 million in the previous year. Among other factors, this is due to outsourcing.

Staff costs fell by 3.9 % to € 765.5 million. Staff costs as a percentage of total output of operations dropped by 2 percentage points. The key factor was € 46.4 million in income from the lump-sum option in the pension plans of the German companies. Compared with 2017, the number of employees rose by 258, taking the total figure at the end of the year under review to 15,713. The sharpest increase was posted by the North American companies with 159 people, due among other things

2.2

Consolidated sales revenue in € billions

to the acquisition of the assets and liabilities of the Dubric Group. The biggest declines were recorded at the French and South American sites. The KSB Group employed on average 90 more people than in the previous year. Based on the 3.0 % increase in total output of operations and simultaneous rise in the number of employees, the average output per employee improved from € 142 thousand in the previous financial year to € 146 thousand.

The ratio of other expenses to total output of operations rose from 17.8 % to 18.3 %. In absolute terms, this represents a change from € 392.4 million to € 416.9 million. The increase was attributable to higher expenses for warranties and contractual penalties (€ +20.4 million) due to the provision for a legacy project in the United Kingdom mentioned earlier, as well as higher expenses for repairs, maintenance and third-party services (€ +22.0 million). By contrast, other staff costs fell by € 12.5 million.

Finance income/expense improved by € 3.0 million, reflecting higher income from equity investments accounted for using the equity method and lower financial expense, particularly interest expense.

EARNINGS

The KSB Group generated earnings before income tax (EBT) of € 65.6 million, compared with € 104.2 million in 2017. This means that the previous year's forecast of a substantial increase in earnings did not materialise on account of the one-time special effects described above. Correspondingly, the return on sales before tax decreased from 4.7 % in the previous year to 2.9 %, also falling short of expectations outlined in the previous year. The income tax rate rose substantially and is now 63.5 % after 50.0 % in the previous year. This rise was attributable to considerably higher deferred tax expenses. Adjusted for the ef-

fects resulting from deferred taxes on loss carryforwards, which cannot be capitalised, and impairment losses on the goodwill of KSB Seil Co., Ltd., South Korea, and the French cash-generating units, the adjusted income tax rate is 31.8 %. Earnings after income tax, which totalled € 23.9 million (previous year: € 52.1 million) fell by 54.1 % and thus more sharply than earnings before income tax (EBT) (-37.0 %).

At € 12.6 million, earnings attributable to non-controlling interests declined by € 2.3 million compared with the previous year. Relative to earnings after income tax, there was therefore a change from 28.6 % to 52.7 %.

Earnings attributable to shareholders of KSB SE & Co. KGaA (€ 11.3 million) were € 25.9 million lower than in the previous year (€ 37.2 million).

Earnings per ordinary share were € 6.26, compared with € 21.10 in the previous year, and € 6.64 per preference share, compared with € 21.36 in 2017.

Financial Position and Net Assets

FINANCIAL POSITION

The financial position of the KSB Group remains as solid as ever on account of one-time special effects, as evidenced by a consistently high equity ratio of 38.2 % (previous year: 39.3 %).

Liquidity

KSB generated cash flows from operating activities of € 61.4 million, a year-on-year decrease of € 59.3 million. This was primarily attributable to the high commitment of funds in inventories. This contrasted with higher liabilities.

The outflows from investing activities increased by € 82.3 million compared with 2017. While the return of term deposits and commercial papers increased cash flows considerably in the previous year, the addition of fixed-term deposits and payments for the acquisition of consolidated companies led to a decline in cash flow in the year under review. Accordingly, cash flows from investing activities changed from € -8.2 million in the previous year to € -90.5 million in the year under review.

65.6

Consolidated earnings (EBT) in € millions

Negative cash flows from financing activities fell strongly, totalling € –9.4 million compared with € –106.0 million in the previous year. This is due to lower payments for financial liabilities because no partial redemption of the loan against borrower's note took place in the year under review, in contrast to the previous year.

Cash and cash equivalents from all cash flows fell sharply from € 289.5 million to € 255.5 million. Exchange rate effects amounting to € +4.6 million (previous year: € –6.8 million) contributed significantly to this.

The KSB Group assumes that, in future, it will continue to be able to meet its outgoing payments largely from operating cash flow. From the current perspective its financial management is meeting the goal of ensuring its liquidity at all times essentially without any additional external financing measures. In addition, there has been a syndicated loan agreement of KSB SE & Co. KGaA and KSB Finanz S.A. since December 2018 to hedge liquidity risk and cover the need for bank guarantees of the KSB Group. The credit line can be used at any time and has a fixed term of five years with the option to renew twice by one year each time.

For more information on liquidity management (such as credit lines) see the section on Risk Reporting on the Utilisation of Financial Instruments elsewhere in this group management report.

Investments

As in the previous year, the additions for tangible assets amounting to € 13.0 million (previous year: € 12.5 million) primarily concerned internally generated tangible assets. Advance payments for a new software to be deployed in Sales was reclassified to this balance sheet item in the year under review.

Investments in property, plant and equipment in the reporting year amounted to € 66.6 million, considerably down on the figure of € 89.4 million for the previous year. The highest additions at € 21.5 million (previous year: € 29.0 million) relate to plant and machinery. A further € 20.3 million related to other equipment, operating and office equipment (previous year: € 21.8 million). As in 2017, the focus of investment activities was Europe, and predominantly Germany and France. Outside Europe, the highest additions were made at the plants in the USA,

255

Net financial position in € millions

India and China. The policies for measuring depreciation and amortisation were maintained in the year under review.

Net financial position

Due to a decline in cash and cash equivalents, the net financial position at € 255.0 million, down from € 288.0 million in the previous year, is lower than forecast twelve months ago (significantly above the previous year). This development is essentially attributable to an increase in inventories and higher payments for materials.

Contingencies and commitments

The KSB Group's off-balance sheet contingent liabilities totalled € 10.7 million as at the reporting date (previous year: € 7.2 million). These arise mainly from performance guarantees.

There are no other extraordinary obligations and commitments beyond the reporting date. Other financial obligations arise only within the normal scope from long-term rental, lease and service agreements (in particular IT and telecommunications) necessary for business operations and from purchase commitments amounting to € 12.4 million (previous year: € 12.2 million).

38.2

Equity ratio in percent

NET ASSETS

Around 27.5 % is attributable to fixed assets (previous year: 28.5 %). Intangible assets and property, plant and equipment with a historical cost of € 1,476.2 million (previous year: € 1,424.3 million) have carrying amounts of € 587.7 million (previous year: € 614.3 million). In intangible assets, goodwill impairment of the South Korean company KSB Seil Co., Ltd. reduced the value by € 20.6 million and that of the French cash-generating units reduced the value by € 7.6 million. The advance payments made decreased by € 24.5 million year on year and the internally generated intangible assets increased by € 30.2 million. This development essentially resulted from the reclassification of a selection software for the standard pump programme and of a project whose objective is to introduce an end-to-end e-sales process. The amounts for these two projects previously included in advance payments are reported under internally created intangible assets in the year under review. Overall, intangible assets decreased from € 108.1 million to € 91.1 million due to the above-mentioned impairment on goodwill. With investments in property, plant and equipment (€ 66.6 million) lower than write-downs this year (€ 71.2 million), this balance sheet item contracted by € 9.6 million. The carrying amount of financial assets, investments accounted for using the equity method and long-term other non-financial assets rose by a total of € 0.2 million to € 28.5 million. The investments accounted for using the equity method accounted for € +1.7 million. Deferred tax assets decreased to € 80.4 million (previous year: € 91.7 million)

Inventories totalled € 544.4 million, up € 82.6 million from the 2017 year end. Raw materials, consumables and supplies as well as work in progress, finished goods and goods purchased and held for resale increased. This increase was primarily attributable to higher inventories of work in progress for orders on hand (€ +15.6 million), higher raw materials, consumables

and supplies (€ +19.6 million) and the effect resulting from the first-time application of IFRS 15 on the inventories presented (€ +42.2 million). Inventories tied up around 24 % of resources (previous year: 20 %).

Trade payables decreased from € 613.3 million at the 2017 year end to € 518.1 million. This decline resulted mainly from receivables recognised by PoC that were no longer recorded in the reporting period. The receivables recognised by PoC in the previous year correspond to the contract assets from the application of IFRS 15 that are shown as a separate item in the year under review. Contract assets total € 74.5 million. Overall – taking into account the change in total assets – this balance sheet item accounts for approximately 23 % (previous year: 27 %) of total assets.

Other financial assets declined from € 117.0 million to € 103.4 million. This change essentially results from reduced other receivables and other current assets (€ –8.9 million).

In contrast, other non-financial assets rose by € 12.1 million. Here, recoverable taxes, essentially in France, Germany and the USA, rose by € 9.3 million to € 40.1 million.

Cash and cash equivalents account for around 11 % of assets, totalling € 255.5 million (previous year: € 289.5 million).

Total assets fell by 0.5 % to € 2,242.2 million. Considerable decreases were recorded for both non-current assets and current assets. Inventories in current assets were the exception, recording a drastic increase.

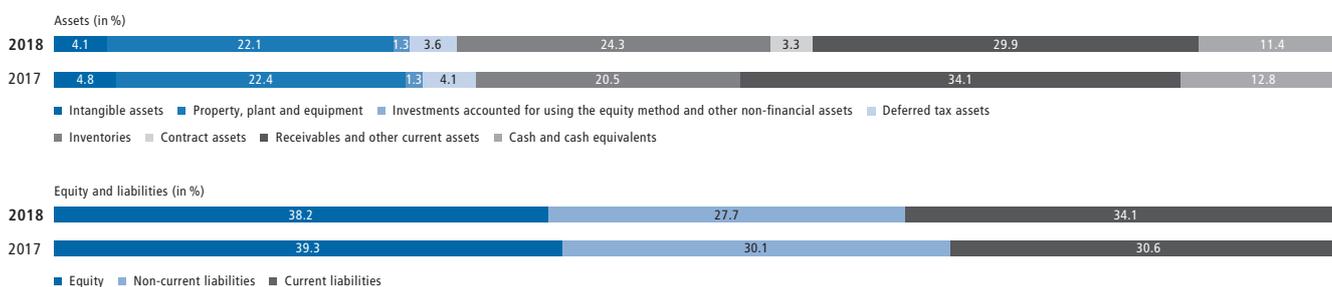
Equity

The KSB Group's equity amounts to € 856.8 million (previous year: € 885.4 million). This includes KSB AG's subscribed capital of € 44.8 million as in the previous year. The capital reserve remains unchanged at € 66.7 million. Revenue reserves declined to € 577.8 million (previous year: € 611.9 million) essentially as a result of the transition to IFRS 15 and IFRS 9 and negative currency translation differences; this figure includes the proportion of earnings after income tax attributable to shareholders of KSB SE & Co. KGaA of € 11.3 million (previous year: € 37.2 million). € 167.6 million (previous year: € 162.1 million) is attributable to non-controlling interests. Due to these developments, the equity ratio fell to 38.2 % (previous year: 39.3 %) despite the 0.5 % decline in total equity and liabilities year on year.

Expenses in statement of comprehensive income



Balance sheet structure



The non-controlling interests mainly relate to the following companies: KSB Limited, India, and KSB Shanghai Pump Co., Ltd., China, as well as the PAB subgroup. The latter consists of Pumpen- und Armaturen-Beteiligungsgesellschaft mbH, Frankenthal, and its US subsidiaries.

Inflation and exchange rate effects

Of the Group's consolidated companies only the annual financial statements of an Argentinian company had to be adjusted for the effects of inflation. At € 0.3 million, this has not resulted in any material impact on our net assets, financial position or results of operations.

The translation of financial statements of consolidated companies that are not prepared in euro gave rise to a difference of € -13.8 million (previous year: € -54.1 million). The total of currency translation differences was taken directly to equity.

Liabilities

The largest item under liabilities continues to be provisions for employee benefits, including, also as the largest item, pension provisions, which decreased by € 33.3 million from € 586.9 million to € 553.6 million. This development results primarily from the lump-sum option in the pension plans of the German companies applicable since 2018. Details and information on the impact on EBIT are set out in the Business Development and Results of Operations section.

On 2 October 2018, Heubeck AG published the new Heubeck 2018 G mortality tables. These contain the latest statistics of statutory pension insurance schemes and of the German Federal Statistical Office and reflect the most up-to-date developments on mortality, disability, marriage and fluctuation probabilities.

The new tables now take into account the statistically verifiable relation between life expectancy and the amount of pension paid. This is achieved via a general marking down of mortality rates. In addition, the new mortality tables reflect changed disability rates, as there has been a decline for more than ten years in the age range from 58 years.

The first-time application of the new mortality tables resulted in an addition of € 4.8 million in the balance sheet; the closing balance of pension provisions in the year under review is € 553.6 million.

Obligations for current pensioners and vested benefits of employees who have left the company account for about 45 % of the amount recognised in the balance sheet. The rest relates to defined benefit obligations for current employees.

To understand the explanations on provisions and liabilities compared with the previous year, it should be kept in mind that from the 2018 financial year accounting principles were amended so that some items previously allocated to provisions are now classified as liabilities. This did not have an impact on earnings. The reclassification was performed retrospectively for the balance sheet figures of the previous financial year. Further information on the impact on individual balance sheet items is presented in the Notes to the consolidated financial statements.

Non-current liabilities fell by € 24.2 million to € 30.1 million, due to the reclassification of the tranche of the loan against borrower's note due in 2019 to current financial liabilities. The loan against borrower's note, which still amounts to € 48.0 million, is expected to be repaid in 2019 and 2021.

Current liabilities rose overall by € 74.3 million to € 765.0 million compared with € 690.7 million at the 2017 year end.

Other provisions for employee benefits rose to € 34.4 million (previous year: € 28.0 million).

Other provisions also increased from € 70.2 million in 2017 to € 84.9 million. While provisions for warranty obligations and contractual penalties as well as provisions for restructuring measures decreased, provisions for other obligations rose by € 20.7 million. This is essentially attributable to additions to provisions from a legacy project in the United Kingdom totaling € 25 million, as mentioned earlier.

Trade payables rose to € 270.2 million (previous year: € 241.6 million). Other non-financial liabilities decreased by € 108.9 million. Advance payments received on orders, which were stated under this item at € 97.7 million in the previous year, are

shown under contract liabilities in the year under review. Other financial liabilities fell by € 48.7 million. In the previous year this item included advance payments from PoC of € 49.4 million, which are also stated under contract liabilities in the year under review. Current financial liabilities increased by € 26.8 million. This is attributable to the tranche of the loan against borrower's note due in 2019, which was reclassified from non-current financial liabilities to current financial liabilities in the year under review. Taking into account the decline in total equity and liabilities, the share of current liabilities in total equity is 34.1 % (previous year: 30.7 %).

Summary of the Performance in the Financial Year

The tangible improvement in order intake forecast in the previous year was not achieved. Essentially, this is attributable to the negative currency translation effects described earlier. The Indian rupee, the Brazilian real and the Argentinian peso, in particular, weighed on the order intake, as a result of which the Pumps segment recorded no more than slight growth instead of a pronounced increase. The previous year's forecasts can be confirmed for the other segments despite the burden resulting from translation effects. Orders received rose sharply in the Valves segment and remained stable in the Service segment.

The trend of sales revenue corresponded to that of order intake. Adjusted for currency translation, the forecast tangible increase would have materialised, but the current exchange rates led to no more than a moderate rise. Sales revenue in the Pumps segment rose slightly, rather than tangibly as forecast; similarly, the Valves segment fell short of the projected slight growth, recording a stable performance instead. In the Service segment the forecast of tangible growth was confirmed.

The tangible improvement in EBIT predicted in the previous year failed to materialise due to unforeseen events. A considerable increase was expected for the Pumps segment, which materialised as forecast. However, this increase was not due to operational factors. For one, it was attributable to income from the decline in pension provisions resulting from the introduction of a lump-sum option in the pension plans of the German companies; for another, it was attributable to the provision

made in the first half of the year for a legacy project in the United Kingdom. In the Valves segment, in contrast, the expectation of a stable performance did not materialise. Expenses for the goodwill impairment of a South Korean company and impairment losses on property, plant and equipment of a production facility in France weighed on EBIT for the Valves segment, which had to report a substantial decline as a result. Assumptions were also not confirmed for the Service segment, for which significant growth had been forecast. Among other things, this is due to the goodwill impairment of two French cash-generating units. Instead, this segment reported a sharp decline. Like the sharp drop in EBIT described above, earnings before income tax (EBT) and the return on sales fell significantly as a result of the effects described, falling short of expectations of a strong increase. At € 255.0 million, down from € 288.0 million in the previous year, the net financial position also fell strongly due to increased inventories and was thus lower than planned twelve months ago (significantly above the previous year).

Accordingly, business performance in terms of order intake and sales revenue corresponded to expectations, apart from the negative exchange rate effects.

Expectations for the earnings figures of the Group were not met overall owing to negative one-time special effects.

On the whole, the picture emerging is that which KSB announced back in August 2018. For the two key indicators, order intake and sales revenue, the corrected forecast of a moderate rise was reached. In the same way, the corrected forecast of a considerable decline in EBIT materialised.

KSB continues to have a healthy financial basis for the future.

Dependent Company Report

The legal representative has submitted the dependent company report to the Supervisory Board. This concludes with the following declaration: “In accordance with Section 312(3) AktG [*Aktiengesetz* – German Public Companies Act], we declare that our company – on the basis of the circumstances known to us at the time when the transactions were made – received adequate compensation for all transactions listed in the dependent company report. No measures required to be reported were taken or not taken at the instigation or in the interest of Johannes und Jacob Klein GmbH or a company affiliated to it.”

Report on Expected Developments

The International Monetary Fund has lowered its growth forecast for the global economy in 2019 to 3.5 % in real terms. This means that the growth seen in the past years will decline slightly. Among other factors, this development is due to the negative consequences of the trade dispute between the USA and China. Effects curbing growth in Europe dating from the second half of 2018, including the risks in the Italian financial sector, a decline in consumer spending in Germany and political uncertainties in France are additionally expected to linger in 2019. For the United Kingdom, in particular, the forecast of around 1.5 % is subject to high risk on account of the uncertainties associated with Brexit. Overall growth in the euro zone is expected to weaken to 1.6 %.

The IMF forecasts anticipate a slowdown in the growth momentum in the USA to 2.5 %. The budget freeze at the start of the year also has a negative impact on economic growth. Nevertheless, the fiscal incentives suggest that consumer demand will remain high, which will also benefit imports.

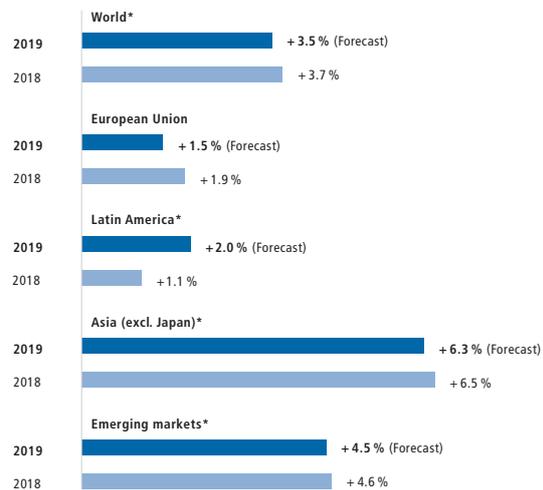
For the emerging markets and developing economies the IMF is projecting a growth rate of 4.5 %, i.e. only slightly below the previous year's level. For the European emerging economies a decline of the growth rate to 0.7 % overall is forecast despite a good economic performance in Central and Eastern Europe; this is solely due to the currency crisis in Turkey.

For Asia the IMF is forecasting economic growth of 6.3 %, which is attributable in particular to the weakening momentum in China of 6.2 %. By contrast, an increase in gross domestic product (GDP) of 7.5 % is anticipated for India, which benefits from lower oil prices and a less restrictive monetary policy. Growth of 5.1 % is projected for the ASEAN countries, which also include important KSB markets.

Growth in Latin America is expected to range at 2.0 %. The recovery from the recession in 2015 and 2016 continues in Brazil and should lead to a 2.5 % rise in GDP this year.

Despite the slowdown in the growth of the global economy the IMF expects persistently strong growth of gross investment worldwide. For the German mechanical engineering companies the German Mechanical Engineering Industry Association (VDMA) expects positive stimuli for orders received from the two biggest markets, USA and China, among others.

Gross domestic product growth



* Source: International Monetary Fund (January 2019)

As far as manufacturers of liquid pumps in Germany are concerned, the VDMA expects sales revenue growth of 1 % in the current year; for industrial valves, the association expects an increase of 2 %.

For global mechanical engineering, the VDMA projects similar, slightly weaker economic growth. For German mechanical engineering, too, the VDMA forecasts the third consecutive boom year and a price-adjusted rise of +2 %, i.e. slightly below the previous year.

As far as liquid pumps in Germany are concerned, the VDMA expects real sales revenue growth of +2 % in the current year; for industrial valves, the association expects a nominal increase of 2 %.

For new shipbuilding, Macquarie Research projects a slight decline for 2019 after a slight increase in the year under review; for the following years it forecasts no more than a stable performance at the 2019 level.

SUMMARY OF EXPECTED DEVELOPMENT

Despite the weaker global economic growth, the underlying conditions are, generally speaking, expected to be good for an expansion of business in and outside Europe. Overall, the KSB Group is looking forward to further order intake growth in the current year because it tends to lag slightly behind the economic cycle. The main drivers of business will be standard products, support services and spare parts. Given that customers remain very willing to invest, the number of major projects for which products tailored to project specifications are supplied in addition to standard pumps and valves, is expected to increase. Overall, the order intake is expected to increase to € 2,350 million to € 2,500 million and sales revenue is expected to rise to € 2,300 million to € 2,450 million. Considering that the earnings for the current financial year will be impacted by one-time special effects, EBIT is forecast to grow to € 95 million to € 115 million overall for the 2019 financial year.

Pumps

Order intake in the Pumps segment will rise substantially in the course of the year although the situation in the field of conventional power stations remains critical and there are also signs that demand for pumps in industry and mining will be muted. Instead, a significant increase in order intake is to be expected from water and waste water management and from building services. In the oil and gas industry the extension of the product range may provide fresh stimuli for customer orders. Sales revenue for pumps will also increase substantially in 2019, helped by the invoicing of project orders from 2018 and previous years. Despite the expected substantial rise in sales revenue KSB is expecting EBIT for this segment to decline slightly in 2019 due to this year's one-time special effects totalling € +7.4 million.

Valves

A tangible increase in order intake is expected in the Valves segment in the current year. A rising number of orders are anticipated from industry, including but not limited to the chemicals and petrochemicals industries, and from the transport sector. In construction/building services and in industry, the planned growth will be based on new products and in the water and waste water sector on improved demand from East and South East Asia. By contrast, a further decline in demand for globe, butterfly and gate valves for the energy sector is to be expected. Sales revenue lags behind the order intake for valves and is therefore anticipated to show substantial growth

Expected development

€ millions	Actual 2018	Forecast 2019
Order intake	2,303.5	2,350 – 2,500
Pumps	1,506.2	Substantial increase
Valves	355.6	Tangible increase
Service	441.7	Substantial increase
Sales revenue	2,245.9	2,300 – 2,450
Pumps	1,469.4	Substantial increase
Valves	340.8	Substantial increase
Service	435.7	Tangible increase
EBIT	74.7	95 – 115
Pumps	90.6	Slight decline
Valves	-37.4	Substantial increase
Service	21.5	Substantial increase

in 2019 compared with 2018. For the Valves segment KSB therefore projects a substantial rise in EBIT.

Service

A focus of the growth strategy is on expansion of the service business. Consequently, substantial growth of the order intake for support services and spare parts is projected for the current year, with a focus on industry. The spare parts warehouses in Germany, Brazil and South Africa will be equipped with new software to make processes faster and smoother. In addition, new component warehouses will be established in China, India and South East Asia. Specifically in China a spare parts factory is planned to be built with a view to reducing delivery times significantly. Sales initiatives will help communicate the range of service offerings in growth markets more effectively and win new customers. This also applies to support services that are newly developed and offered in the wake of the digital transformation. For sales revenue in the Service sector the Group is projecting tangible growth while forecasting a substantial increase in EBIT in 2019. This assumption is based on the continued expansion of the service business under the new KSB SupremeServ brand.

The forecast horizon for all the afore-mentioned measures is the 2019 financial year.

FORWARD-LOOKING STATEMENTS

This report contains forward-looking statements and information that are based upon the assumptions of Management. They express current forecasts and expectations with regard to future events. As a result, these forward-looking statements and information are exposed to risks and uncertainties that lie outside the Management's sphere of influence. KSB wishes to point out that actual events or results may differ materially from the forward-looking statements and information presented, if one or more of the following opportunities or risks, or other opportunities, risks and uncertainties should materialise, or if the assumptions underlying the statements prove to be inaccurate.

Opportunities and Risks Report

As an organisation that operates throughout the world, the KSB Group is exposed to macroeconomic, sector-typical, financial and company-specific risks. The risk policy is designed to enable KSB to grow sustainably and profitably. The KSB Group aims to reduce the risks associated with its business and where possible avoid them completely. At the same time its global alignment and extensive product range offer a wealth of opportunities. This includes but is not limited to any opportunities that arise on the basis of research and development activities, as well as any that are linked to the quality and cost effectiveness of products. KSB's competitive position is also being strengthened by optimising the global sales and production network. KSB always reviews opportunities to expand its global presence and is able to achieve this through start-ups and acquisition projects.

The Group sees opportunities and risks as possible future developments or events that may lead to departures from forecast or targets. The departure can be both positive and negative. In order to manage the varied opportunities and risks professionally and efficiently, the Group aligns its actions accordingly and focuses upon the respective situation when selecting the persons responsible. In doing so, Controlling, Finance and Accounting as well as Internal Audits perform important monitoring tasks.

RISK MANAGEMENT SYSTEM

KSB has implemented a Group-wide risk management system for identifying and assessing relevant risks and reporting these to Group headquarters. The risk management process of the KSB Group consists of the successive phases of identification, assessment, management, control, documentation and communication of risks. The six phases form a continuous and IT-based closed-loop system. This is documented in KSB's risk management manual as well as the management responsibility and the description of all relevant tasks.

Managers are encouraged to take timely action to define and implement measures to limit or avoid damage that may result from the occurrence of risk events. All corporate and central functions and Group companies, including Group companies that are not consolidated, are included in the risk management system. The responsible managers are required to supply their relevant key business and financial indicators each month. As well as creating quarterly forecasts on business trends, they also twice a year report the recognised risks for the next 24 months from the reporting date for the categories of market and com-

petitive risks, technological risks, project- and product-related risks, financial risks and procurement risks. Other business risks (environmental, human resources, etc.) are also reported in this cycle to the Risk Managers at the Group headquarters. A distinction is made between qualitative risks and quantitative risks, not considering any action that has been taken or planned:

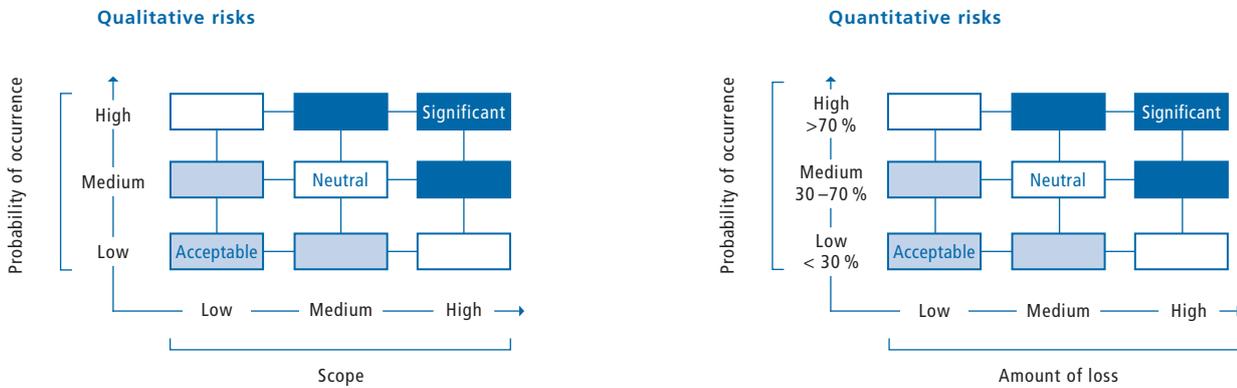
Qualitative risks are long-term developments that could have a negative impact on the KSB Group and which cannot or cannot yet be thoroughly quantified due to a lack of precise information. In order to be able to evaluate them all the same, however, estimates of the probability of occurrence and scope are made using defined evaluation categories. With respect to probability of occurrence, the extent to which the information indicating the potential risk is detailed must be determined.

Quantitative risks are those risks with possible monetary impact on the earnings of the KSB Group or the respective Group company. They are evaluated taking into account the specifically calculated probability of occurrence in combination with the potential amount of loss.

The scope or amount of loss describes the potential influence of the individual risk on the redefined key indicator of earnings before finance income/expense and income tax (EBIT) of the KSB Group or the respective Group company, not considering any action that has been taken or planned.

In order to assess whether qualitative and quantitative individual risks are material for KSB, they are classified as acceptable, neutral or significant risks. All individual risks categorised as neutral or significant that are detailed in the "Individually assessed opportunities and risks" section are considered to be material for the KSB Group. The relevant classification can be determined from the matrices below:

→ **Qualitative risks – Quantitative risks**



Classification of amount of loss

Magnitude	Sales revenue	Amount of loss in € thousands		
		Low	Medium	High
Small companies	Up to € 20 million	50 – 125	125 – 250	> 250
Medium-sized companies	€ 20 to € 80 million	75 – 250	250 – 500	> 500
Large companies, holding companies, organisational units	From € 80 million	100 – 500	500 – 1,000	> 1,000

Evaluation of the amount of loss at KSB is based on just three possible classifications: low, medium and high. The following criteria apply:

→ **Classification of amount of loss**

This approach offers the necessary transparency to identify risks in their entirety and to manage them effectively, professionally and in an economically responsible manner.

The bodies to which specific responsibilities and competencies were assigned in KSB’s risk management system in the reporting year are shown and explained in the diagram below.

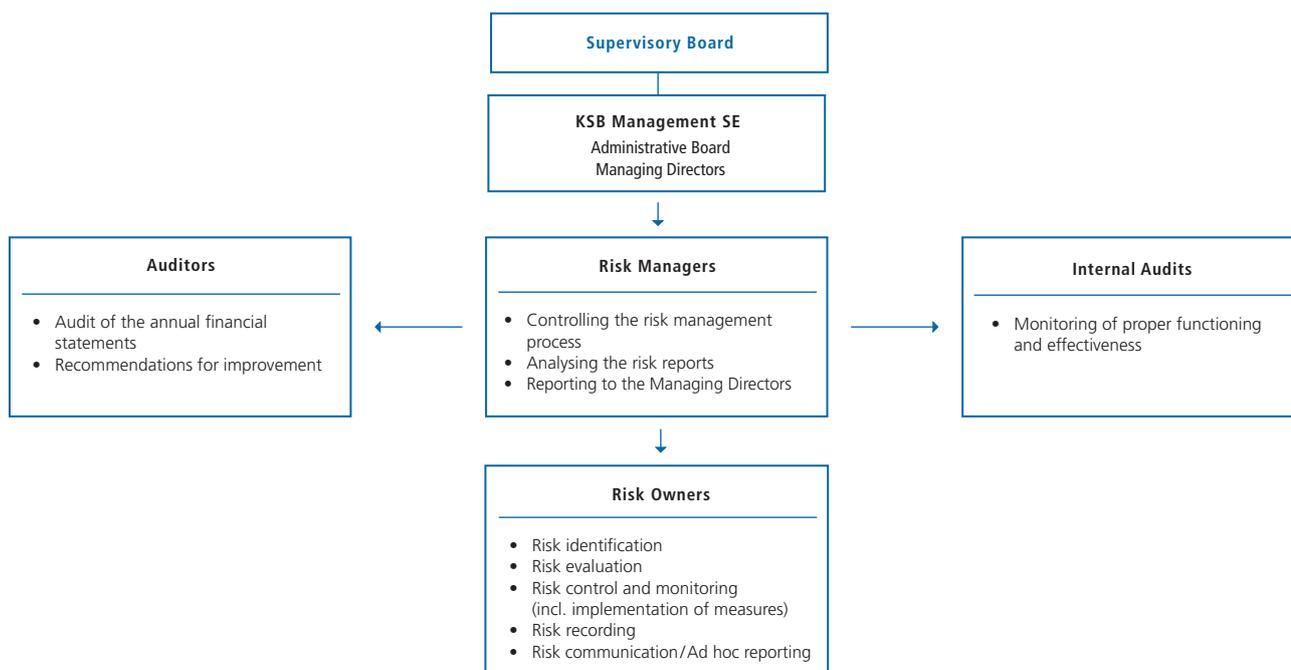
→ **Risk management at KSB**

As the legal representative, KSB Management SE assumes overall responsibility for risk management. KSB Management SE reports to the Supervisory Board of KSE SE & Co. KGaA via its Managing Directors during regular Audit Committee meetings and is monitored by the latter. The Managing Directors are supported by the Chief Compliance Officer and the Group Finance and Accounting department of KSB SE & Co. KGaA. The latter

coordinates the risk management process at Group level and investigates all reported risks to determine whether they are relevant for the financial statements. This ensures that there is a systematic link with the Group accounting process. The Managing Directors and the Supervisory Board’s Audit Committee receive at least two risk reports per financial year. These reports include all the risks that are categorised as significant or neutral that exceed pre-defined threshold values individually or collectively, not considering any action that has been taken or planned (gross risk). Particularly critical topics are reported on an ad-hoc basis by the managers in charge. In contrast, opportunities are not taken into account in KSB’s current risk management system. They are reported separately by segment managers and regional managers purely in qualitative terms, without further quantification.

With regard to financial risks KSB makes use of additional risk identification, assessment, management and communication. The central Finance department is responsible for this task which is described in further detail later in this section.

Risk management at KSB



Compliance risks are dealt with by the Chief Compliance Officer, who is assigned to the Legal and Compliance, Patents and Trademarks staff function. The Chief Compliance Officer is supported by the members of the Compliance Committee and the Compliance Managers of the individual companies.

The Internal Audits department is integrated into the risk management system as part of the internal control system. When planning audits, it prioritises areas according to potential risks and is provided with all the necessary information. The auditors ensure that all audited units adhere to the applicable guidelines, actively participate in the risk management system, and control or avoid their risks. Information obtained by Internal Audits on both the identified risks and the countermeasures initiated in response forms an integral part of the reporting to the Managing Directors and to the Audit Committee of the Supervisory Board.

The risk management system is regularly reviewed and promptly updated where necessary, for example, in the event of relevant legal or organisational changes. In addition, the auditors examine within the scope of the annual audit the early risk detection system, establishing that it is present and checking that it is fit for purpose.

INTERNAL CONTROL SYSTEM AND RISK MANAGEMENT SYSTEM WITH REGARD TO THE GROUP ACCOUNTING PROCESS

The accounting-related internal control system (ICS) contributes towards ensuring proper financial reporting. The aim is to ensure that the consolidated financial statements and group management report comply with all relevant regulations. Key elements of the ICS are – as well as the risk management system described above – guidelines and regulations, which include standard accounting and measurement policies. They must be applied to the full extent by all Group companies. There is a separation of functions and the four-eye principle is applied. This is ensured by the audits carried out by the Internal Audits department.

In addition, the Accounting department carries out regular analytical plausibility checks using time series analyses and actual/budget variance analyses. This enables KSB to identify significant changes early on, which are examined for accounting and measurement discrepancies. The resulting findings are then discussed at management level.

The responsibility for Group accounting lies with the employees in the central Accounting KSB Group department. KSB employs the services of qualified external reviewers for certain calculations as part of financial reporting (such as the calculation of complex pension obligations using actuarial assumptions).

Binding schedules and guidelines apply to accounting within the KSB Group and to accounting at each individual subsidiary. The accounting and measurement methods that must be applied to compile the consolidated financial statements are defined in writing in a manual that is updated and revised on a continual basis. This also includes the guidelines for posting intra-group transactions. New accounting principles and other official announcements are continually analysed with regard to their relevance and impact on the consolidated financial statements. Guidelines and manual are adapted where necessary and any changes communicated immediately to the companies. Accounting KSB Group monitors compliance with these regulations. This reduces the risk of compiling inappropriate financial statements or failing to publish them by the defined deadlines.

The financial statement information for all Group companies is automatically processed using certified and tested standard consolidation software. Systematic checks are implemented to help validate the data. Employees in Accounting KSB Group verify any warning signals that arise before using the data. The sequence of the processing steps is strictly specified through the use of the consolidation monitor within the IT system. This ensures the correct processing of data.

To enable a seamless and accurate accounting process, only employees who have the appropriate specialist know-how are assigned to this task. These employees are trained on a regular basis to make sure that their expert knowledge remains up to date. Since the year under review, the process is also supported by a harmonised chart of accounts used throughout the Group.

Access authorisations have been defined for the accounting-related IT system. This protects the data against unauthorised access as well as improper usage and modification. The data is checked at many stages, helping to ensure the processing quality. Alongside regular system reviews by the auditors, these checks contribute to limiting operational risks.

INDIVIDUALLY ASSESSED OPPORTUNITIES AND RISKS

The categories presented below include the gross risks classified as significant or neutral and the main opportunities for business development as at 31 December 2018. Where risks are not designated as significant, they were classified as neutral risks.

Markets / Competition

■ Risks

The business opportunities of KSB are again affected by changes in the economic and political environments in the current reporting year. The Group manages the risk of fluctuations in the economy and in demand by remaining active in several markets and industries with different economic cycles. Furthermore KSB is monitoring the development of the economic environment for its markets. If necessary, capacities are adjusted, production facilities relocated and cost-cutting measures implemented.

Asia remains the most important sales market for power plant equipment, including pumps and valves. The competitive situation in China has not eased by comparison with the previous year. The associated increased pressure on prices thus also constitutes a “significant” risk in the current financial year. Political decisions too, such as the postponement or even abandonment of energy projects in several Chinese provinces, have impacted negatively on business performance. In order to tap into the Asian market more widely, KSB agreed a strategic alliance with a long-term partner, the Chinese SEC Group, in late 2015. This aims at closer cooperation so that KSB can achieve success in Asian power plant projects outside of China.

The risk from the political situation in various parts of this world, however, regained in significance year on year. Most important in this context is the development of relations between the United States and Iran. Due to the US sanctions against Iran, there are no opportunities to continue ongoing projects in Iran. Consequently, there is a risk that the costs already incurred on local projects have to be borne without consideration. The protectionist tariff policy of the United States also weighs on business due to the associated global decline in demand. The worsening of the conflict in the Middle East, especially in Saudi Arabia, Qatar, Iran and Israel, as well as the development of the political situation in Turkey, may have a negative impact on business. In addition, the East/West relations that are under considerable strain given the political dif-

ferences between Russia and the USA, and between Russia and most European countries, continue to be significant. This also becomes apparent in the Russian government's import substitution programme. Russian companies are to increasingly order products that have been made in Russia or involve a high proportion of local value added. The KSB company in Moscow has prepared for this development, setting up a local assembly site for industrial and water engineering pumps in leased premises. Additionally, KSB completed the establishment of its own production site, which is due to start operating in 2019.

The departure of the United Kingdom from the European Union harbours risks both for the local sales and service company and for the other units with business partners in the United Kingdom. In general, there is still uncertainty about the future provisions; however, delays in goods trade, for example, may result from increased border checks. In total, the United Kingdom accounts for 1.2 % of sales revenue in the Group.

■ Opportunities

Major contracts for infrastructure development projects are to be awarded in the two Asian growth countries China and India in 2019. Due to KSB's strong presence in these countries, there is a good chance that it will be involved as a supplier of pumps, valves and services. The expansion of nuclear energy continues in China and India, for which local plant engineering contractors require high-safety pumps and valves. In addition, owing to targeted activities in the service market KSB expects to be able to sell more services and spare parts in China, in particular.

By broadening its portfolio of pumps to API  specifications the KSB Group has steadily improved its position in the oil processing industry since 2016. Here, the order situation is expected to improve over 2018.

From 2020, new regulations of the International Maritime Organisation IMO  will apply. According to this specialised UN agency, all ships on the high seas will have to use fuel with a substantially lower sulphur content to reduce air pollution from ships worldwide. Refineries will invest in the technology for processes to produce this fuel. This should increase demand for refinery pumps. Moreover, ships which continue to use fuel with a high sulphur content will be retrofitted with exhaust gas cleaning systems. This would have a correspondingly positive impact on order intake.

Projects / Products

■ Risks

The markets' requirements for the products of the KSB Group are constantly changing. The Group will only succeed if it meets its delivery deadlines and offers technically advanced products in good quality at affordable prices. To minimise the risk of delivery delays, which can lead to an adverse effect on KSB's reputation with customers and also result in financial penalties, it constantly monitors its sales and manufacturing operations. If it discovers that machinery needs to be renewed or capacities expanded, these investment projects are examined as part of a step-by-step approval process. By doing this, KSB counters the risk of schedule and cost overruns that is rated as "significant".

Regular market analysis and monitoring minimise the risk that products will become technically obsolete or are offered at prices not acceptable in the market. At the same time, KSB is exposed to the risk posed by cheap products from Eastern Europe and Asia that compete with KSB's portfolio. This calls for continuous quality management, which has been introduced across the Group.

In KSB's business, there are special requirements when it comes to the processing of large-scale projects with long contract terms. There are also always associated risks. There may be cost overruns, tighter import regulations, staff shortages, technical difficulties or quality problems – including possible contractual penalties – that reduce margins. KSB therefore trains its employees in project management and equips them with specialist knowledge. This enables them to identify the risks associated with longer-term orders at an early stage. In addition, project managers are provided with appropriate management tools. Decisions are made in conjunction with clearly structured authorisation processes.

There are also technical and financial risks to orders with newly designed products. Technical risks are limited to the extent that intermediate steps for development work are defined and partial solutions are subjected to assessments. This also applies to pumps that are to be provided within the framework of a major contract running over a number of years for the construction of a new type of power plant in China. Commercial risks are minimised by using appropriate contractual clauses. Care is taken to ensure that advance payments usually cover the costs incurred. Suitable provisions are set aside for warranty obligations and contractual penalty risks. These amounted to € 46 million in the consolidated financial statements for 2018 compared with € 51 million in the previous year; beyond this KSB sees no other major residual risk (net risk).

■ Opportunities

Submersible borehole pumps, like those required in well fields, in mining and on drilling platforms, are increasingly used in higher performance ranges. Accordingly, KSB has extended the portfolio to include pumps which – with drive ratings up to 5 MW – deliver flow rates of up to 5,000 m³ per hour. For heads up to 1,500 m KSB, as one of only two producers worldwide, has also been offering double-entry submersible borehole pumps since 2018, which offer relatively greater protection against failure. This competitive edge improves KSB's position as a supplier for major, technically sophisticated projects.

At the ACHEMA 2018 industry fair KSB presented new digital products that are used for service activities. They include use of a control system that records status data of pumps in a system. It indicates to the customer – or alternatively, KSB directly – when servicing is required. When the system is commissioned or on-site repairs are carried out, KSB is able to provide local specialist personnel with direct and appropriate support using Augmented Reality Service  technology without specialists having to travel to the site. This saves the customer time and expense. These and other innovative services enable the KSB Group to consolidate its market position and to improve order opportunities.

Finance / Liquidity

■ Risks

As a group with global operations, KSB is exposed to a wide variety of currency risks. This significant risk is countered with foreign exchange hedges. However, the global manufacturing network also offers the opportunity to benefit from currency effects and to use these where appropriate in competition with other manufacturers. In addition to uncertainties regarding exchange rates, interest rate developments on the capital markets play a role. In material individual cases in the past KSB countered the interest rate risk involved in bank loans subject to variable interest rates by hedging future interest payment flows accordingly. In the current financial year KSB saw no need for such hedging.

Alongside the euro, the most important currencies for the KSB Group are the US dollar, the Indian rupee, the Brazilian real and the Chinese yuan. If the exchange rate differs from the assumptions made, this would have positive or negative effects on business volumes and earnings. A strict receivables management system and the use of trade credit insurance helps KSB avoid situations where receivables cannot be collected from customers.

Risks regarding margins and liquidity are typical of the project business. As well as the continued pressure on selling prices, which is reducing profit margins, these include unfavourable contract conditions such as reduced advances and tougher contractual penalties. As KSB complies exactly with the approval processes in the quotation phase, this risk is minimised. At the same time, this enables KSB to recognise and avoid liquidity shortages. Where necessary, sufficient liquidity is secured by agreeing appropriate credit lines early on.

Persistent recessions or newly emerging crisis may adversely affect the financial situation of customers. Resulting delays in payment and bad debts which were rated as “significant” in the financial year would weigh on the results of operations. The same effect might occur if the foreign exchange regulations become stricter for individual countries. KSB counters this by means of a strict receivables management system and intensive customer contacts.

Changing market conditions mean that business models need to be fundamentally reviewed and the product range adjusted accordingly time and again. A further potential consequence of market developments that exert a permanent strain is an impairment loss on goodwill and assets. If impairment testing in accordance with IAS 36 shows a need for impairment, KSB recognises a corresponding expense in the financial year. There is also a residual risk with regard to the development of premises that cannot be controlled and on which the earnings are based. In the current financial year an impairment loss of € 20.6 million was incurred in respect of goodwill of the South Korean company KSB Seil Co., Ltd. Based on current estimates, a residual risk of € 0.8 million remains for the future. For other companies with goodwill we have taken into account the risk assessment through sensitivity analyses to estimate the risk of impairment. Further information can be found in the Notes to the consolidated financial statements in Section IV. Balance Sheet Disclosures under “Intangible assets”.

As regards tax matters, the global orientation of the activities of the KSB Group must be taken into consideration. Based on its operative activities in numerous countries with varying tax laws and administrative interpretation, differentiated assessment is required for measuring tax obligations. Uncertainty may arise due to different interpretations by taxable entities on the one hand and local finance authorities on the other. These may come to light during audits. By cooperating closely with external local tax specialists, KSB counteracts the risk of having to pay back taxes. As KSB continually monitors unclear issues, it can generally classify the probability of occurrence. Should a need for subsequent payment arise, the corresponding provisions are created in good time. In the 2018 consolidated financial statements, like in the previous year, we did not set aside any provisions for circumstances that are classified as a significant or neutral risk. In addition, there are contingent liabilities in the expected amount of € 1.5 million (previous year: € 1.6 million).

Concentration on a small number of customers entails dependencies which, in the event of the loss of a customer, could result in a material slump in order intake and sales revenue and thus to a burden on earnings for some French service companies. The pressure which individual customers can exert on the company in these cases rises and may result in increasing concessions having to be made by the supplier. If individual Group

entities find themselves in such a situation, losses are in part offset by their parent company. If the situation continues, KSB will consider reorganisation measures or a review of the business model of the company in question.

Procurement

■ Risks

Commodity prices and procurement times are subject to strong market-related fluctuations. This may adversely affect KSB's earnings situation if it does not manage to make up for cost increases or pass them onto its customers. Delays or bottlenecks in the supply chain for raw materials and components may negatively impact KSB's business operations. If KSB does not benefit promptly from declining procurement prices, the persistent pressure on the selling price of products would have a negative impact on earnings.

In the context of the procurement strategy, KSB is also careful to avoid becoming dependent on individual suppliers and thereby counteract the risk of a supplier default. If local conditions mean that it is impossible to ensure sufficient diversification in this regard, KSB will make use of additional foreign business partners. In selected cases, external expertise is integrated into our company, not least to make the best possible use of capacity.

■ Opportunities

KSB reorganised global purchasing and continued to improve processes to increase the efficiency of work in this area in 2018. This also applies to the increased number of online measures through which KSB makes a global comparison of purchasing terms and conditions for goods and services with little investment. The Group will benefit from these measures in the current year.

The changes support the competitiveness of KSB and also provide the foundation for the successful digitalisation of purchasing. In this way KSB secures the opportunities for having permanent access to the best suppliers. It also enhances its appeal to talented buyers who help achieve KSB's corporate goals.

Technology / Research and Development

■ Risks

It is essential to future success to have a product and service range that is suited to the market in terms of technology, price and delivery time. The changing needs of customers and new standards and regulations – especially in promising markets such as China – require the continuous development and improvement of products and services. Research and development required for adjustments consumes significant financial and human resources, with no guarantee of success in either the medium or the long term.

To avoid any negative impact on earnings, it is important to recognise the market-related or technical risks early on. To this end, the KSB Group is constantly updating the development process, which incorporates various control levels. As sales employees are regularly included in this process, risks arising from changes in markets or applications can be taken into account in good time in the evaluation.

■ Opportunities

In the Business Innovation Lab  KSB works in interdisciplinary teams to explore new business models on the basis of digital technologies. By including plant-based data KSB is able to offer its customers solutions to make their liquid transport methods more secure and more efficient while ensuring a higher level of transparency of their processes. Several of these models are currently undergoing testing for functionality and marketability. They are applied in line with the business opportunities they offer.

Through the digital transformation approach there is a greater focus on the permanent external monitoring and communication of systems. Sensors and communications modules are becoming an integral part of this new type of system. The new cloud-based system for continuous pump monitoring enables customers to order support services before problems materialise, which ultimately benefits KSB's business. The Group is also investigating approaches for self-learning monitoring software, the electronic change of fixed speeds – as an alternative to mechanical adjustments – as well as the miniaturisation of power electronics and its integration in the motor.

A particular focus of development activity in past years has been on pumps for the oil and gas industry which are in compliance with the API  standard. The programme launched in 2016 was continued in the year under review and the portfolio expanded to include further sizes and additional versions, which increases the likelihood of order successes.

Other business-specific risks – Environment

■ Risks

KSB's business activities, primarily in the area of production, are subject to numerous environmental protection laws and regulations. Environmental damage of any kind (for example, groundwater contamination, renovation needed due to outdated construction materials or unpleasant odours arising from the use of chemicals) may result in losses not covered by an insurance policy. Therefore, at all company sites officers monitor compliance with laws and regulations as well as with internal KSB rules. If KSB discovers any contamination, it sets aside provisions to meet the liabilities for the necessary clean-up work. In the 2018 consolidated financial statements, these amounted to just under € 0.2 million for significant or neutral risks, as in the previous year.

As part of acquisition projects, KSB examines properties for possible contamination before purchase. Critical issues are taken into account by way of corresponding contractual regulations with the seller and appropriate measures are implemented in consultation with the seller.

In markets where environmental regulations are becoming more stringent, there is a risk that KSB products and own or purchased services may cause infringements that lead to KSB losing its market authorisation and which damage KSB's reputation. A change in rules on liability in environmental protection can also increase the risks for business success. As a member of national and international professional associations the KSB Group becomes aware of imminent changes in environmental law early on. The legal frameworks that are in place in its Operational Units are continually updated, enabling KSB to ensure that its employees always abide by the applicable law. This is also monitored by external auditors as part of the management certifications.

■ Opportunities

At KSB, environmental management is combined with an active and forward-looking approach as well as internal processes that enable permanent cost reductions. This applies, for instance, to all measures that reduce energy consumption in production, service and in the administrative areas. Inversely, the KSB Group offers the users of its products the opportunity to reduce their electricity costs by selecting energy-efficient KSB products.

Hazards to people and nature may emanate from the production and processing methods of manufacturing companies. The global environmental management system helps identify these risks early on and initiate protective measures in good time. KSB thereby not only prevents pollution, but also its financial consequences.

Drawing on a functioning and certified environmental management system, KSB fulfils a requirement of numerous public-sector customers, large companies and entire industries such as the automotive sector. For them, evidence of an environmental management system is an increasingly important criterion in the selection of suppliers. By having its production and service plants checked by auditors and certified to international standards, the KSB Group and its customers are both assured that KSB companies respect the environment. KSB's commitment to the UN Global Compact [\[2\]](#) also meets the expectations of its customers and improves order opportunities with companies that pick their suppliers with a view to their responsibility for the environment and society, among other things.

Other business-specific risks – Human resources, legal aspects and IT

■ Risks

To achieve its growth and profitability business objectives, KSB needs qualified employees at all locations, including technical specialists. Due to the demographic change in some countries, the competition for these and other highly skilled professionals is increasing, and will intensify in the course of the economic recovery. KSB counters this risk with demand-oriented measures, systematic human resources planning and international recruitment processes.

Changing market conditions can have a negative impact on the funded status of pension obligations. Strong fluctuations in the evaluation of capital market interest rates to be paid may have a considerable impact on the Group's earnings and the equity carried on the balance sheet. Alternative models are validated to mitigate this risk.

Changes to our processes and organisational structure, such as the introduction of shared services centres, require clearly defined project responsibilities and valid project plans, as well as the selection of suitably qualified external partners. This helps to avoid teething troubles when changes are introduced to structures and processes, as such problems could impact on the expected cost benefits.

Other potential risks associated with the activities of KSB's employees include dishonest conduct or violations of laws, which could damage the image of KSB. The KSB Group counters these risks and safeguards its reputation among customers by organising regular compliance training and through individual initiatives in critical regions.

Legal disputes cannot always be avoided within the framework of business activities. These are usually disputes arising from operations, generally involving unclear warranty issues. If as a result of these issues KSB expects negative effects on the success of its business, corresponding provisions are set aside, which cover not only the anticipated amount of loss, but also the costs of proceedings. To rule out a net risk, the 2018 consolidated financial statements include about € 2 million (previous year: € 1 million) for those cases classified as significant or neutral risks. Provisions for litigation with authorities and for staff matters have been created in the amount of just under € 2 million overall (previous year: € 3 million) to cover any cases classified as significant or neutral within the risk assessment methodology. Overall, the risk from legal disputes in the financial year is rated to be significant.

Government decisions, such as cost sharing for projects to expand infrastructure in the vicinity of KSB properties, may also adversely affect KSB's earnings.

The manipulation and loss of electronic data can lead to serious commercial disadvantages. KSB limits this risk by means of adequate security systems and access procedures. An increased centralisation of the IT systems of the various operating units assists KSB in this. In this way, high security standards are implemented and the risk of data loss or corruption is reduced.

KSB seeks to counter increased external fraud activities by raising awareness of fraud attempts. At the same time, KSB is increasing its compliance requirements.

■ Opportunities

2018 saw the launch of a programme designed to enhance KSB's appeal as an employer and improving the opportunities for identifying and retaining the right employees for forward-looking positions. This applies, for example, to young talent to help shape the Group's digital transformation. Target group-appropriate recruitment processes were developed for these and other specialists, at times departing from the traditional avenues of personnel recruitment.

Moreover, the introduction of a global HR  management system is being prepared, which will form the basis of strategic human resources planning. The improved transparency of employee-related data will enable KSB to deploy people in an optimum way, taking into account their individual knowledge and skills, and to open new career opportunities for them, including in other countries.

IMPORTANT OPPORTUNITIES AND RISKS BY SEGMENT

As in the previous year, the opportunities and risks for the Pumps, Valves and Service segments are most influenced by economic development. The future development of China remains important to KSB. A material factor for Pumps and Valves, and to a lesser extent for Service, continues to lie in the uncertainties regarding the political risk, which have increased in some countries compared with the previous year. Political decisions in China regarding energy projects and the East/West relations, which remain under considerable strain, and as of this year also the relations between the United States and Iran, con-

stitute material risks for the business of the KSB Group. KSB adjusted its strategy accordingly and discontinued its business with Iran. Nevertheless, a risk remains with regard to projects started and the associated outstanding payments. Worsening payment morale also bears corresponding risk potential for future business. As regards the economic development, the risk assessment compared with the previous year has changed in that the conflict in the Middle East could lead to an oil crisis and is thus a significant risk for the KSB Group. The economic development in general continues to be the most significant risk due to the difficulty of assessability. By contrast, the KSB Group continues to hope that the measures intended to foster growth will provide it with considerable support in achieving its goals. KSB's customers are also often affected by recessions and more intense competition, which can decrease their ability to pay in individual cases.

Negative currency changes in growth countries could threaten exports, in particular those from KSB's European plants. But this would also enable the production facilities in the countries affected to benefit from such developments and to increase their export volumes.

The scope of opportunities has not changed materially since the previous year.

RISK REPORT ON THE UTILISATION OF FINANCIAL INSTRUMENTS

Central financial management in the KSB Group performs its duties within the framework of the guidelines laid down by KSB Management SE as the legal representative. The KSB Group bases the nature and scope of all financial transactions exclusively on the requirements of its business. It does not lend itself to business of a speculative nature. The aim is to ensure liquidity at all times and to finance activities under optimal conditions. With respect to the export business, foreign exchange and credit risks are hedged to the greatest extent possible. KSB continuously improves its receivables management methods with the goal of settling outstanding amounts by their due dates.

KSB is exposed to the following financial risks as a consequence of its business activities:

On the one hand, KSB is exposed to credit risk, which is defined as potential default or delays in the receipt of contractually agreed payments. It 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. 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.

Foreign exchange hedges are used to reduce the risks from transactions involving different currencies. These are generally currency forwards, which KSB uses both for transactions that have already been recognised and for future cash flows from orders still to be processed. At year end, the notional volume of currency forwards used to hedge exchange rate risks was € 238.3 million (previous year: € 276.5 million). Foreign currency items denominated in US dollars account for the major volume hedged by forwards. By strengthening its production sites worldwide, KSB can make use of “natural” currency hedging in currency markets that continue to be volatile.

To minimise interest rate risks, interest rate swaps are concluded in material individual cases to hedge cash flows from underlyings. No hedging via interest rate swaps took place in the current financial year.

All these risks are limited through an appropriate risk management system, defining how these risks are addressed through guidelines and work instructions. In addition, the current risk characteristics are continuously monitored and the information obtained in this way is provided to the Managing Directors and the Supervisory Board in the form of standardised reports and individual analyses.

For more information on the three risk areas and the impact on the balance sheet, see the Notes, Section VI. Additional Disclosures on Financial Instruments.

OVERALL ASSESSMENT OF OPPORTUNITIES AND RISKS

The opportunities and risks for the KSB Group are mainly derived from macroeconomic influencing factors and their effects on the global mechanical engineering markets and the competition.

The overall risk situation as at the reporting date of 31 December 2018 tightened compared with the previous year. This is due to the political developments described in the risk situation by segment and their impact on the markets. Moreover, geopolitical instabilities, decisions on sanctions and volatile currencies had a negative impact on business volume and on planned earnings. Overall, KSB expects an economic performance in line with the IMF [forecast](#) for next year.

In this environment, the KSB Group continues to rely on its ability to match capacities and resources to the changing market conditions. A solid financial position and an efficient cost structure are vital in order to maintain long-term competitiveness. KSB is convinced that it can continue to successfully overcome the risks arising from the above-mentioned challenges.

The scope of opportunities has not changed materially since the previous year.

The risk management system in place as well as the related organisational measures allow KSB Management SE as the legal representative to identify risks in a timely manner and to take adequate measures. In view of the somewhat uncertain situation, the focus of activities in 2019 will continue to be on the management of market risks. The legal representative states that, based on the risk management system established by the KSB Group, at present there are no risks that threaten business continuity and could lead to a lasting and material impact on the net assets, financial position and results of the KSB Group.

Acquisition-related Disclosures

A summary of the acquisition-related disclosures required by Section 315(4) HGB [*Handelsgesetzbuch* – German Commercial Code] is given below and explanatory information is provided pursuant to Sections 175(2) and 176(1) AktG [*Aktien-gesetz* – German Public Companies Act]. Information is disclosed only to the extent that it applies to KSB SE & Co. KGaA (KSB AG until 17 January 2018). In the following, only the term KSB SE & Co. KGaA will be used.

The share capital of KSB SE & Co. KGaA amounts to € 44.8 million, of which € 22.7 million is represented by 886,615 no-par-value ordinary shares and € 22.1 million by 864,712 no-par-value preference shares. Each no-par-value share represents an equal notional amount of the share capital. All shares are bearer shares. They are listed for trading on the regulated market and are traded in the General Standard segment of the Frankfurt Stock Exchange.

Each ordinary share entitles the holder to one vote at KSB SE & Co. KGaA's Annual General Meeting. Some 84 % of ordinary shares are held by Johannes und Jacob Klein GmbH, Frankenthal (until 4 May 2017, the company operated as Klein Pumpen GmbH), whose shares are majority-owned by KSB Stiftung [KSB Foundation], Stuttgart. The preference shares carry separate cumulative preferred dividend rights and progressive additional dividend rights. Detailed information on the share capital and shareholders holding an interest of more than 10 % is provided in the Notes to the Consolidated Financial Statements. Holders of preference shares are entitled to voting rights only in the cases prescribed by law. The issue of additional ordinary shares does not require the consent of the preference shareholders. Similarly, the issue of additional preference shares does not require the consent of the preference shareholders provided that the subscription rights do not exclude newly issued senior or *pari passu* preference shares.

The company is authorised by a resolution passed at the Annual General Meeting on 6 May 2015 to purchase, until 5 May 2020, company shares of any type totalling up to 10 % of the current share capital or, if lower, of the share capital at the time of this authorisation being exercised. The Board of Management shall be entitled to: (1) sell company shares purchased on the basis of this authorisation either on the stock exchange or by another means that safeguards the rule of equal treatment of all shareholders, for example by means of an offer to all of the company's shareholders; (2) sell the acquired shares of the company with the consent of the Supervisory Board, excluding shareholders' subscription rights, if the shares are sold for cash and at a price that is not materially lower than the market price for company shares of the same type and with the same features at the time of the sale. This authorisation is limited to the sale of shares that overall represent no more than 10 % of the existing share capital on the date on which such authorisation becomes effective or, if the amount is lower, the date this authorisation is exercised. The 10 % limit shall be reduced by the proportional amount of share capital for shares (i) issued within the scope of a capital increase during the term of the authorisation excluding subscription rights pursuant to Section 186(3) Sentence 4 AktG or (ii) to be issued for the purpose of servicing warrants and convertible bonds, provided that the bonds were issued during the term of the authorisation excluding subscription rights pursuant to Section 186(3) Sentence 4 AktG; (3) sell the shares with the consent of the Supervisory Board, excluding shareholders' subscription rights, to third parties for the purpose of acquiring companies, parts thereof and/or financial interests in companies as well as within the scope of corporate mergers or (4) redeem the acquired shares without any further resolution of the Annual General Meeting in full or in part, including in several partial steps. The redemption may also take place without a capital reduction by adjusting the proportional amount of the other no-par-value shares in the company's share capital. In such cases, the legal representative

shall be authorised by the Articles of Association to adjust the number of no-par-value shares. KSB SE & Co. KGaA has not yet made use of this authorisation to purchase treasury shares.

There are no resolutions by the Annual General Meeting authorising the company's legal representative to increase the share capital (authorised capital).

In accordance with its Articles of Association, KSB SE & Co. KGaA was managed by at least two Board of Management members until 17 January 2018. The Supervisory Board decided on the appointment and termination of the mandate of members of the Board of Management in accordance with the statutory provisions. Since 17 January 2018, KSB Management SE has conducted the business of KSB SE & Co. KGaA. According to the Articles of Association, the business of KSB SE & Co. KGaA is managed by the legal representative, which acts through the four Managing Directors.

Amendments to the company's Articles of Association are resolved by the Annual General Meeting. If the amendments only affect the wording of the Articles of Association, they can be made by the Supervisory Board, which operates and is formed in accordance with the regulations of the German Co-determination Act.

Corporate Governance Statement (Section 315d HGB in Conjunction with Section 289f HGB)

The Corporate Governance Statement pursuant to Section 289f HGB [*Handelsgesetzbuch* – German Commercial Code] in conjunction with Section 315d HGB dated 13 March 2019 is accessible to the public at www.ksb.com > Investor Relations > Corporate Governance/Corporate Governance Statement.

In addition to the Corporate Governance Report (including the Statement of Compliance in accordance with Section 161 *Aktiengesetz* [German Public Companies Act]), the Corporate Governance Statement includes relevant information on corporate governance practices applied at KSB SE & Co. KGaA that go above and beyond statutory requirements. Also described are the working practices of KSB Management SE as the general partner and the Supervisory Board, and the composition and working practices of the committees of the Supervisory Board.

Statement on the Non-financial Report (Sections 315b, 315c in Conjunction with Sections 289b to 289e HGB)

The combined separate non-financial report is prepared in accordance with Sections 315b, 315c in conjunction with 289b to 289e HGB and disclosed together with the group management report in accordance with Section 325 HGB. The report can be accessed at: www.non-financial-report2018.ksb.com

Remuneration Report

The remuneration report provides information on the principles of the remuneration system for the general partner (KSB Management SE) including its Managing Directors and Administrative Board. It is prepared in accordance with the recommendations of the German Corporate Governance Code (item 4.2.5).

1. REMUNERATION OF THE GENERAL PARTNER

In accordance with the Articles of Association of KSB SE & Co. KGaA (the “company”), the general partner receives annual remuneration not based on profit and loss in the amount of 4 % of the share capital for the management and assumption of personal liability. Accordingly, € 20 thousand was spent on this by KSE SE & Co. KGaA in the 2018 financial year.

According to the Articles of Association, the company additionally reimburses the general partner for any expenses incurred in connection with the management of business operations; this relates but is not limited to the remuneration of the members of the governing bodies of the general partner.

2. REMUNERATION OF THE MANAGING DIRECTORS

The general partner is responsible for the management of the company. The Administrative Board of KSB Management SE appoints its Managing Directors and is responsible for the contracts of service of the Managing Directors. This responsibility includes the structure of the remuneration arrangements, the amount of remuneration and their regular review.

The remuneration arrangements for the Managing Directors are structured as transparently as possible. The total amount of remuneration for the individual Managing Directors is determined based on various parameters. Criteria for assessing the appropriateness of the remuneration include the responsibilities of the individual Managing Directors, their personal performance, the economic situation, the company’s success and customary remuneration amounts when taking peer companies and the remuneration structure used elsewhere within the company into consideration.

The remuneration of the Managing Directors consists of fixed and variable components. Fixed components are granted regardless of performance and consist of a fixed sum plus benefits, as well as pension commitments (retirement, disability, widow’s or orphan’s pension). The fixed sum makes up 60 % of the normal annual salary and is paid out as a monthly basic remuneration. All Managing Directors are equally entitled to the accompanying fringe benefits which include the private use of a company car, payment of insurance premiums and any payments associated with a post-contractual non-competition clause. No loans or advance payments were granted to Managing Directors in the past financial year.

To ensure the sustainability of the nature of the remuneration, the variable remuneration component includes a long-term component, which accounts for around two thirds of the variable remuneration. It is calculated on the basis of the net profit of the KSB Group plus depreciation/amortisation. Its calculation in the form of a rolling, weighted three-year average essentially includes the effect of the future financial years over the contract term. The short-term variable portion of remuneration is linked to three reference values in equal part. In addition to the Group’s key indicators of EBIT margin and sales revenue, the calculation is based on the personal goals of the Managing Directors. These goals are set in such a way that their fulfilment has a positive impact on the relevant performance area beyond the year under review.

The total amount of the variable remuneration components is limited in order to take extraordinary, unforeseen developments into account.

The weighting factors above do not reflect the additional possibility of a bonus, to be paid out in individual cases at the discretion of the Administrative Board, of no more than three monthly salary payments per financial year in recognition of any special performance of individual Managing Directors. Such decisions are only made on an irregular basis, meaning that they do not necessarily have to be made annually.

Furthermore, when contracts of service are concluded, care is taken to ensure, in accordance with item 4.2.3 of the German Corporate Governance Code, that payments made to a Managing Director in the event of his or her tenure being terminated prematurely without good reason shall not exceed the value of two years' remuneration including fringe benefits (settlement cap) and shall not exceed the remuneration due for the remaining term of the contract of service. No other payments have been promised to any Managing Director in the event of termination of service; similarly no compensation will be paid in the event of a takeover offer. If the contract of service of a Managing Director is terminated for cause, the company shall not make any severance payments. On 6 May 2015 – using a legally permissible option – the Annual General Meeting resolved not to disclose the details of the compensation for a period of five years.

3. REMUNERATION OF THE ADMINISTRATIVE BOARD

The shareholder of KSB Management SE, Klein, Schanzlin & Becker GmbH, decides on the remuneration of the Administrative Board. The remuneration essentially consists of a fixed sum which covers the time spent attending up to 15 meetings of the Administrative Board. A daily or hourly rate in line with usual market rates is agreed for any extra time spent. Fringe benefits for the Administrative Board have not been agreed and will not be granted. Its members are, however, covered by directors' and officers' (D&O) liability insurance [*Vermögensschaden-Haftpflichtversicherung*] taken out by the company under usual market conditions in favour of the Administrative Board.

Frankenthal, 13 March 2019

KSB Management SE

The Managing Directors

