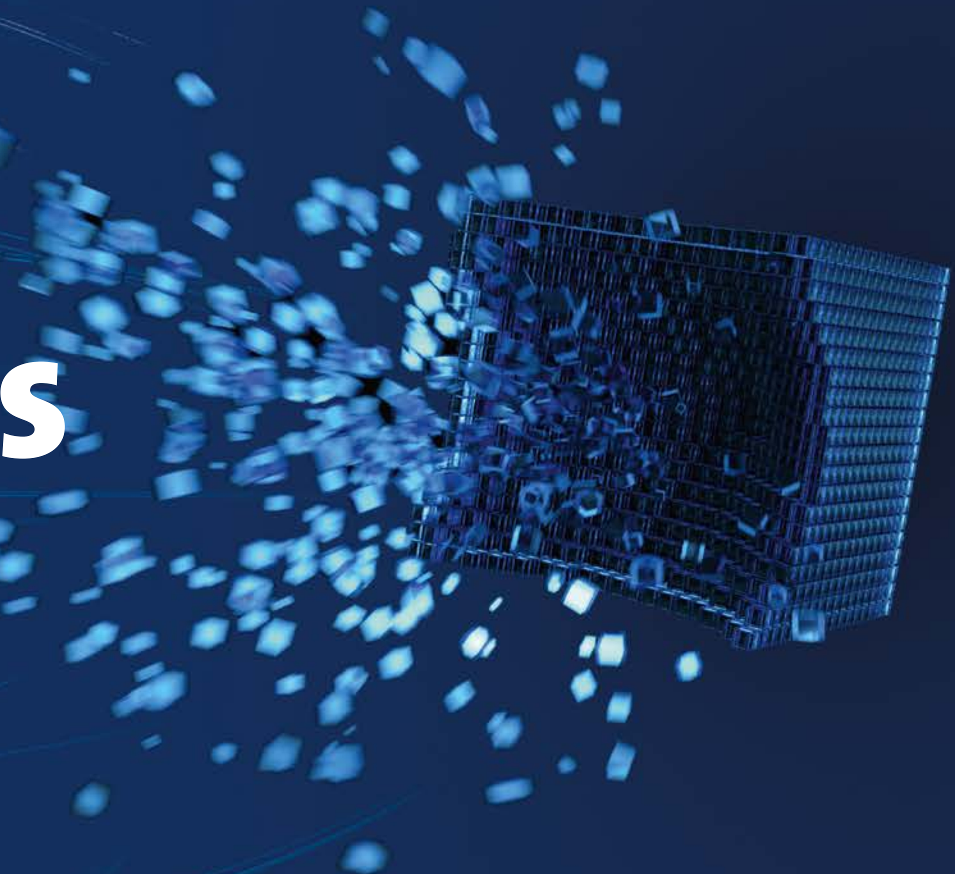
KRONES Group Annual Report 2019

Set on **success**



KRONES

2019 highlights

- Despite difficult overall economic conditions, consolidated revenue increased in 2019 by 2.7% to €3.96 billion.
- Order intake, at €4.08 billion, was up 3.2% year-on-year.
- Profitability affected by high personnel costs and one-time expenses for restructuring and impairments. The EBT margin is 1.1% (prior year 5.3%). Without one-time effects, the EBT margin would be 2.8%, in line with the guidance of around 3%.
- KRONES is making good progress in implementing structural measures for a sustained improvement in earnings.
- KRONES plans to pay a dividend based on earnings excluding one-time effects. Shareholders will receive a dividend of €0.75 per share for 2019

		2019	2018	Change
Revenue	€ million	3,958.9	3,854.0	+2.7%
Order intake	€ million	4,083.5	3,957.3	+3.2%
Orders on hand at 31 December	€ million	1,385.7	1,261.1	+9.9%
EBITDA	€ million	227.3	305.9	−25.7%
EBITDA margin	%	5.7	7.9	−2.2 PP*
EBIT	€ million	43.9	203.2	−78.4%
EBT	€ million	41.7	204.3	−79.6%
EBT margin	%	1.1	5.3	−4.2 PP*
Consolidated net income	€ million	9.2	150.6	−93.9%
Earnings per share	€	0.30	4.78	–
Dividend per share	€	0.75**	1.70	−55.9%
Capital expenditure for PP&E and intangible assets	€ million	168.9	179.1	−€10.2 million
Free cash flow	€ million	−94.4	120.7	−€215.1 million
Net cash at 31 December***	€ million	38.1	215.1	−€177.0 million
Working capital to revenue****	%	26.9	27.3	−0.4 PP*
ROCE	%	2.7	12.8	−10.1 PP*
Employees at 31 December				
Worldwide		17,353	16,545	+808
Germany		10,733	10,887	−154
Outside Germany		6,620	5,658	+962

*Percentage points **As per proposal for the appropriation of earnings available for distribution ***Cash and cash equivalents less debt
****Average of last 4 quarters

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TO OUR SHAREHOLDERS

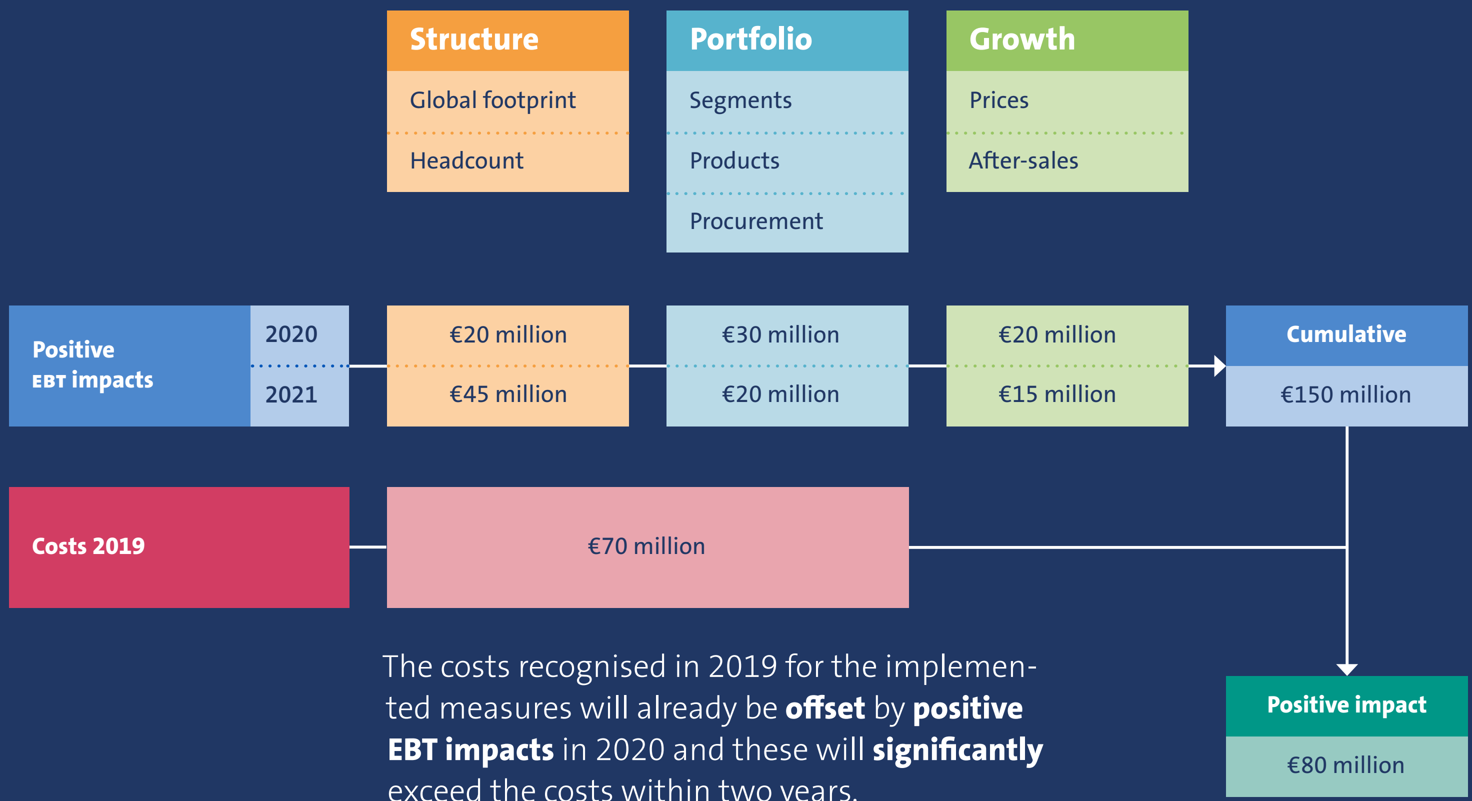
Set on **success**

The 2019 financial year has clearly shown the need for changes at KRONES. So that the company stays **competitive going forward**, the Executive Board has decided structural measures that are now being implemented. Among other things, we are further expanding our **global footprint** and optimising the entire House of KRONES product portfolio. We will eliminate the weaknesses in the company overall.

Despite the many challenges, we look to the future with confidence and self-assurance – because KRONES' **strengths clearly predominate**. We are outstandingly well positioned in markets with stable growth in the medium and long term. Our workforce is both highly qualified and highly motivated. Moreover, the company has very sound finances and a stable majority shareholder. Building on this strong foundation, we are sure that together with our team, we have KRONES **set on success**.

These are the **measures** to keep KRONES on **track for success.**

Measures
Overview



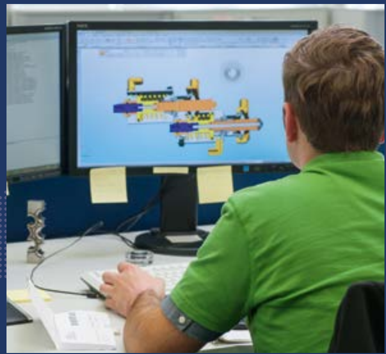
The costs recognised in 2019 for the implemented measures will already be **offset** by **positive EBT impacts** in 2020 and these will **significantly** exceed the costs within two years.

Expansion of our **global footprint** in **emerging markets**

Structure
Global footprint

By the end of 2020, KRONES will implement a total of **600,000 production hours** at its new locations in Hungary and China. The new Hungarian production facility is expected to save KRONES about **€5–10 million** in 2020. When it is fully established, we expect annual cost savings of **€20 million**. The production facility in China will deliver savings of at least **€2 million** in the first stage.

Added to this are **200,000 construction hours** in Hungary, China, the Czech Republic and India.



The **plant in Hungary** will increase our future **profitability**

Structure
Global footprint

The plant in Debrecen, Hungary, will be fully operational by the end of 2020. It will then have a capacity of 36,000 working hours per month. At the beginning of 2020, the new plant had 450 employees. Another 50 are to be added by the end of 2020.

Expanding our **global footprint** with local cost structures

Structure
Global footprint

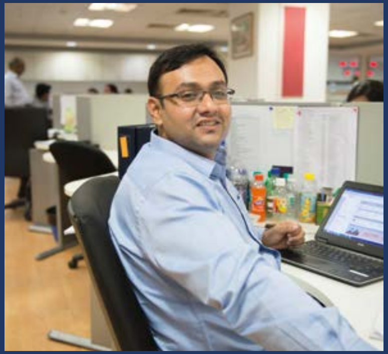
KRONES has already significantly expanded its emerging markets workforce in past years. At the end of **2019**, we had **4,187 employees** in emerging markets, **33% more than in 2018**.

That has a simple reason: To take advantage of market growth opportunities in emerging economies, we need **more employees in the regions where customers are located**. We already employ about **24% of the workforce** in emerging markets. Given corresponding market growth, we will further increase that percentage.

Expansion of our **global footprint** in **process technology**

Structure
Global footprint

A critical success factor in process technology is the ability to support customers locally with capabilities along the **entire value chain**. For this purpose, KRONES has **built up and expanded in-house capacity** in recent years. We have additionally strengthened our process technology capabilities with acquisitions. In this way, KRONES has gained process technology locations in the **USA** and **China**. These will generate **positive earnings contributions from 2020**.



Reduction in workforce in **Germany** and **internationally**

Structure
Employees

To increase profitability for the long term, group processes and resources are to be further optimised and **organisational units streamlined**.

As part of its efficiency measures, KRONES has **already reduced full-time jobs in Germany in 2019**. This will continue in 2020.

In **Germany**, the structural measures result in the loss of **500 jobs**, comprising **200 in the reporting period** and **300 in 2020**. About **200 jobs will be cut** internationally by the end of 2020.

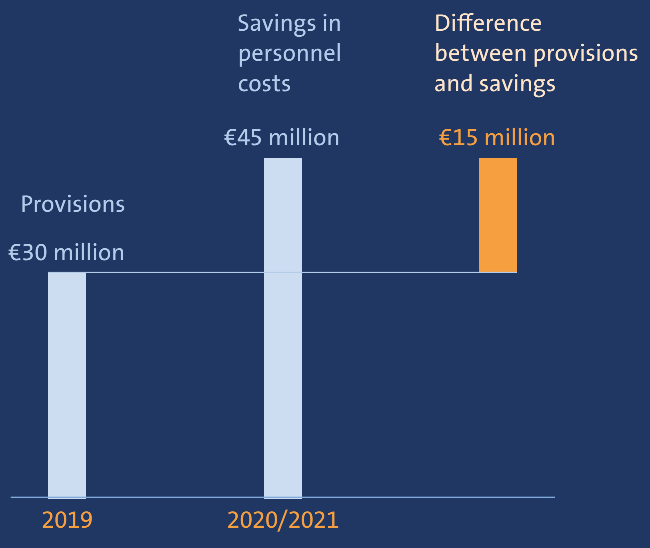
Germany (in-house)	– 200 FTE
Germany (temp)	– 50 FTE
RoW (in-house)	0 FTE
2019	**– 250 FTE**

Germany (in-house)	– 300 FTE
Germany (temp)	– 100 FTE
RoW (in-house)	– 200 FTE
2020	**– 600 FTE**

Reduction in workforce in **Germany** and **internationally**

Structure
Employees

The measures to **reduce personnel costs** necessitated around **€30 million in provisions** in 2019 and had a corresponding negative impact on earnings. By reducing the workforce, KRONES expects **savings** in personnel costs totalling **around €45 million in 2020 and 2021**.



Portfolio streamlining in the House of KRONES

Portfolio
Segments

Digitalisation

Automatic control systems
IT services

Process technology

Beer
Malt beverages
Soft drinks
Juice
Water
Liquid food

Bottling and packaging equipment

Labelling technology
Inspection technology
Filling technology
Cleaning technology
Plastics technology
Packing and palletising technology
Conveyor technology

Intralogistics

Warehouse management systems
In-house solutions
Order picking systems

Lifecycle Service

Line efficiency
On-site service
Retrofits

We are streamlining our portfolio across the entire House of KRONES. This includes new products and services as well as exiting from unprofitable areas and technologies.

Portfolio streamlining in process technology

Portfolio
Segments

Portfolio streamlining in **process technology**

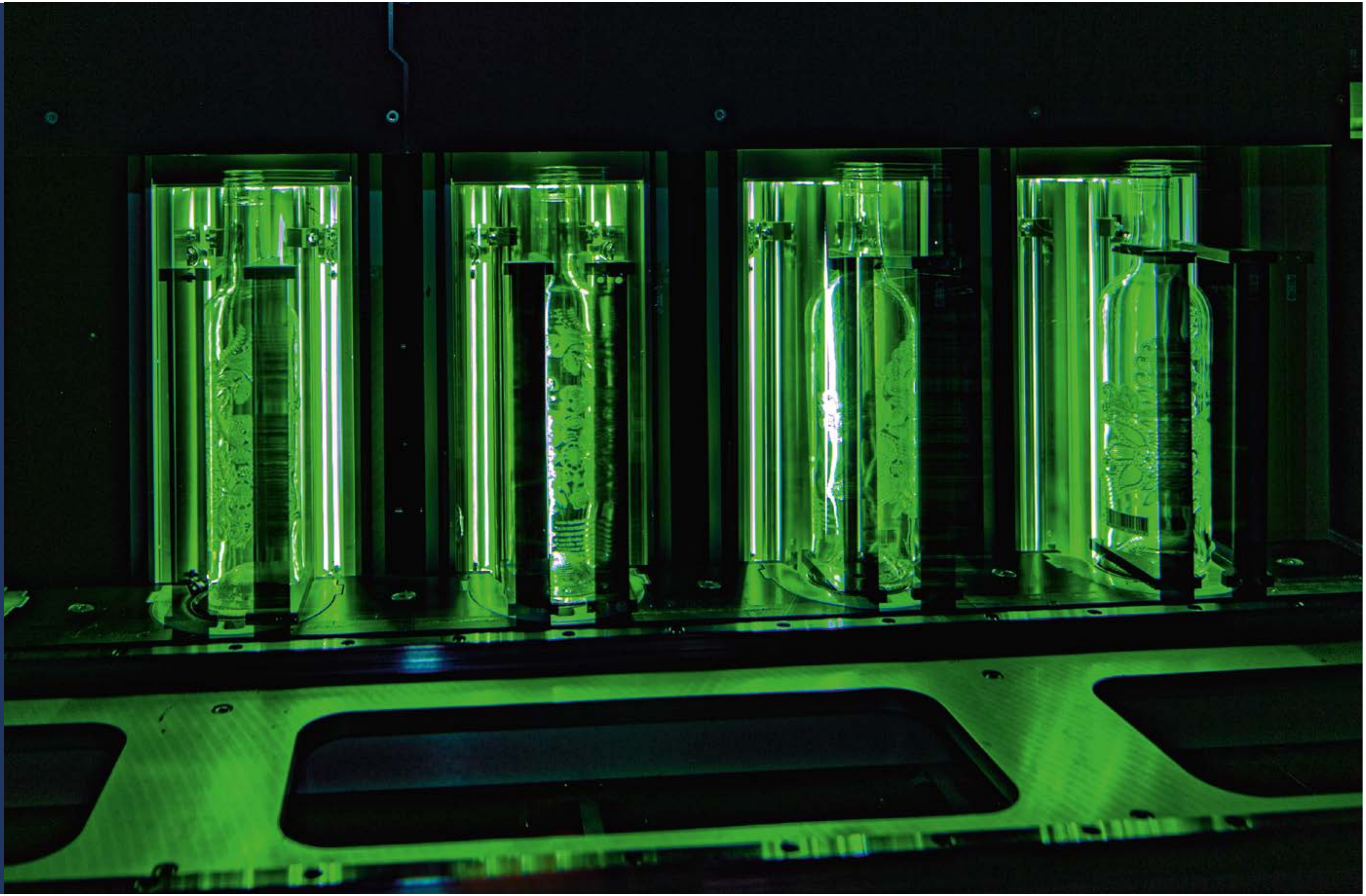
Portfolio Segments

Process technology is one pillar of the **House of KRONES**. It includes products and areas that are developing well. Overall, however, **profitability** in process technology is **insufficient**. This is mainly due to **beverage production**. We are going to make this a **legally independent unit**. This enables us to **better assess** how the individual businesses, specifically with regard to the different types of beverages, are developing on a **standalone basis**.

After several acquisitions in the past, we currently plan **no acquisitions** in process technology.

Portfolio streamlining in Bottling and Packaging Equipment

Portfolio
Segments



Portfolio streamlining in **Bottling** and **Packaging Equipment**

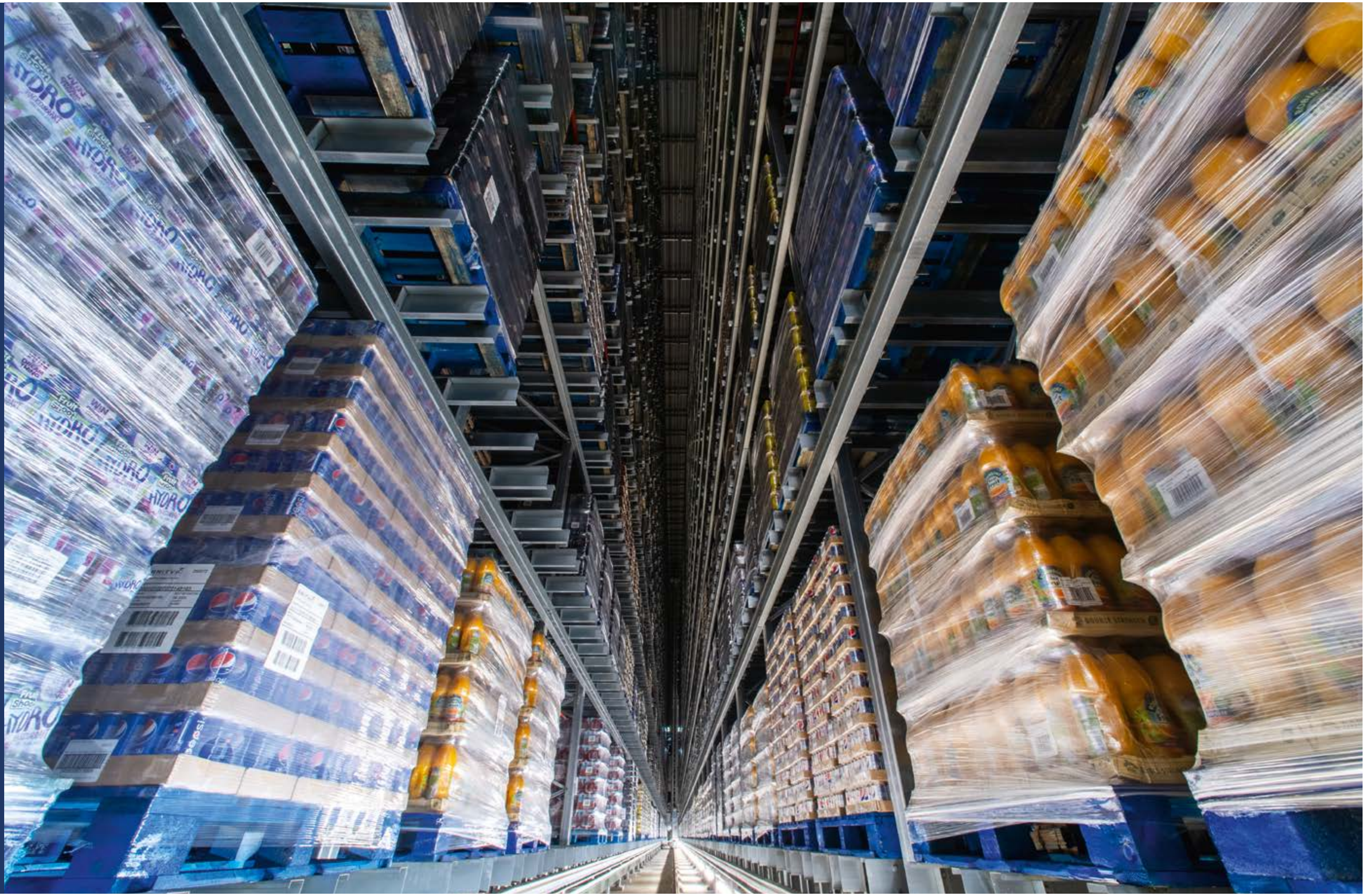
Portfolio
Segments

This segment is suffering as a result of the critically skewed debate about plastics. We create **sustainable material cycles** with our high-quality **PET recycling systems**, material-saving container design and low-energy container production.

At the same time, we continue to expand our product portfolio in **glass** and **cans** as packaging types.

Portfolio streamlining in Intralogistics

Portfolio
Segments



Portfolio streamlining in **Intralogistics**

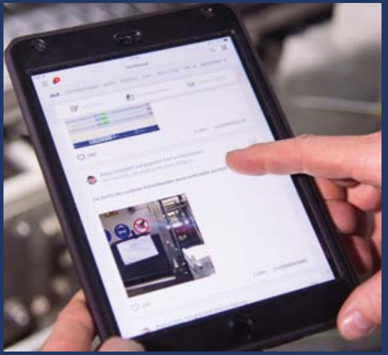
Portfolio
Segments

The third pillar of the **House of KRONES**, intralogistics, continues to see **very good demand** for our products and services. We will **manage the rapid rate of growth** and **push ahead with internationalisation**. For this purpose, we have **pooled** all intralogistics activities in **SYSTEM LOGISTICS** and made this a **legally independent unit.**

Portfolio streamlining in **digitalisation**

Portfolio
Segments

Looking ahead, we will concentrate our digitalisation activities more intensively around solutions for our core **bottling and packaging equipment** segment and notably for **lifecycle services**. Overall, **investment** in digitalisation will continue to **impact profitability** in the **next few years**. KRONES sees **good market opportunities** here in the **medium to long term**.



Internationalisation and **optimisation** of procurement

Portfolio
Procurement

At **about €2 billion**, cost of materials is by far the largest expense item in the statement of profit and loss.

Expansion of our global footprint relates not only to production, but also to the procurement of material inputs. **Best-cost country (BCC) sourcing** secures us **significant reductions in procurement costs.**

We will **rigorously continue** with the **international procurement measures** we have implemented so far.

Internationalisation and **optimisation** of procurement

Portfolio
Procurement

KRONES has already successfully implemented this in **Taicang, China**. It has also established a supplier network in **India, Taiwan, Thailand** and **Turkey**.

BCC procurement volume totalled **around €45 million** in 2019. This will continue to rise and will deliver significant cost savings in the years ahead.

Large potential savings in procurement

	Use of known cost levers	Medium-term measures: Category management	Medium-term measures: BCC and make-or-buy	Advanced tools
Current status	Ongoing optimisation of current expense structure	Main categories assessed	Concrete outcomes attained	To be published
KRONES *action*	Maintenance of negotiating practices	Systematic assessment covering 80% of total expenses Optimised procurement strategy	Planning and use of all options	Combined requirements and consolidated supplier base Product structure optimised for outsourcing
Cumulative savings in next 3 years	€20–30 million	€20–30 million	€30–40 million	

Implementation of **price increases**

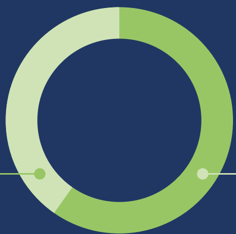
Growth
Prices

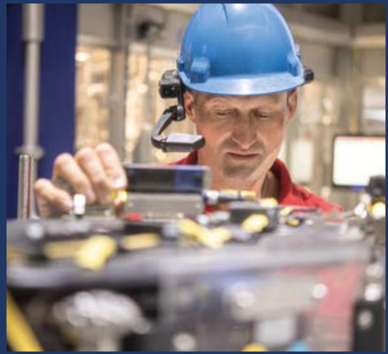
Price increases are necessary in order to partially offset rising labour and material costs. The basis for this is **strong price discipline**. Realistically, a €10–20 million earnings contribution is attainable. A **1% price increase** on **self-produced machinery** would provide an additional EBT contribution of **€10–15 million** in 2020.

Exploiting **after-sales market potential**

Growth
After-Sales

Due to the strong installed base, the after-sales market has considerable growth potential for Krones in the medium to long term. Krones has **around 40,000** machines installed in customers' factories. **Further expanding** our service locations around the world will enable us to significantly increase our service business. Our LCS team so far serve **about 60%** of our installed base. Each percentage point generates **€12 million annually** in profitable service revenue.





Letter from the **Executive Board**

"KRONES will rigorously implement the measures it has decided in order to put us back on track for success."

Christoph Klenk
CEO

Dear shareholders and friends of KRONES,

2019 was very challenging for KRONES. Due to various factors, we had to lower our earnings guidance mid-year. In response, the Executive Board introduced far-reaching structural measures to strengthen profitability and keep the company set on success.

KRONES continues stable growth despite weakening economy

Forecasts for the economy gradually worsened over the course of the year. The US trade disputes with China and Europe and the long-unresolved Brexit weighed down on the economy. International Monetary Fund (IMF) experts had to revise their global growth forecast downwards several times in 2019, from at first 3.5% to 2.9%. The sometimes highly emotionally charged plastics debate also did not benefit our business.

Despite these uncertainties, demand in our markets serving the international beverage and packaging industry was satisfactory. KRONES was able to use the relatively stable demand and increased revenue during the reporting period by 2.7% to €3.96 billion. This means we met our 3% growth forecast. Order intake grew similarly, improving by 3.2% to €4.08 billion.

Profitability in 2019 significantly below target

In contrast to revenue and order intake, profitability did not develop as planned at the beginning of 2019. KRONES' profitability was hit unexpectedly hard during the reporting period by significant rises in labour costs. In addition an unfavourable product mix leading to capacity underutilisation in plastics technology and temporarily weak demand in parts of the after-sales business also had a negative impact, primarily in the second quarter. In total, the EBT margin fell in the reporting period from 5.3% to 1.1%. It should also be noted that we recognised €70 million in expenses for provisions and writedowns in 2019. Adjusted for these expenses for structural measures, the EBT margin was 2.8%. KRONES therefore attained the target of around 3%, which had been reduced mid-year (from originally around 6%).

Structural measures launched – initial benefits visible

To stay competitive for the long term and attain the profitability needed for the purpose, we launched a package of short and medium-term measures in the second half of 2019. The aim is to improve cost structures, raise efficiency, review our portfolio and create new growth momentum. Many of the individual measures to be implemented in 2020 and 2021 are described in detail on pages 5 to 24.

KRONES is already seeing initial benefits. We are progressing well with the cost savings. Selling prices have stabilised and are moving in the right direction. We are also making good progress with the expansion of our global footprint. The most important project here is our new plant in Hungary. After delays, the factory will be fully operational in the second half of 2020 and from then onwards will save some €20 million a year. We have also significantly strengthened our presence in China after expanding production and establishing completely regional procurement structures.

There is still much to be done in process technology, however, most of all in business with breweries. We have set ourselves clear targets here, together with a timescale for attaining them. If the beverage production business does not meet the required profitability target by 2021, we will make clear-cut decisions about the future of this business.

Continued high level of investment in innovation

As part of the action package, we are reducing the recently very high level of capital expenditure back to normal levels. This mainly relates to spending on property, plant and equipment and on acquisitions. Regarding acquisitions, we are going to concentrate on integrating the companies acquired in recent years. No major acquisitions are planned for the time being.

Technologically leading products and services are our company's aspiration and future. Consequently, we are going to maintain our high level of investment in innovation and will not be cutting our research and development budget or expenditure on digital activities.

KRONES has innovative products for global challenges such as reducing CO_2 emissions and sustainability in plastic packaging. We will secure our technology leadership with further innovations in the years ahead. Some of our innovations from the reporting period are showcased on pages 58 to 63.

International workforce to grow – reduction in Germany

The number of employees in the Group increased in the reporting period by around 800 to 17,353. In Germany, the number employed decreased by 150. The job cuts in Germany are very painful but regrettably unavoidable. As difficult as those job cuts in Germany have been for us, we have to relocate parts of our value creation abroad in order to remain competitive as a strongly export-oriented company in our international markets. Especially in the current challenging and, for our company, unusual situation, I would like on behalf of the entire Executive Board to extend my sincere thanks to the entire KRONES team for their hard work and commitment.

Targets for 2020 – delivering sustained turnaround in profitability

After the difficult year in 2019, KRONES aims to achieve a rapid and sustained turnaround in profitability so that we meet our medium-term targets as soon as possible. Although we have set ambitious targets for 2020, we do not expect any growth in revenue with a view to the current uncertain situation in the markets. The EBITDA margin (see also page 49 following) is expected to improve to about 6.7–7.2%. For our third performance target, working capital to revenue, we will attain 26% this year and in doing so, in combination with lower capital expenditure, we will also increase free cash flow.

We are the market and technology leaders in a globally growing market. The task now is to continue implementing the structural aspects and the adopted measures together with our motivated global team. I firmly believe that together we can put KRONES back on track for success.

Christoph Klenk
CEO

The **Executive Board**

Markus Tischer
International Operations and Services
Digitalisation

Thomas Ricker
CSO

Norbert Broger
CFO

Christoph Klenk
CEO
Intralogistics
Process Technology

Ralf Goldbrunner
Bottling and Packaging Equipment
Compact Class

Report of the **Supervisory Board**

Volker Kronseder
Chairman of the Supervisory Board

Ladies and Gentlemen,

KRONES is in a challenging situation. The past few years have mainly been characterised by profitable growth. However, the 2019 financial year has clearly shown that there is a need for changes. Although revenue increased, earnings fell well short of expectations. So that KRONES stays competitive moving forward, the Executive Board, in close consultation with the Supervisory Board, has already implemented strategic and operational measures and initiated further structural adjustments. Those measures also include what for KRONES is the unusual step of a reduction in the workforce. This was not an easy decision for the Executive Board and Supervisory Board, but it is regrettably unavoidable. The Supervisory Board has consulted in great detail on the causes of the weak earnings as explained by the Executive Board together with the measures to improve profitability. It considers the path now taken and the structural measures to be the right way forward. The Supervisory Board will follow and review the implementation of the measures. It will work closely and constructively for this purpose with the Executive Board.

Advice and oversight

The Supervisory Board of KRONES AG continuously oversaw and advised the Executive Board during the 2019 financial year, as prescribed by the German Stock Corporation Act and the company's articles of association, and discharged its responsibilities with due care. Full regard was given at all times to the provisions of the German Corporate Governance Code and those of the German Stock Corporation Act on Executive Board reporting obligations to the Supervisory Board. The Executive Board regularly informed the Supervisory Board about the company's business and financial situation and risk management in written and oral reports both during and outside of Supervisory Board meetings. With regard to decisions of particular significance to KRONES AG and the Group, the Supervisory Board was informed and involved by the Executive Board at an early stage. The Chairman of the Supervisory Board and the Chief Executive Officer in particular maintained regular contact between meetings. In that connection, they jointly discussed questions of corporate strategy, current business performance, the risk situation, risk management and compliance.

Focuses of the work of the Supervisory Board in 2019 included current business performance and in particular earnings performance, strategy and measures for target attainment and sustained strengthening of profitability. Other focuses of the Supervisory Board's work were market and competition topics. There were no changes in the membership of the Supervisory Board in 2019.

Conflicts of interest

Under section 5.5.2 of the German Corporate Governance Code, each member of the Supervisory Board must inform the Supervisory Board of any conflicts of interest, particularly if they could arise as a result of performing an advisory role or membership of a governing body at customers, suppliers, lenders or other third parties. No such conflicts of interest were disclosed in the reporting period.

Supervisory Board meeting reports

In total, four regular Supervisory Board meetings were held in 2019. All 18 Supervisory Board members were present at three of the four meetings. One member of the Supervisory Board was unable to attend one meeting.

Representatives from KRONES' auditing firm were present for a portion of the first meeting on 20 March. They gave the Supervisory Board a detailed explanation of their audit engagement together with the focus of their audit of the 2018 annual financial statements and provided a detailed overview of the audit. Questions from the Supervisory Board were explained and answered by the auditors in detail. The Supervisory Board then ratified the annual financial statements and management report of KRONES AG and approved the consolidated financial statements and consolidated management report. Under the "Supervisory Board and Executive Board matters" agenda item, the Chairman of the Supervisory Board presented the findings of the efficiency review on the work of the Supervisory Board. In summary, the Chairman of the Supervisory Board noted that the efficiency of the Supervisory Board in 2018 was rated as very positive. Under the same agenda item, the Supervisory Board unanimously resolved to extend the contract of Chief Sales Officer Thomas Ricker, which was set to expire on 31 December 2019, by five years to 31 December 2024. In doing so, the Supervisory Board complied with the recommendation of the Standing Committee. On the same occasion, the Supervisory Board adopted the agenda for the 2019 annual general meeting. Finally, the Management Board provided the Supervisory Board as part of reporting on business planning with a detailed explanation of the targets and measures for target attainment for 2019 together with the medium-term planning.

The Supervisory Board held its second meeting in 2019 on 24 July. Reporting on the business situation, the Executive Board informed the Supervisory Board about the most important figures for the first half of 2019 and the outlook for the full year. In the same connection, the Executive Board members each gave a current status report and the outlook for 2019 with regard to the business areas in their respective portfolios. The Supervisory Board consulted in detail on the reasons for the current difficult business situation and the downgraded guidance published by the company on 10 July. Following lengthy discussion, the Supervisory Board also decided to terminate, with immediate effect, the appointment of Michael Andersen as a member of the Executive Board of KRONES AG. His responsibilities were provisionally assumed by Chief Executive Officer Christoph Klenk.

The third meeting of the Supervisory Board in 2019 took place on 25 September. At the recommendation of the Standing Committee, the Supervisory Board unanimously appointed Norbert Broger as member of the Executive Board and Chief Financial Officer of KRONES AG with effect from 1 January 2020 to 31 December 2022. Prior to his appointment, the selection procedure was outlined to the Supervisory Board and Norbert Broger introduced himself in person. A further item on the agenda was the business situation at KRONES. Chief Executive Officer Christoph Klenk and the members of the Executive Board heading the various units explained their analysis and the measures planned.

The Supervisory Board held its fourth meeting of 2019 on 27 November. During the meeting, an external expert in capital market law gave a presentation and informed the Supervisory Board about important formal stipulations and the adoption of Supervisory Board resolutions. The "Executive Board matters" agenda item included the redistribution of responsibilities within the Executive Board. Another item on the agenda at the fourth meeting of the Supervisory Board was the report of the Audit and Risk Management Committee, addressing the topics of risk management, internal auditing and compliance. The Executive Board then presented the Supervisory Board with figures on the current performance of the business and the outlook for the full year 2019. Finally, the Supervisory Board considered the Executive Board's budgeting for the 2020 financial year. The Supervisory Board unanimously approved the annual and investment budget for 2020.

The work of the Audit and Risk Management Committee

The Audit and Risk Management Committee consists of Supervisory Board Chairman Volker Kronseder, his deputy Werner Schrödl and Supervisory Board members Norman Kronseder, Hans-Jürgen Thaus, Josef Weitzer and Jürgen Scholz. Its Chairman is Hans-Jürgen Thaus. The Audit and Risk Management

Committee oversees the company's accounting and financial reporting, the audit of the financial statements and other reporting, and prepares related proposals for Supervisory Board resolutions. In addition, the committee prepares the Supervisory Board's review of the annual financial statements, the management report and the auditor's report for the separate and consolidated financial statements, and makes recommendations. Furthermore, the Audit and Risk Management Committee monitors the effectiveness of the internal control system, the risk management system and the compliance system.

The Audit and Risk Management Committee met five times in 2019. All six members were present at four of the five meetings. One member of the committee was absent at the meeting on 20 November.

At its 14 March meeting, the committee mainly considered the auditor's report on the audit of the annual and consolidated financial statements as of 31 December 2018.

On 20 March, the committee met to prepare the Supervisory Board meeting held to ratify the financial statements. Based on the remarks of the auditor and information from the auditor's report, the members of the Audit and Risk Management Committee agreed to recommend that the Supervisory Board ratify the annual financial statements and management report of KRONES AG for the 2018 financial year and approve the consolidated financial statements and consolidated management report for 2018.

At its third meeting on 10 April, the Audit and Risk Management Committee addressed the report on the non-financial statement. The auditor presented the audit findings for this purpose. The Audit and Risk Management Committee approved the audit findings and had no objections. The committee members decided to recommend that the Supervisory Board ratify the consolidated non-financial report. In addition, the committee explained the recommendation to the Supervisory Board for the auditor to be proposed by Supervisory Board to the Annual General Meeting for election as auditor of the annual and consolidated financial statements for 2019.

Items on the agenda at the fourth meeting of the Audit and Risk Management Committee on 15 October included KRONES' current financing situation, the Executive Board's review of the portfolio and of portfolio streamlining measures and the Group's current situation.

At the fifth meeting of the Audit and Risk Management Committee on 20 November, the heads of Controlling, Internal Audit and Compliance informed the members of the committee about the current risk situation, internal audit and compliance management.

The work of the Standing Committee

The Standing Committee consists of Werner Schrödl, Norman Kronseder, Josef Weitzer, and Volker Kronseder. It is chaired by Volker Kronseder. The committee generally deals with all other topics that are outside the remit of the Audit and Risk Management Committee. These include, for example, human resources strategy and Executive Board and Supervisory Board remuneration. The Standing Committee met three times in 2019. All four members were present at all three meetings.

At the meeting on 14 March, the Standing Committee prepared the extension of Chief Sales Officer Thomas Ricker's contract for the Supervisory Board. The committee members resolved to recommend that the Supervisory Board adopt the resolution to extend the contract with Thomas Ricker by five years to 31 December 2024.

The Standing Committee's second meeting took place on 10 July. At that meeting, Chief Executive Officer Christoph Klenk and Chief Finance Officer Michael Andersen informed the committee about the current business situation and measures for improving earnings in the short to medium term.

The Standing Committee's meeting on 12 September was primarily convened to make a recommendation in advance of the Supervisory Board meeting on 25 September for the appointment of Norbert Broger as a member of the Executive Board of KRONES AG.

Supervisory Board concurs with audit findings

The annual financial statements of KRONES Aktiengesellschaft prepared by the Executive Board, the consolidated financial statements, the management report for KRONES AG and the group management report for the period ended 31 December 2019 were examined by the auditors elected by the annual general meeting, Ernst & Young GmbH Wirtschaftsprüfungsgesellschaft, and each issued with an unqualified audit report. The audited annual financial statements and consolidated financial statements, the management report for KRONES AG and the consolidated management report for the period ended 31 December 2019 were duly submitted to all members of the Supervisory Board for review. The audited financial statements and management reports were the subject of the Supervisory Board meeting held to ratify the financial statements on 18 March 2020. Representatives of the auditing firm also participated in the meeting and reported to the Supervisory Board on their audit findings and the focal points of their audit.

The Supervisory Board noted and approved the audit findings. No objections were raised following the final review by the Supervisory Board, which covered in particular the matters described in the auditor's audit report including the audit procedures. The Supervisory Board has ratified the annual financial statements for KRONES AG and approved the consolidated financial statements as well as the Executive Board's proposal for the appropriation of earnings available for distribution. The 2019 annual financial statements for KRONES AG are thus ratified.

The auditors included in their audit the Executive Board's report, in accordance with section 312 of the German Stock Corporation Act, on KRONES AG's relations to affiliated companies and submitted their audit report to the Supervisory Board. The audit by the auditors did not give rise to any objections. The auditor issued the following unqualified audit opinion on the dependency report:
"Based on our due audit and assessment, we confirm that

1. the statements as to fact made in the report are accurate,
2. the consideration given by the company in respect of the legal transactions referred to in the report was not unreasonably high."

The Supervisory Board's review of the report in accordance with section 312 of the German Stock Corporation Act on KRONES AG's relations to affiliated companies did not give rise to any objections. The Supervisory Board therefore concurred with the findings of the audit by the auditors. Following the final outcome of its own review, the Supervisory Board did not raise any objections to the Executive Board's concluding declaration on relations with affiliated companies.

In addition to the statutory audit, Ernst & Young GmbH Wirtschaftsprüfungsgesellschaft also performed a limited assurance review of the separate combined non-financial report for KRONES AG and the Group for the period from 1 January to 31 December 2019. On the basis of that review, the auditor did not raise any objections to the reporting in and fulfilment of the statutory requirements for the non-financial statement.

Thanks to the Executive Board and the workforce

The members of the Supervisory Board would like to thank the Executive Board and all of the company's employees for their dedication and wholly successful work in the 2019 financial year.

Neutraubling, March 2020
The Supervisory Board

Volker Kronseder
Chairman of the Supervisory Board

The **Supervisory Board**

Volker Kronseder

Chairman of the Supervisory Board
* University Hospital Regensburg
* Economic Advisory Board, Bayerische Landesbank

Werner Schrödl**

Deputy Chairman of the Supervisory Board
Chairman of the Group Works Council
Chairman of the Central Works Council
* Executive Board member of the Bavarian Company Health Insurance Funds Confederation

Dr. Verena Di Pasquale**

Deputy Chairperson of DGB Bayern
(the German Trade Union Confederation in Bavaria)

Robert Friedmann

Spokesman for the central managing board of the Würth Group
* ZF Friedrichshafen AG

Klaus Gerlach**

Head of Central International Operations and Services

Oliver Grober**

Chairman of the Employees' Council, Rosenheim

Thomas Hiltl**

Chairman of the Employees' Council, Nittenau

Norman Kronseder

Farmer and forester
* Bayerische Futtersaatbau GmbH

* Other Supervisory Board seats held, pursuant to Section 125 (1) sentence 5 of the German Stock Corporation Act ** Elected by the employees

Prof. Dr. jur. Susanne Nonnast

Professor at Ostbayerische Technische Hochschule (OTH) Regensburg

Beate Eva Maria Pöpperl **

Independent Member of the Employees' Council

Norbert Samhammer

Managing Director, Samhammer Holding GmbH
* Samhammer AG

Petra Schadeberg-Herrmann

Managing Partner, Krombacher Brauerei Bernhard Schadeberg GmbH & Co. KG, Krombacher Finance GmbH, Schawei GmbH, Diversum Holding GmbH & Co. KG

Jürgen Scholz**

First authorised representative, IG Metall administrative office in Regensburg
* Infineon Technologies AG

Hans-Jürgen Thaus

* Maschinenfabrik Reinhausen GmbH
* Hawe Hydraulik SE, Aschheim/Munich (until 27 June 2019)

Josef Weitzer**

Deputy Group Employees' Council Chairman
Deputy Composite Employees' Council Chairman
Employees' Council Chairman, Neutraubling
* Sparkasse Regensburg

Matthias Winkler

Managing Partner,
WW + KN Steuerberatungsgesellschaft mbH

* Other Supervisory Board seats held, pursuant to Section 125 (1) sentence 5 of the German Stock Corporation Act ** Elected by the employees

The KRONES **share**

"KRONES' profitability was below expectations in 2019. That was also reflected in our share price."

Olaf Scholz
Head of Investor Relations

- Stock markets benefit from low interest rates
- KRONES share price affected by revised guidance
- Shareholders to receive €0.75 per share dividend for 2019

Low interest rates stimulate international stock markets

Two main themes dominated the 2019 stock market year. One focus was the sustained low interest rate policy pursued by central banks. The activities of the US Federal Reserve and the European Central Bank caused long-term bond yields in 2019 to fall on both sides of the Atlantic. Central banks additionally indicated that they plan to continue applying expansionary monetary policy going forward. Low interest rates encourage investment in equities. On the other hand, the simmering trade conflict between the USA and China was an ongoing source of concern for investors in 2019. This led to sharp price swings on several occasions. On balance, however, positive factors prevailed and most share indices gained strongly in 2019.

The leading German share index, the DAX, improved by 25.5% between January and December 2019 to close the year at 13,250 points. As a result, the DAX ended 2019 only slightly below its all-time high of nearly 13,600 points in 2018. The EURO STOXX 50, comprising the 50 largest companies in the euro area, gained similarly strongly to the DAX with an increase of 24.8% in the reporting period. 2019 saw the Dow Jones index reach new record levels. The leading US stock market index climbed 22.3%. Compared with the USA and Europe, the upward trend on the Japanese stock market was not quite as dynamic. The Nikkei index rose by 18.2% in 2019.

KRONES share price impacted in 2019 by revised earnings guidance

The KRONES share price fluctuated sharply between January and December 2019. After a good start to the 2019 stock market year and significant price gains in the first quarter, our share price continued to rise at the beginning of the second quarter. KRONES shares reached their high point for 2019 at €88.85 on 18 April. This marked a gain of 32% on the opening price of €67.50 at the beginning of the year. Our share price then increasingly moved away from that level as the year progressed. This was partly due to a temporary general market correction. Mainly, however, the decreases in the share price were due to the unsatisfactory operating business. KRONES' profitability performance was weaker than expected in 2019.

The KRONES share price fell sharply in the third quarter of 2019 due to the revised guidance. This was the main reason why our shares underperformed the SDAX over the full year 2019.

KRONES share price performance compared with the SDAX 2019

On 10 July, KRONES published an ad-hoc announcement lowering its guidance for the EBT margin in 2019. This accelerated the downward trend in our share price. KRONES shares reached their lowest level during the reporting period at €47.46 on 15 August. Although our share price subsequently recovered, the price of €55.45 at the end of September was 18% down on the beginning of the year. The fourth quarter of 2019 brought a strong rise in our share price. A contributing factor was the publication of details on structural measures to secure sustained gains in KRONES' profitability. Our share price also benefited from a favourable overall market. The KRONES share price at the end of December 2019, at €67.50, was exactly the same as a year earlier. Including the €1.70 per share dividend, the annual performance of the KRONES share price in 2019 was 2.5%. The SDAX, of which KRONES has been a component since 18 June 2018, improved by 31.6% in 2019.

Key figures for the KRONES share

at 31 December		2019	2018	2017
Earnings per share	€	0.30	4.78	5.97
Equity per share	€	43.36	45.36	42.10
Free cash flow per share	€	–2.99	3.82	–4.77
Price/earning (P/E) ratio based on closing price for the year		225.0	14.1	19.2
Dividend per share	€	0.75*	1.70	1.70
High	€	88.85	122.80	121.25
Low	€	47.46	66.10	87.28
Year's closing price	€	67.50	67.50	114.50

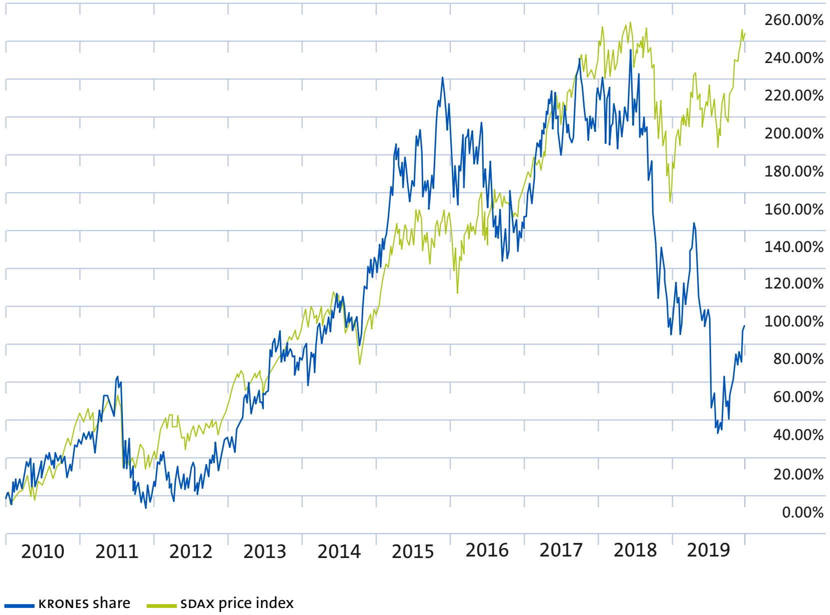
* As per proposal for the appropriation of earnings available for distribution

KRONES shares deliver very solid long-term return

The KRONES share price has risen by an average of 6.6% a year over the last ten years.

The past ten years from 2010 to 2019 have seen our share price almost double with an increase of 90%. KRONES' average annual share price gain over the ten-year period comes to 6.6%. That is less than the SDAX price index (+11.1%), meaning the SDAX excluding dividends. Including dividends, and assuming reinvestment of the dividends in KRONES shares, the average annual return since 2010 comes to 8.2%. The comparable SDAX performance index gained 13.4% annually.

Performance of KRONES shares compared with the SDAX price index, 2010 – 2019



KRONES retains strong position in SDAX index

Due to its below-average performance, the KRONES share price slipped down the ranking in terms of market capitalisation in 2019. In contrast, there was a strong rise in trading volume.

KRONES shares have been listed and available for trading on all German stock exchanges since 29 October 1984. Our shares are no par value ordinary bearer shares. Each share carries one vote in the annual general meeting. The total number of KRONES shares is 31,593,072.

Our share has been a component of the SDAX since mid-2018. The SDAX is the German stock exchange index containing the 70 companies that succeed those listed in the MDAX in market capitalisation and revenue. Over the reporting period, KRONES slipped to 25th place (previous year: 13th place) among the companies in the SDAX in terms of market capitalisation. In terms of trading volume, on the other hand, the KRONES share gained significantly, improving to 11th place at the end of 2019 (previous year: 23rd place). This makes our shares one of the larger and highest-revenue SDAX components.

Total daily trading volume in XETRA trading and on Frankfurt stock exchange averaged around 71,000 KRONES shares in 2019 (previous year: 40,000 shares). 2019 likewise saw more KRONES shares change hands on alternative trading platforms, which primarily handle orders from institutional investors. Average daily trading volume there came to around 108,000 shares (previous year: around 63,000).

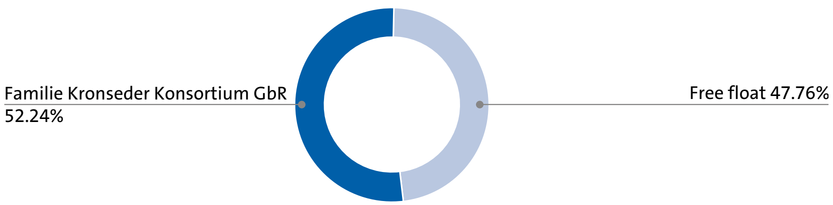
Key figures for the KRONES share

Number of shares	31,593,072
WKN (German securities code)	633500
ISIN	DE 0006335003
XETRA symbol	KRN

Shareholder structure

KRONES' shareholder structure remained virtually unchanged in the reporting period. At 31 December 2019, Familie Kronseder Konsortium GbR held the majority of KRONES AG's shares, with 52.24%. The family intends to remain a stable majority shareholder of KRONES AG. The free float came to 47.76% at the end of 2019.

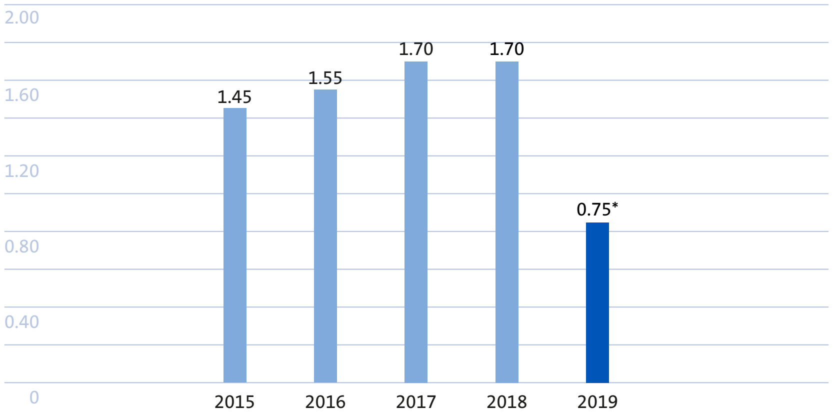
Shareholder structure as of December 2019



KRONES plans to pay a dividend of €0.75 per share for 2019

The company's long-term dividend policy is to pay out 25% to 30% of consolidated net income to shareholders. At the Annual General Meeting on 18 May 2020, the Executive Board and Supervisory Board will be proposing a dividend of €0.75 per share for the 2019 financial year (previous year: €1.70 per share).

Dividend per share (€)



* As per proposal for the appropriation of earnings available for distribution

2

CONSOLIDATED MANAGEMENT REPORT

KRONES **at a glance**

Business model, business areas and organisational structure

KRONES offers machinery and systems for bottling and packaging and for beverage production. Innovative digitalisation and intralogistics solutions round out our portfolio. KRONES' customers include breweries, beverage producers and companies from the food, chemical, pharmaceutical and cosmetic industries. Services are an important part of KRONES' business model. The company maintains service centres and offices around the world.

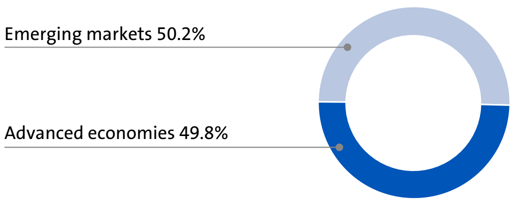
KRONES reports on two segments: **Machines and Lines for Product Filling and Decoration** and **Machines and Lines for Beverage Production/Process Technology**. The Machines and Lines for the Compact Class segment, which was reported on separately until 2017, was made part of KRONES' core segment **Machines and Lines for Product Filling and Decoration** with effect from 1 January 2018.

Major markets and competitive position

Customers in the beverage industry account for most of KRONES' revenue. The remaining revenue comes from business in non-beverage sectors (food, dairy, chemicals, pharmaceuticals and cosmetics).

KRONES is heavily export-oriented, generating almost 90% of consolidated revenue outside Germany. The regional breakdown of revenue is well balanced overall. In the reporting period, KRONES generated 49.8% of its revenue in industrialised countries and 50.2% in the rapidly growing emerging markets.

KRONES group share of consolidated revenue 2019



Apart from a few large companies that are part of a corporate group, KRONES competes with a number of companies that offer only individual bottling and packaging products. Most of our main competitors are based in the euro area. Chinese manufacturers have primarily competed against KRONES for orders on their home market.

Backed by our global service portfolio, which enables us to provide fast service to customers on-site, KRONES is well positioned in the competitive arena as a full-service provider.

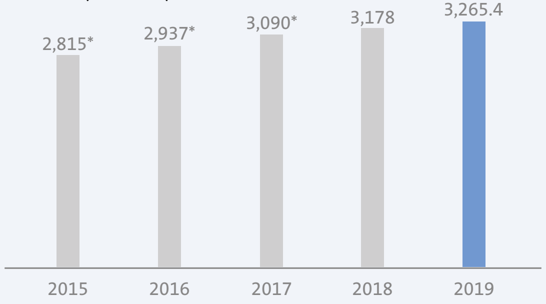
Machines and Lines for Product Filling and Decoration

This is by far KRONES' largest segment. It offers machines, lines, and solutions for filling, labelling, packaging, and conveying products. Machines for producing PET containers and converting used plastic bottles into food-grade recycled material (PET recycling systems) are also part of this segment.

- Product treatment technology
- Systems engineering
- Labelling technology
- Inspection technology
- Filling technology
- Cleaning technology
- Plastics technology
- Packing and palletising technology
- Conveyor technology

See also Segment report, pages 85 and 137.

Revenue (€ million)



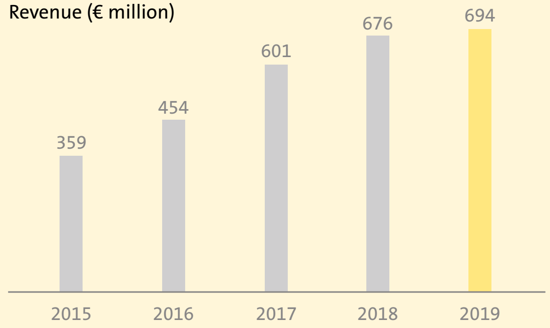
	2019	2018
EBT (€ million)	56.4	223.3
EBT margin (%)	1.7	7.0

Machines and Lines for Beverage Production/Process technology

This KRONES segment supplies customers with machines, lines, and digitalisation solutions for producing and processing beer, soft drinks, fruit juices, milk, and dairy drinks. Beverage Production/Process Technology also includes intralogistics products and services offered by the subsidiaries SYSTEM LOGISTICS, SYSKRON and TRIACOS as well as EVOGUARD brand components.

- Brewhouse and filtration technology
- Digitalisation
- Information technology
- Intralogistics

See also Segment report, pages 87 and 137.

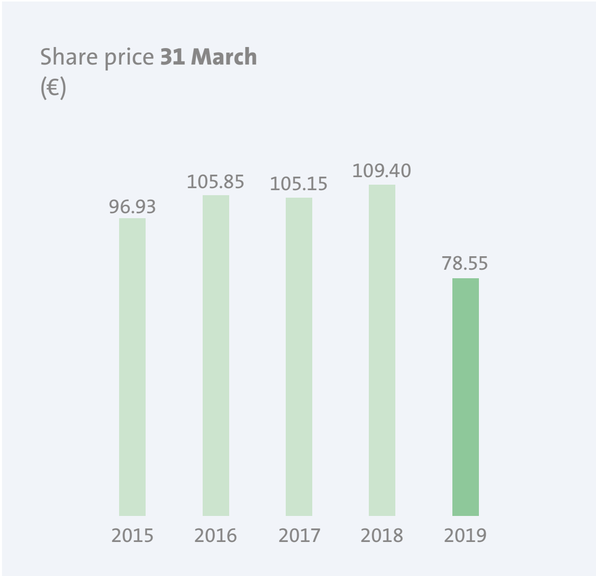


	2019	2018
EBT (€ million)	−14.7	−19.0
EBT margin (%)	−2.1	−2.8

First quarter 2019

KRONES made a good start to 2019. Revenue in the period January to March increased by 10.3% year-on-year to €983.5 million. Order intake improved by 5.0% to €1,041.6 million. Due to the tight cost situation, earnings before taxes decreased – despite the higher revenue – by 8.4% to €51.5 million.

Low interest rates and hopes of an end to the trade conflict between China and the USA buoyed stock markets in the first quarter of 2019. Equity prices fluctuated strongly, however. This also affected the price of KRONES shares. The strong start to the year was followed by a sharp correction in late January. From mid-February, however, our share price gained continuously. With a price of €78.55 at the end of March, our shares were 16.4% up on the beginning of the year. Our share price thus gained more strongly in the first quarter than the SDAX, which went up by 15.0%.



Second quarter 2019

The KRONES Annual General Meeting was held in Neutraubling on 5 June. Attendance – the proportion of the company's share capital represented at the meeting – was some 81%. Shareholders adopted all agenda items submitted for voting with a large majority. The dividend was held stable relative to 2018 at €1.70 per share.

KRONES' profitability was impacted in the second quarter by high material and labour costs and by an unfavourable product mix. Revenue was lower than expected on products with a large proportion of in-house added value, such as machines and lines in plastics technology. That led to capacity underutilisation in this area. Earnings before taxes came to –€3.6 million in the second quarter. Revenue increased by 0.7% year-on-year to €905.8 million, while the €997.0 million order intake was 2.5% down on the previous year.

The KRONES share price performed worse in the second quarter than the overall market. One reason for this was the figures for the first quarter, which KRONES published at the end of April. Profitability fell short of analysts' expectations. In total, the KRONES share price went down by 9.7% between April and June and stood at €70.95 at the end of the second quarter.

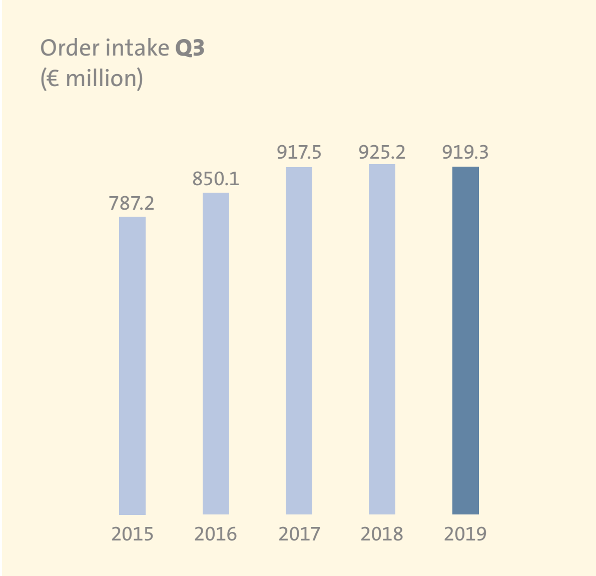
Third quarter 2019

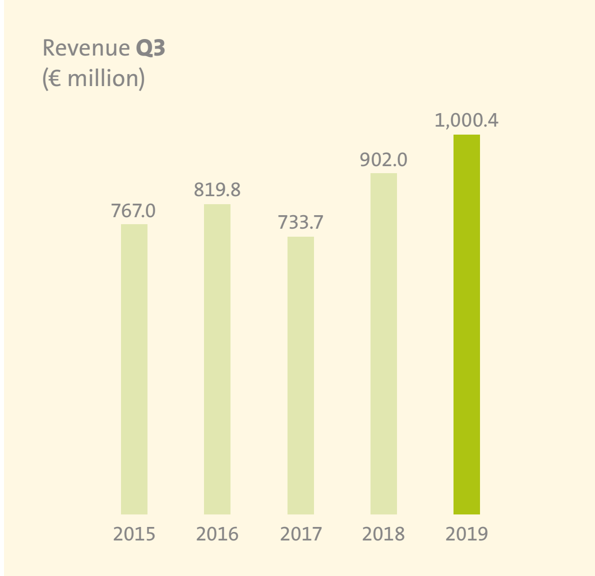
The company announced in an ad-hoc announcement on 10 July that it would not achieve its earnings target for 2019. KRONES published a new target for the EBT margin in 2019 of about 3%. The previous target had been about 6%. At the same time, the Executive Board announced structural changes for sustained improvements in profitability.

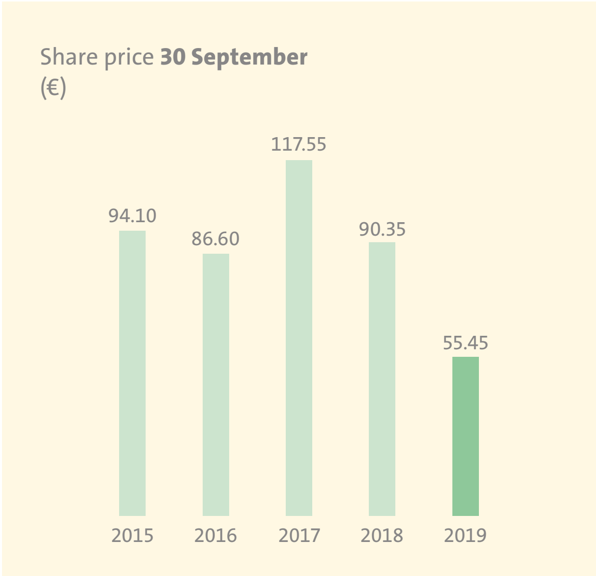
The KRONES share price came under pressure in the third quarter. This was mainly due to the adjustment to the earnings forecast. The share price marked its lowest point in mid-August at around €47.50. It then recovered substantially. At the end of September, our share price stood at €55.45.

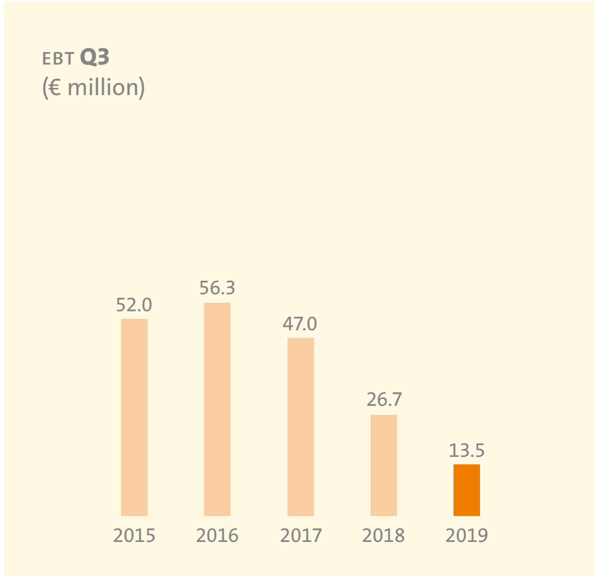
At its meeting of 25 September 2019, the Supervisory Board appointed Norbert Broger as Chief Financial Officer of KRONES AG with effect from 1 January 2020. He served KRONES from 2006 to 2012 as Head of Controlling, Risk Management and Strategic Corporate Development.

After the weak second quarter, business went better for KRONES between July and September 2019. Revenue was up 10.9% year-on-year, to €1,000.4 million. Order intake was 0.6% down. KRONES generated EBT of €13.5 million in the third quarter.







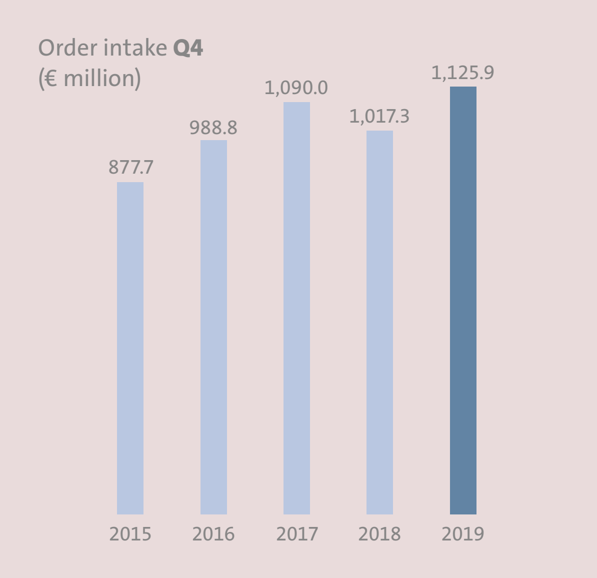


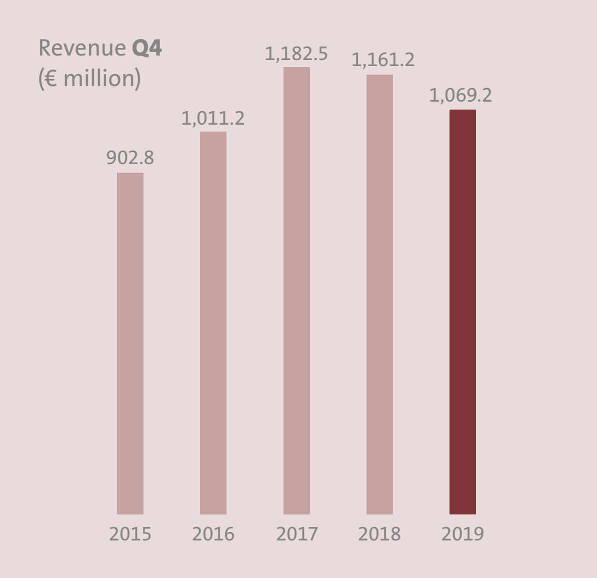
Fourth quarter 2019

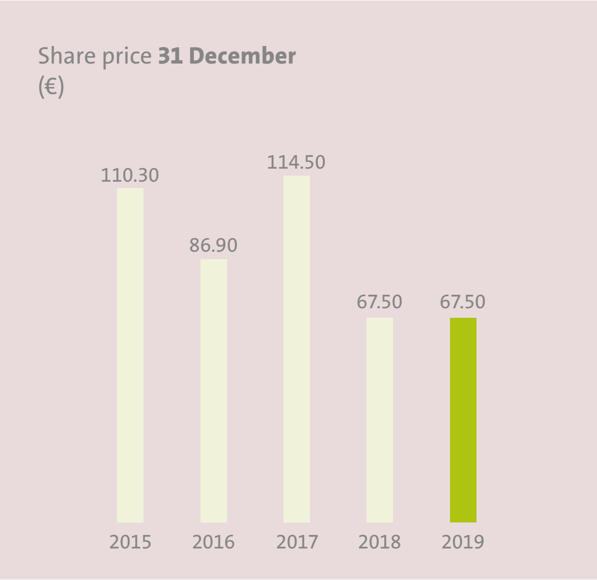
KRONES took part in a number of major international trade fairs during the autumn. At K, the leading global trade fair for the plastics and rubber industry, KRONES exhibited solutions for a closed plastics cycle. The centrepiece was the MetaPure PET recycling system.

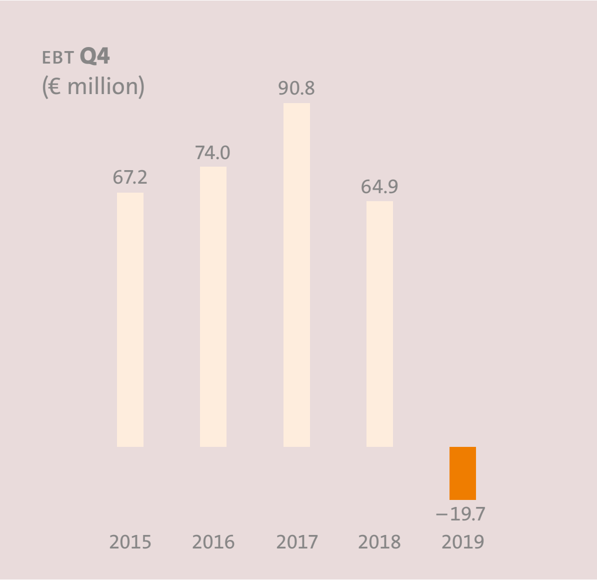
In the fourth quarter, KRONES recognised provisions for personnel-related measures and impairments in connection with portfolio streamlining. This resulted, in total, in one-off expenses of around €70 million. As a result, earnings before taxes were negative, at –€19.7 million. By contrast, the operating business developed in the final quarter according to plan.

The fourth quarter of 2019 brought a strong rise in our share price, with a gain of 22% between October and December. A contributing factor was the publication of details on structural measures to secure sustained gains in KRONES' profitability. The KRONES share price at the end of 2019, at €67.50, was exactly the same as a year earlier.









Systems and Lifecycle Service – **performance matters**

KRONES delivers turnkey plants to the beverage and liquid food industry. We use our expertise to keep our customers' investment and operating costs low. Of equal importance, we enable our customers to produce reliably and at high quality.

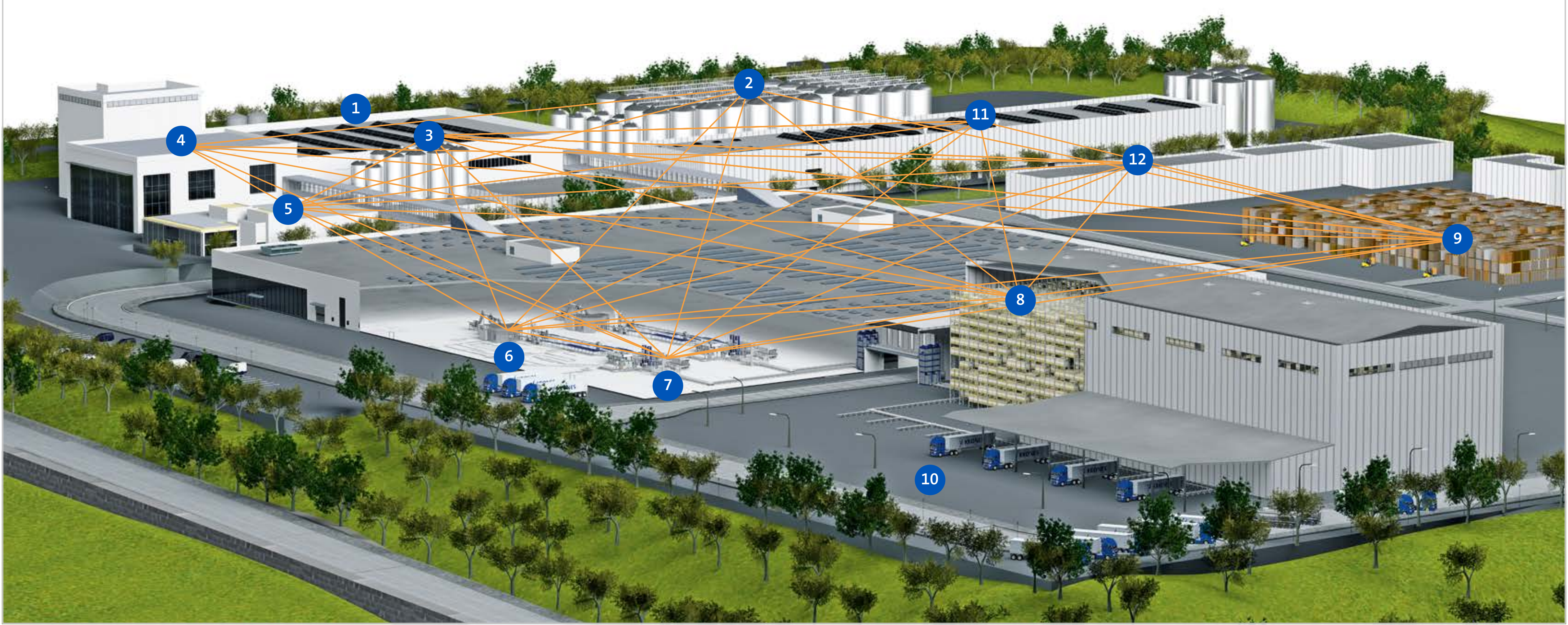
We deliver all of the machines and lines necessary for producing, filling and packaging beverages. We also provide complete logistics systems, supply and disposal systems and custom IT and digitalisation solutions that manage and document all production processes.

In addition, we support our customers with excellent, 24/7 after-sales service. That is crucial to ensuring that beverage plants deliver consistently high performance. KRONES' lifecycle service (LCS) experts are not just service providers – they are partners to our customers. Together, we find solutions for efficient, secure, reliable and cost-effective production. As well as providing optimum maintenance and retrofitting, our LCS team offer expert consulting as Partners for Performance.

The following model of a complete beverage plant provides a brief overview of our offerings.

LCS
Partner for Performance

1. Brewhouse (malt silo, mash tun, lauter tun, wort kettle, whirlpool and wort chiller)
2. Fermentation tanks, conditioning tanks and filters
3. Conditioning and production tanks
4. Administration
5. Laboratory
6. Bottling hall
7. Packing and palletising machines
8. Fully automated high-bay warehouse
9. Semi-automated or manual warehouse
10. Order picking and distribution
11. Heat, cooling, compressed air and energy supplies
12. Disposal systems



State-of-the-art production: The new KRONES control cabinet production facility

Control cabinet production at KRONES has had a new home at our Neutraubling headquarters since August 2019, in a brand-new building with 6,000 m² of production space and 850 m² of office space. A key advantage is that logistics and production are now in one place. Optimized material flows and close proximity make for faster throughput and higher productivity.

The new building features state-of-the-art technology. An automated driverless transport vehicle keeps workstations supplied with parts. The previous manual warehouse has made way for a fully automated warehouse. KRONES was able to draw here on the expertise of subsidiaries SYSTEM LOGISTICS AND TRIACOS.

Not to forget the employee-friendly working conditions: The new factory building is naturally well-lit and the assembly benches are height and tilt-adjustable. All in all, the new facility provides the ideal conditions for efficient production.

Strategy and management system

"Our market continues to be attractive, but it is also challenging. That has been plain to see in the last two years. If we resolutely implement the measures we have initiated, KRONES will be set for success."

Christoph Klenk
CEO

KRONES currently finds itself in an unusually challenging business situation. Except for the crisis year 2009, the company's performance trend has mainly been one of profitable growth. We continued to deliver respectable revenue growth in 2018 and 2019. However, KRONES has recently seen a significant decline in profitability. KRONES' strategy is therefore focused on resolutely implementing the defined measures in order to set the company for success.

KRONES serves an attractive market. Our market is growing stably because demand for packaged beverages and foods is rising. The market benefits from megatrends such as world population growth, a growing middle class in emerging economies and increasing urbanisation. In the long term, we expect market growth to be above global GDP growth.

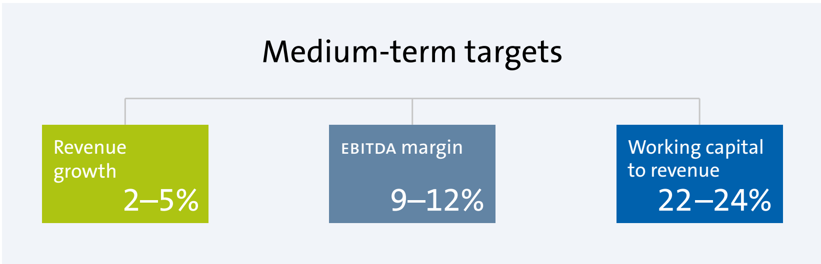
With its full global portfolio of products and services, KRONES is well positioned to profit from the market opportunities. The company provides customers in the liquid food industry with everything they need from a single source, from beverage production to filling to packaging. Intralogistics solutions, information technology and high-quality after-sales service round out the portfolio.

As the recent past has shown, the market not only offers opportunities and is not immune to current developments in the global economy. Trade conflicts, political uncertainties and economic crises in individual countries and regions, together with the sometimes highly irrational and emotionally charged plastics debate, make for uncertainty among our customers. Competition for orders will remain intense and the targeted price increases will be hard to push through. Digitalisation will also require high levels of investment.

KRONES has ambitious medium-term goals

From 2020, KRONES will use the EBITDA margin instead of the EBT margin as the target figure for profitability. This is because EBITDA (earnings before interest, taxes, depreciation and amortisation) is closer to cash flow and more comparable because it does not include depreciation and amortisation, financial income/expense and taxes. Our medium-term target of 6–8% for the EBT margin corresponds to an EBITDA margin of 9–12%. To consolidate its good market position and have sufficient headroom for capital expenditure, KRONES has set itself ambitious medium-term financial targets.

- 2% to 5% average organic revenue growth per year
- 9 to 12% EBITDA margin
- 22% to 24% working capital to revenue ratio



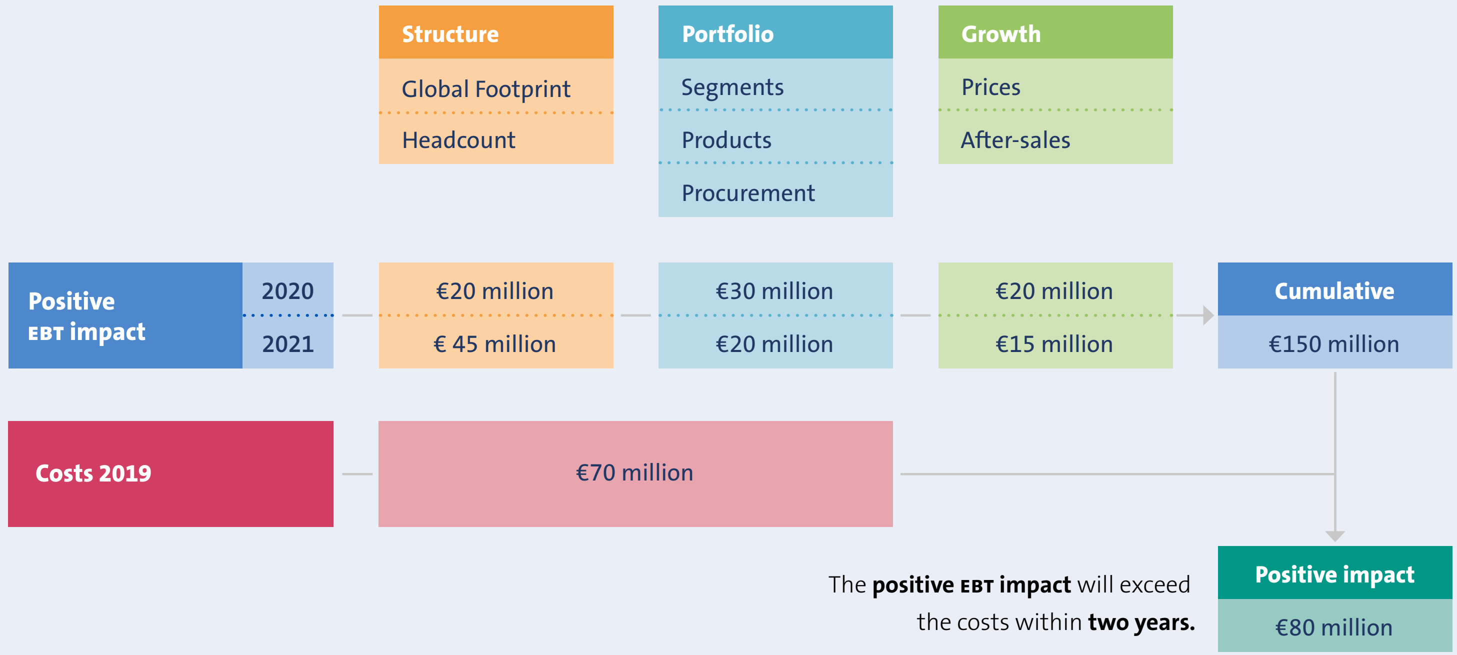
KRONES aims to attain the medium-term targets as quickly as possible and regards a period of three to four years as realistic.

Various challenges – such as rising material and labour costs, the plastics debate, and also general economic uncertainty – meant that we did not reach our original targets for 2018 and 2019. Despite increased market volatility, KRONES sets ambitious medium-term targets. However, KRONES will take longer to attain those targets. The company regards a period of three to four years as realistic. During the reporting period, we launched many measures with which we want to set the KRONES team for success. Now it is a matter of resolutely implementing them.

Profitability improvement: measures in progress

To remain competitive for the long term, KRONES must generate sustained and sufficient earnings. With an EBT margin of 2.8% in 2019 (excluding expenses for provisions to reduce labour costs and impairments for portfolio streamlining in a total amount of about €70 million), we are still short of our target. In the second half of 2019, the company therefore initiated medium-term alongside short-term measures to improve earnings. The measures are divided into three pillars.

Medium-term measures and impacts



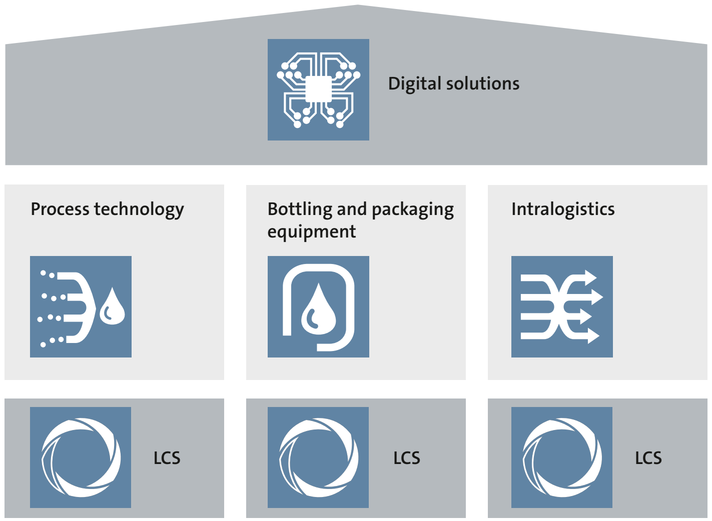
Structural measures make up the largest share of the action package. Most of all, they include expansion of KRONES' global footprint. We currently generate only a small share of added value outside of Germany even though almost 90% of revenue comes from abroad. In the short and medium term, therefore, we plan to relocate parts of the value chain to best-cost countries. The most important project here is our new factory in Hungary. This is scheduled to go into full operation with 500 employees in the second half of 2020. Production has also been expanded in China. In total, about 600,000 hours of production time are to be implemented in Hungary and China by the end of 2020. Added to this are 200,000 design and planning hours in future in the Czech Republic, India, Hungary and China.

In addition, group processes and resources are to be further optimised and organisational units streamlined. In Germany, the structural measures result in a reduction of 500 jobs: 200 in the reporting period and 300 in 2020. About 200 jobs will be reduced internationally by the end of 2020. The new process technology locations established in the USA, China and India as a result of acquisitions in recent years will also contribute positively to earnings.

KRONES is also expanding its global footprint to counteract the rise in material costs. Best-cost country (BCC) sourcing secures significant reductions in procurement costs. KRONES has already successfully implemented this in Taicang, China. Furthermore, we have established a supplier network in India, Taiwan, Thailand and Turkey. We will rigorously continue with the international procurement measures we have implemented so far.

Optimising the House of KRONES portfolio

With the "House of KRONES", KRONES has tailored its business model to customer needs and to the state-of-the-art beverage plant. This approach will not change. We will, however, continue to make individual adjustments and optimise the portfolio. In the **Process Technology** pillar, we will begin by making the beverage production business a legally independent unit. We can then better assess how this business is developing on a standalone basis, specifically with regard to the different types of beverages. Currently, we do not plan any acquisitions in process technology. We are concentrating on integrating the acquisitions made in recent years in the USA and China.



The **core bottling and packaging equipment** segment is affected by the critical plastics debate. In our opinion, PET has a wrongly bad reputation. PET plastic has a major advantage over other types of packaging such as glass: It is significantly lighter than other materials and PET bottles have a correspondingly smaller ecological footprint in long-distance transportation. This is a key reason why PET continues to be the fastest growing packaging material worldwide.

It is often overlooked that plastic packaging can in fact be sustainable. This requires packaging materials to be produced in a resource-efficient manner and kept in a closed cycle. KRONES' technologies and products meet both of these criteria. We provide material-saving container design, low-energy production and used plastics recycling. With our high-quality PET recycling systems that turn used PET bottles into raw material for new ones, we support a sustainable material cycle.

Extending the company's good position in glass and cans

In its core segment, KRONES will continue to strengthen the glass and cans product portfolio. As the megatrend towards packaged beverages continues, weak demand for PET packaging would mean greater demand for other types of packaging such as glass and cans. KRONES has always been well positioned here with a broad product range for both packaging types. The company added a key innovation to the glass portfolio during the reporting year with the Craftmate G glass bottle filler.

As well as expanding the broad-based bottling and packaging segment with further attractive products, we are also going to strip the portfolio of less profitable activities and technologies in order to focus our capital on the most attractive investments.

The third pillar of the House of KRONES, **intralogistics**, continues to see good demand for our products and services. Intralogistics is a major element of the digital beverage plant. It is an important area for our customers because it allows them to optimise material flow management. The priority in this area is on managing the rapid rate of growth and pushing ahead with internationalisation. For this purpose, we have pooled all intralogistics activities in SYSTEM LOGISTICS and made this a legally independent unit. This enables us to react quickly and flexibly to market requirements.

Price increases important for sustained business performance

Price increases are necessary in order to partially offset rising labour and material costs. We will implement our goals here by means of increased price discipline. For 2020, we consider an earnings contribution of €10–20 million to be realistic from higher prices.

Digitalisation offers huge opportunities in the medium to long term

In **digitalisation**, KRONES has the major advantage as a full-service supplier of being able to capture all material and data flows around the clock throughout the entire beverage plant production process. Combining the captured data with the knowhow of our workforce, some of whom have decades of experience, we develop new products and services – primarily for the life cycle services (LCS) subsegment – that significantly improve plant efficiency. In this way we create lasting added value for customers. The aim is to develop digital business models and establish them as quickly as possible in the food and beverage industry.

Overall, investment in digitalisation will continue to impact profitability in the next few years. KRONES sees good market opportunities here in the medium to long term.

High-growth service business strengthens profitability

KRONES will continue to invest in its operations at home and in its global footprint, although at a lower level than in preceding years.

Our service business is important to the profitability of KRONES. The key success factor for the LCS business is and remains availability, meaning how quickly the service team can solve a customer's problems on the spot. That means both technicians and spare parts must be as close to the customer as possible. To ensure this, we will further reinforce our global network of service and sales offices. Alongside availability, another major growth driver for the service business takes the form of innovative products and services supported by innovation in digitalisation.

The service market has considerable further growth potential for KRONES in the medium to long term. A major asset for KRONES is the large installed base of about 40,000 machines in customers' factories. Our LCS team so far serve about 60% of our installed base. We are going to raise this figure in the years ahead by convincing customers of the benefits of our services, which enable them to significantly increase productivity.

Capital expenditure returning to normal levels

To remain competitive for the long term, KRONES must invest – both in its German locations and in its global footprint. In contrast to the strong growth investment of the preceding years, capital expenditure will be scaled back to normal levels in the short to medium term. Most capital expenditure in Germany is to be on IT infrastructure. Germany remains KRONES' central location for the development of innovative machines, lines and services.

Elsewhere, KRONES will invest in the organisation and in integrating the acquisitions made in recent years. We will also further expand our IT internationally.

Innovations: key investment for the future

Innovations secure our company's future and are the basis for sustained growth. For this reason, even in economically more challenging times, KRONES will maintain its comparatively high spending on research and development.

New products and services must provide added value for customers in order to be a market success. Close contact with our customers gives us important input for innovations and improvements. Based on customer needs, we work together to develop ideas for new products and services. We also generate ideas of our own by thinking out of the box. Close contact and good working relationships with universities, research institutions and startups also help us in this regard.

Alongside digital innovations, solutions at KRONES focus on environmentally compatible, cost-cutting, flexible and operator-friendly machines and products (see R&D p. 58).

Security from solid financial and capital structure

With insufficient cash flow from operating activities in 2019, free cash flow and net cash and cash equivalents also decreased significantly due to the high level of capital expenditure. The equity ratio was a comparatively satisfactory 41.3%. KRONES therefore retains a robust financial and capital structure. The company has sufficient financial headroom to finance growth investment and potential acquisitions and to accord shareholders their due share of the company's success in the form of dividends. KRONES' dividend strategy is to pay out 25% to 30% of consolidated net income to shareholders.

Ongoing strong focus on free cash flow

KRONES continues to focus on free cash flow. This fell significantly in 2019 because of the decline in the operating business, above-average capital expenditure and a rise in working capital. We will work hard on all three of those parameters in the coming years. First of all, as described earlier, we will regain our former profitability. After several years of strong growth investment, we will return capital expenditure to normal levels. A clear focus in future capital expenditure will be on whether business units are generating sufficient cash. This criterion will also be a deciding factor in portfolio streamlining. We are holding back on acquisitions. No major acquisitions are planned for the short or medium term. However, we have the capacity to act on attractive acquisition opportunities at any time.

The greatest potential for improving free cash flow consists of reducing working capital. KRONES is not satisfied with working capital as a percentage of revenue, which is our third target. This came to 26.9% in 2019, which is well short of our 22–24% medium-term target. The lower our working capital, the more capital we have available for other uses. For each percentage point by which we improve this ratio, our free cash flow and therefore our available resources grow by around €40 million.

The main burden on working capital is the high level of customer receivables and contract assets. KRONES will shorten the timespan from delivery to invoicing. First of all, on-site assembly and acceptance are to be completed sooner. Secondly, contracts with customers need to be drafted in such a way that performance rendered can still be invoiced in the event of delays for which we are not responsible. Overall, it is planned for trade receivables to grow below average in the next few years relative to revenue. There is also room for improvement in trade payables, but not on the same scale as in receivables.

Workforce the foundation of lasting success

The workforce is pivotal to KRONES' success – especially at times when conditions become more challenging and there is a break in the continuous upward trend. Our customers buy from KRONES because they trust in the company and its workforce. It is the workforce who are responsible for customers' satisfaction with our products and services. And customer satisfaction is a highly decisive factor when competing for orders.

We had to take various measures due to negative developments during the reporting period – including major job cuts affecting several hundred employees in Germany and elsewhere.

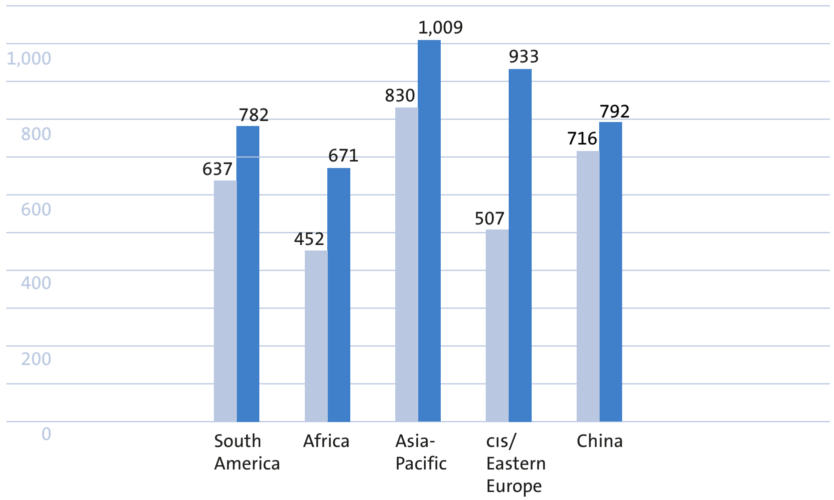
The company will continue to invest heavily in employee training and development in order to maintain workforce knowhow at the same very high level.

KRONES will further expand the workforce in the years ahead where this contributes to profitability. To take advantage of market growth opportunities in emerging economies, we need more employees in the regions where customers are located. We currently employ about 24% of the workforce in emerging markets. Given corresponding market growth, we will further increase that percentage.

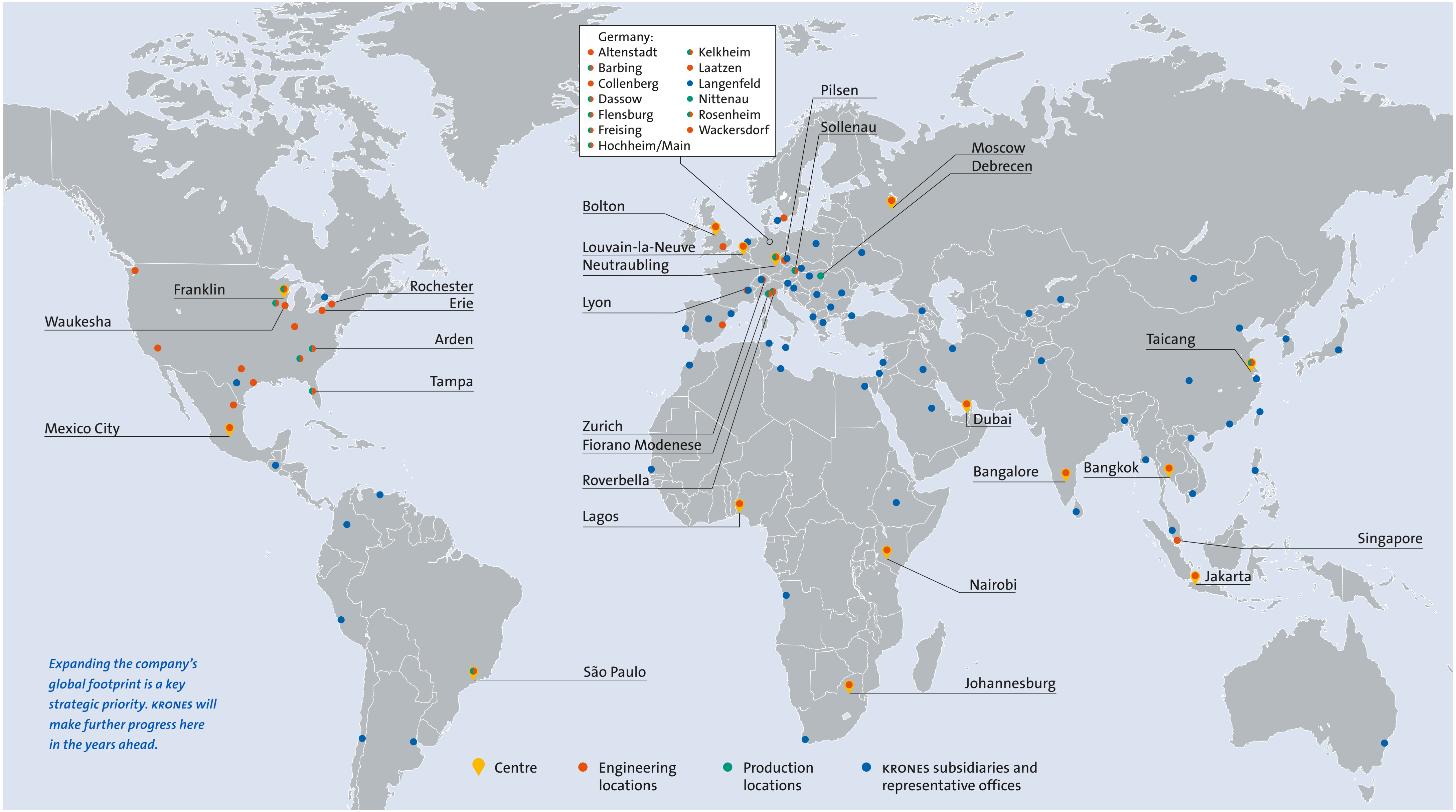
Employees in the emerging markets 2014–2019

Year	South America	Africa	Asia-Pacific	CIS/Eastern Europe	China	**Total**
2014	501	363	453	136	385	**1,838**
2015	519	376	502	147	451	**1,995**
2016	549	386	602	155	508	**2,200**
2017	581	393	734	398	608	**2,714**
2018	637	452	830	507	716	**3,142**
2019	782	671	1,009	933	792	**4,187**

Employees in the emerging markets 2018/2019



KRONES' global footprint



Expanding the company's global footprint is a key strategic priority. KRONES will make further progress here in the years ahead.

KRONES' management system

KRONES' management primarily uses the following financial performance indicators to steer the group and its two segments:

- Revenue
- EBT margin (earnings before taxes as a percentage of revenue)
- Working capital as a percentage of revenue

In order to strengthen our market position and utilise economies of scale, we aim for above market average **revenue growth**.

Earnings before taxes (EBT) are an important earnings indicator. It is out of EBT that the group pays taxes and dividends and makes investments and capital expenditures. Profitability, measured as the **EBT margin**, is among our key targets and parameters. The EBT margin indicates the company's profitability in relation to revenue. For the group, we set the target margin as the weighted average of the two segments. From 2020, we are replacing the EBT margin with the **EBITDA margin** (earnings before interest, taxes, depreciation and amortisation as a percentage of revenue). The EBITDA margin indicates the company's profitability in relation to revenue, irrespective of the tax rate, financial income/expense and depreciation and amortisation.

Our third major performance indicator is **working capital to revenue**, which is calculated at group level. Working capital is calculated as follows: (inventories + trade receivables + contract assets) – (trade payables + contract liabilities). This figure indicates how much working capital is needed to finance revenue generation. The lower the number, the less capital is tied up in operations and the more financial leeway the company has to use its cash and cash and cash equivalents for other purposes.

Other financial key performance figures

In addition to the above, a further important performance indicator for KRONES is free cash flow (cash flow from operating activities less cash flow from investing activities). We take further guidance from the development of **EBT** (earnings before taxes) and **ROCE** (return on capital employed, the ratio of **EBIT** to average capital employed).

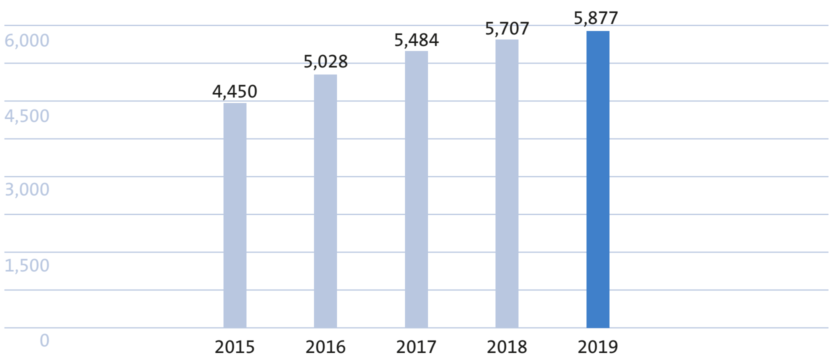
Research and development (R&D)

- 4.9% of revenue invested in R&D
- PET debate: KRONES has solutions
- Expansion of glass and cans product portfolio
- Continued focus on customer benefit in innovation

Some 2,300 highly qualified people at KRONES keep the pipeline filled with new and evolving machines, systems and services. Innovations are the basis of our future business success. New products and services must create added value for customers. That is key to KRONES in consolidating and extending its market position. The increase in the portfolio of registered patents and utility models from 5,707 in the previous year to 5,877 at the end of 2019 confirms the KRONES team's innovative capacity. A total of €195 million (previous year: €179 million) was invested in research and development in the reporting period. That corresponds to 4.9% of consolidated revenue. Of this total, €32.5 million was capitalised as development costs in 2019 (previous year: €38.5 million).

KRONES invested approximately 4.9 % of consolidated revenue in research and development in 2019.

Registered patents and utility models – KRONES Group



Innovation: leading with boldness and expertise

Products development at KRONES is primarily driven by market requirements. Thanks to the frequent contact between our sales and service staff and customers, we know very well what customers' requirements are and how we can create added value for them. The House of KRONES additionally provides us with a 360-degree view of customer needs.

What our customers require most from our machines and systems are safety, affordability, versatility and environmental performance. Machinery should also offer maximum ease of use and take up minimum space.

These needs combined with the extensive knowledge of our workforce result in ideas for new products. Such ideas lead in turn to development projects that our mechanical, electronics, pneumatics and automation experts implement as quickly as possible. In projects that are successful, the innovation process generates products that do well in the market, as shown by the examples on the pages that follow.

Alongside this, we will also break out of the status quo by applying bold forward thinking. Close collaboration with universities and research institutions additionally brings in valuable ideas from outside. By having the courage to think outside the box, we will create innovations that astonish our customers – as with our bottling-on-demand concept study for maximum flexibility in filling. We must do this in order to maintain our technology leadership in the industry.

Another focus of our R&D strategy is transformation – from analogue to digital. This mainly entails further evolving the technologies and methods behind our existing success.

Digitalisation needs the analogue skills of our workforce

Thanks to technical advances, it is now possible to digitally simulate the entire value creation process in a beverage plant. KRONES subsidiary SYSKRON, which pools our digitalisation activities, is tasked with developing new digital business models for our industry. This is done using data collected from our systems and equipment. Combining the analogue expertise and experience of our workforce with technologies such as cloud computing and big data, KRONES develops new products and solutions for customers.

KRONES is already among the leaders in digital services. Broadband communication, for example, enables us to significantly improve quality in remote support and reduce downtime. A case in point is Argos, a headset with camera and miniature display. The machine operator wearing the headset can be provided with troubleshooting support by a KRONES service technician as if they were together in the same room.

In the KRONES.shop, the company has successfully operated a digital platform for more than five years where customers can quickly and conveniently order spare parts, upgrades, components, training courses and other services.

PET debate: KRONES has solutions

Public debate around plastic waste and plastic packaging has risen significantly during the reporting period and has spread uncertainty, especially among our European customers. Their hesitance in placing orders has naturally also affected KRONES, as we generate a large proportion of revenue with machines and lines for filling and packaging plastic containers made of PET. It is often overlooked in the debate that PET remains the world's most popular packaging option and that plastic packaging can be far more sustainable than is thought. This requires the packaging materials to be produced in a resource-efficient manner and kept in a closed cycle.

KRONES' technology and products meet both these criteria. We provide material-saving container design, low-energy production and used plastics recycling. Most of all with our high-quality PET recycling systems that turn used bottles into raw material for new ones, we support a sustainable material cycle. The problem is not the PET bottles themselves but the fact that they are thrown away and not recycled. With our PET recycling systems, we contribute significantly to reducing the global waste problem.

Continuous expansion of the glass and cans product portfolio

KRONES' great advantage is that it is not restricted to a single packaging type. As the megatrend towards packaged beverages continues, weak demand for PET packaging would mean greater demand for other types of packaging such as glass and cans. KRONES has always been well positioned here with a broad product range for both packaging types. The company has added various innovations to the glass and cans portfolio during the reporting year, including the Craftmate G glass bottle filler, and will continue to provide for both of these types of packaging.

KRONES expands enviro sustainability programme

A key objective of all KRONES innovations is to reduce energy and media consumption on our machines and lines. For this purpose, KRONES introduced the enviro sustainability programme, a TÜV-certified management system back in 2008. enviro is an integral part of the product development process at KRONES. As a result, all new KRONES machines and systems are above average in efficiency and environmental performance.

From 2019, in addition to machines and systems, packaging innovations are likewise assessed and certified against objective sustainability criteria in enviro Design. KRONES again teams up with TÜV here as the provider of objective assessment. The aim of enviro Design is to minimise the environmental impact of packaging. Several environment-friendly packaging solutions were in the process of assessment at the end of the reporting period. In 2020, it is planned for the first packaging innovations that meet the strict criteria to be awarded the enviro design seal.

A selection of our innovations

Modulfill NWJ: flexible filling system for high-viscosity products

KRONES has further developed its existing filling technology for safe, clean and hygienic handling of viscous products. Modulfill NWJ covers a wide range, from low-viscosity products such as olive oil and salad dressings to high-viscosity products such as mayonnaise and mustard. It also handles products with particle sizes up to 10 mm, such as barbecue sauces and grainy mustard. Modulfill NWJ can be used both with glass and with PET containers.

A key advantage of the newly developed Modulfill NWJ is its high filling accuracy. Using a novel measuring and valve system, the filler responds to variations in viscosity during the filling process by adjusting flow rates. A newly developed valve geometry ensures a clean fill without smearing or dripping.

Modulfill NWJ can fill up to 48,000 containers per hour and features fully automated cleaning. That saves both time and labour.

New size for can filler series: Modulfill VFS-C

KRONES has the ideal solution for the lower output range (6,000-20,000 containers per hour) with the Craftmate can filler specially designed for craft breweries, while the Modulfill VFS-C unveiled at drinktec 2017 operates at higher speeds (up to 135,000 containers per hour). Now, KRONES has an attractive option for small and medium-sized breweries with a smaller version of Modulfill VFS-C (26,000 containers per hour).

The latest version of Modulfill is similar in appearance to the Craftmate. Technologically speaking it has all the advantages of the more powerful machine series of the same name. An inductive flow meter ensures precise liquid quantity control. Pneumatic valve operation also makes for cleaner production as no lubrication is required.

Argos: real-time service with smart glasses

Digitalisation brings many advantages for KRONES and our customers, especially with regard to service. One digital service product provided by KRONES is Argos. Smart glasses enable quick and easy troubleshooting.

In the event of a fault or error message, the line operator contacts KRONES Support as normal. To troubleshoot the problem, the machine operator puts on the Argos headset, which has a camera and a miniature display. Real-time video and audio enables the KRONES service technician to see exactly what is happening and give precise instructions as if the operator and the technician were in the same room. For the customer, this significantly reduces downtime and increases line productivity.

Digital printing for recycled PET containers

In the view of many experts, direct printing and PET recycling have so far been incompatible. KRONES has proved that wrong. As a result, the benefits of direct printing – such as the ability to do without labels and great versatility – are now also available for recycled PET containers. The interaction between material, ink type and ink adhesion plays a key role here. With the DecoType direct printing machine, KRONES can print bottles made of 100% recycled PET.

An important requirement is for the directly printed PET bottles to be recyclable as well. This means it must be possible to remove the ink from the plastic without any residue. Our solution meets this requirement, as the US Association of Plastic Recyclers (APR) confirmed for KRONES in 2018.

PET-Asept D: dry sterilisation for small batches

KRONES has developed a compact version of the PET-Asept D specifically for the low output range. The newly developed system provides microbiologically safe filling of acidic beverages. It covers the 12,000-16,000 containers per hour output range.

PET-Asept D performs completely dry sterilisation. The sterilisation medium, hydrogen peroxide, is applied to the containers in warm gaseous form. This disinfects them quickly and efficiently without unwanted condensation. Due to its high versatility and small footprint, the system is particularly well suited to small batch production. Following complete cleaning and sterilisation, it is fully ready for use again after just 150 minutes.

Craftmate G: compact glass bottle filler for beers and CSDs

Craftmate G is the latest addition to the KRONES filler family. As the G suggests, it fills glass bottles. Craftmate C, the can filler, has been on the market since 2015. The company first presented the compact glass bottle filler for beers and carbonated soft drinks (CSDs) at BrauBeviale in 2019.

In technological terms, Craftmate G is similarly equipped to its big brothers in the ModulFill range. It has the added advantages of requiring little space and being able to combine with up to two cappers. This gives brewers the versatility to fill CSDs as well as beers. Its output of up to 24,000 bottles per hour and compact form factor mean it is particularly well suited to small and medium-sized breweries.

VarioFlash B: flash pasteurisation for beer

The VarioFlash B flash pasteuriser ensures microbiologically safe beer filling. Spanning an output range of 18 to 600 hectolitres per hour, the system can be combined with bottle or can fillers. VarioFlash B is technologically optimised to minimise water and energy consumption without compromise on microbiological safety.

The small version of the VarioFlash B was primarily developed for craft brewers and small batch breweries. It is ideally suited to the 18 to 45 hectolitres per hour output range. Customers benefit from rapid installation and commissioning, low product losses and media consumption and also low maintenance costs.

Economic environment

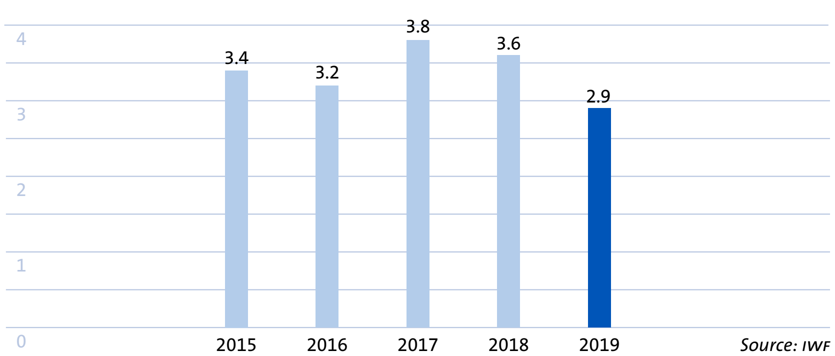
- Global economic growth slowed in 2019
- Difficult conditions for German mechanical engineering
- Rising global demand for packaged beverages

Global economy affected by trade conflicts

The global economy was weaker than expected in 2019. This is due to various sources of uncertainty, including the US trade disputes with China and Europe. The long-unresolved Brexit also weighed down on the economy. International Monetary Fund (IMF) experts had to revise their growth forecast downwards several times in 2019. According to the January 2020 data, global gross domestic product (GDP) grew by 2.9% in 2019 (2018: plus 3.6%). The IMF growth forecast at the beginning of 2019 had been 3.5%.

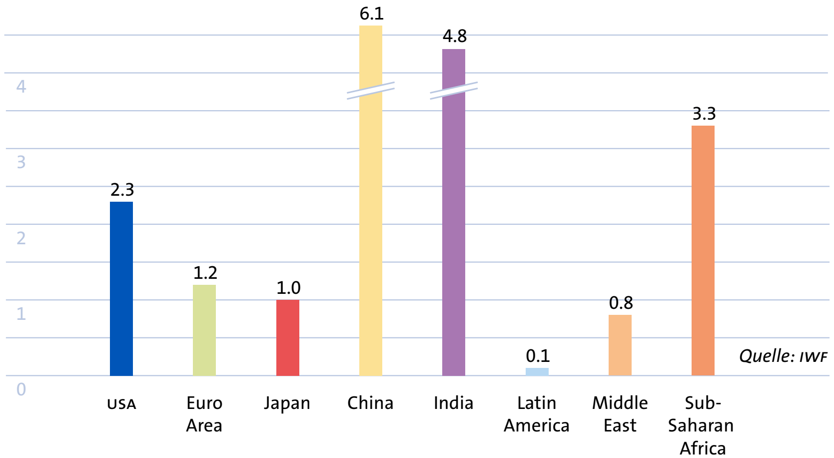
Growth in emerging and developing economies slowed down unexpectedly sharply during the reporting period. GDP there increased by only 3.7% in 2019 (2018: plus 4.5%). According to the IMF experts, that was partly due to developments in India, where political unrest severely curtailed economic growth. After GDP growth of 6.8% in the previous year, India's economy grew by just 4.8% in 2019. Growth likewise slowed in China. Chinese GDP climbed by 6.1% in 2019 (previous year: plus 6.6%). The Latin America region recorded minimal GDP growth of 0.1% in 2019 (previous year: plus 1.1%). This was mainly due to Mexico's stagnating economy. Growth in the Middle East/Central Asia region was 0.8% in the reporting year (previous year: plus 1.9%). There was a slight improvement in economic growth in the Sub-Saharan Africa region. GDP growth there was 3.3% in the reporting period (previous year: plus 3.2%).

GDP growth worldwide (%)



Economic growth in mature industrialised economies slowed significantly overall to 1.7% in 2019 (previous year: plus 2.2%). Growth in the euro area declined even more sharply. GDP there went up by 1.2% in 2019, compared to a 1.9% increase in the previous year. The world's biggest economy, the USA, grew by 2.3% in the reporting period (previous year: plus 2.9%). GDP growth in Japan accelerated to 1.0% in 2019 (previous year: plus 0.3%).

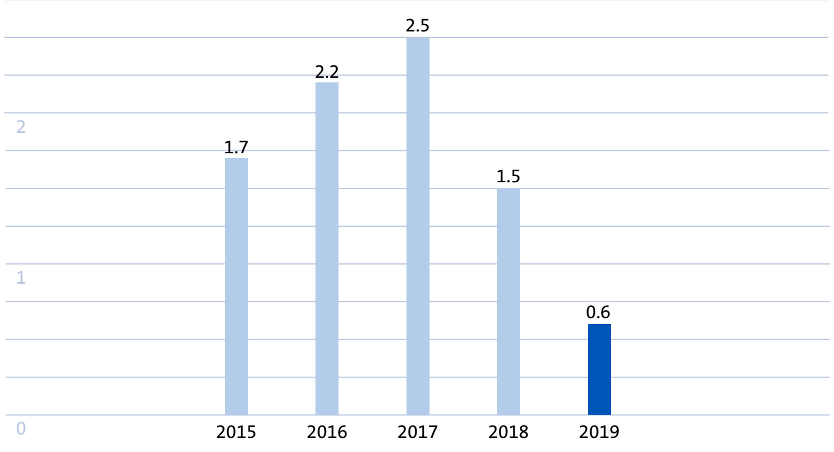
GDP growth rate by region (%)



German GDP growth of 0.6% in 2019

As a strongly export-oriented economy, Germany was hit particularly hard by the trade disputes. According to preliminary figures from Germany's Federal Statistical Office, German GDP grew by 0.6% in 2019 relative to the previous year. Growth was supported by private and public consumption. The German economy grew much less dynamically overall in 2019 than in 2018. GDP growth in the previous year was 1.5%.

GDP growth Germany (%)



Source: Germany's Federal Statistical Office

Slowdown for German mechanical engineering in 2019

The German mechanical engineering industry faced difficult business conditions in 2019. According to the Mechanical Engineering Industry Association (VDMA), the industry was held back by the gloomy macroeconomic environment, threats and sanctions in the global trade disputes and radical structural change in the automotive industry. Output in the reporting period consequently developed worse than expected. On preliminary figures, the VDMA expects machinery and industrial equipment output to have decreased in value by 2% in 2019 relative to the previous year. The VDMA's original forecast for 2019 had been plus 2%.

Megatrends ensure stable market growth

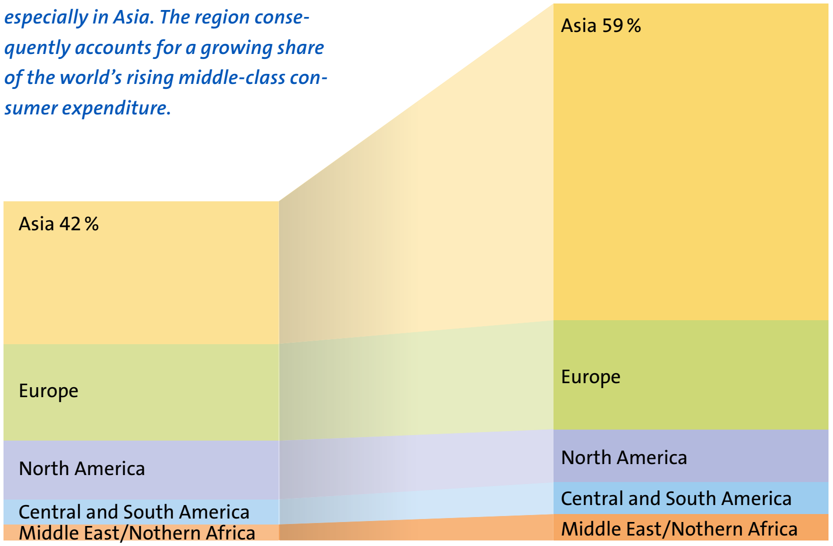
KRONES operates in a market exhibiting stable long-term growth. The average annual growth rate is higher than that of the world economy as a whole. Several megatrends are driving this stronger demand for food and beverage packaging machinery.

The rising global population, growth of the middle class and urbanisation are megatrends that support the growth of KRONES' markets.

The overarching megatrend is global population growth. At the end of 2019, some 7.75 billion people inhabited the earth. According to United Nations forecasts, that number is growing at a rate of more than 70 million each year. Population growth is especially strong in Africa and Asia. The world's population is expected to reach about 8.5 billion by 2030. All those people will need to eat and drink. And, increasingly, they are opting for packaged beverages and foods.

Asia's share of global middle class consumption is growing rapidly

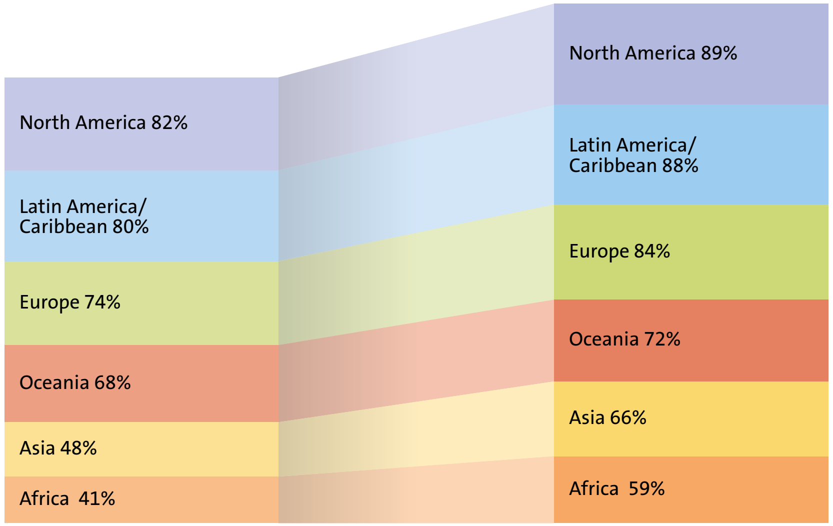
Rapidly increasing numbers of people are moving up into the middle classes, especially in Asia. The region consequently accounts for a growing share of the world's rising middle-class consumer expenditure.



2020 (expected) US$35.0 trillion   *Source: OECD*   2030 (expected) US$55.7 trillion

Urban population in 2015 and 2050 (% of total)

The trend towards urbanisation is strongest in Africa and Asia.



Source: United Nations, (World Urbanization Prospects, The 2018 Revision)

Growing middle class increases consumer spending

More and more people in emerging and developing economies are escaping poverty and rising into the middle class. According to forecasts by the OECD, the middle class worldwide will grow from 3.2 billion people to 4.9 billion in the period from 2020 to 2030. As incomes rise, so too does consumer spending – and that includes spending for packaged beverages and foods. Asia accounts for a large share of the growth of the middle class and the corresponding increase in buying power worldwide. The OECD predicts that Asia's share of total middle class consumer spending worldwide will be 42% by 2020. By 2030, that figure is expected to rise to 59%. The total of consumer spending by the global middle class is likely to increase from US$35 trillion to US$55.7 trillion in that time.

Urbanisation is driving growth

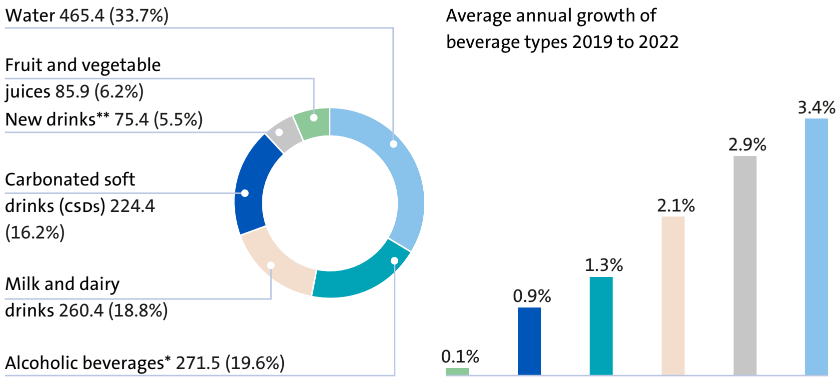
Increasing urbanisation, the migration of people from rural areas to cities, also promotes demand for packaged food and beverages. That is because city-dwellers generally consume more packaged products than people who live in the countryside.

The United Nations forecasts that two out of three of the earth's inhabitants will live in cities by 2050. At present, only about half of the world's population lives in cities. The strongest influx of people into cities is in the developing and emerging market countries of Africa and Asia.

Global consumption of packaged beverages growing continuously

Driven by megatrends, global consumption of packaged beverages is steadily increasing. According to preliminary figures from market research institute Global Data, the world population consumed 1,380 billion litres of packaged beverages in 2019. That was 2.2% more than in the previous year. Global Data projects stable growth in global packaged beverage consumption for the years ahead. For the period 2019 to 2022, the experts expect average annual growth of 2.1%. The growth rates vary between the different types of beverage.

Global consumption of packaged beverages in 2019 (billion litres)



2019: 1,383.0 billion litres (e)

*Beer, wine, and spirits
** Energy drinks, sports drinks, and ready-to-drink tea and coffee

Sources: Global Data

From 2019, KRONES obtains data on the global beverage and packaging market from Global Data. This data came in previous years from Euromonitor. The two providers differ in matters such as the countries covered and methodological approach. There is therefore only limited comparability between the Euromonitor and Global Data figures.

Consumption of bottled water is expected to increase significantly more rapidly than the overall market. With global consumption of some 465 billion litres in 2019, bottled water is by far the largest segment of the global beverage market. It accounts for about one third of all packaged beverage consumption. The Global Data experts expect consumption of bottled water to grow by an average of 3.4% a year from 2019 to 2022. Key growth drivers are rising demand for clean bottled drinking water in emerging and developing countries and the trend to healthy nutrition in industrialised countries.

Demand for **alcoholic beverages**, the second largest segment accounting for 19.6% of the market, is expected to grow less rapidly than the overall market. This is because beer consumption is rising only slowly overall. While beer consumption is growing strongly in some emerging markets, in many industrialised countries demand is saturated. Demand for wine and spirits is growing more strongly. However, these have only minor significance in the alcoholic beverages segment. Overall, Global Data expects that the consumption of packaged alcoholic beverages will grow at an average annual rate of 1.3% between 2019 and 2022.

Within the **milk and dairy drinks** segment (share of global beverage consumption in 2019: 18.8%), rapid increases are expected in the consumption of niche products such as yoghurt smoothies (average growth rate 2019–2022: 9.5%) and flavoured milk (+3.1%). Demand for plain milk, which accounts for around three-quarters of the market segment, is expected to grow on average by just 1.2%. Overall, the milk and dairy drinks segment is expected to grow in step with the overall market from 2018 to 2021 (average annual growth rate: 2.1%).

Another large market is **carbonated soft drinks (CSDs)**. People around the world consumed some 224 billion litres of packaged CSDs in 2019 (share of total beverage consumption: 16.2%). CSDs such as cola and lemonades often contain sugar. Due to increasing consumer health awareness, demand for CSDs is growing at a lesser rate than the overall market. Global Data projects average annual growth rates of 0.9% for the period 2019 to 2022.

Fruit and vegetable juices (share of total beverage consumption in 2019: 6.2%) and new drinks (5.5%) are the two smaller beverage segments. New drinks include ready-to-drink tea and coffee together with sports and energy drinks. From 2019 to 2022, new drinks are expected to show significantly higher average growth rates (+2.9%) than fruit and vegetable juices (+0.1%).

Booming demand for packaged beverages in emerging markets

In emerging and developing economies, KRONES is benefiting from population growth and a growing middle class. The growing diversity of beverages and packaging stimulate demand in mature industrial countries.

The megatrends – global population growth, a burgeoning middle class and urbanisation – mainly play out in emerging and developing countries. These are consequently the strongest source of growth in demand for packaged beverages.

The market researchers expect that the highest growth rate will be in the Africa/Middle East region. Demand for packaged beverages is anticipated to rise there by an annual average of 4.2% between 2019 and 2022. Consumption in Asia/Pacific is also expected to grow at an above-average rate. For this region, the experts forecast an average annual growth rate of 3.2%. Growth in beverage consumption likewise continues at a rapid pace in China, with an average growth rate of 2.9%.

Demand for packaged beverages is growing at high rates in the Africa/Middle East and Asia/Pacific regions.

Demand in mature markets such as Europe and North and Central America is expected to grow at a lower rate than the overall market. These are regions with low population growth. KRONES' growth opportunities in such markets therefore relate not to rising beverage consumption, but to the increasing diversity of beverages and packaging.

Worldwide consumption of packaged beverages

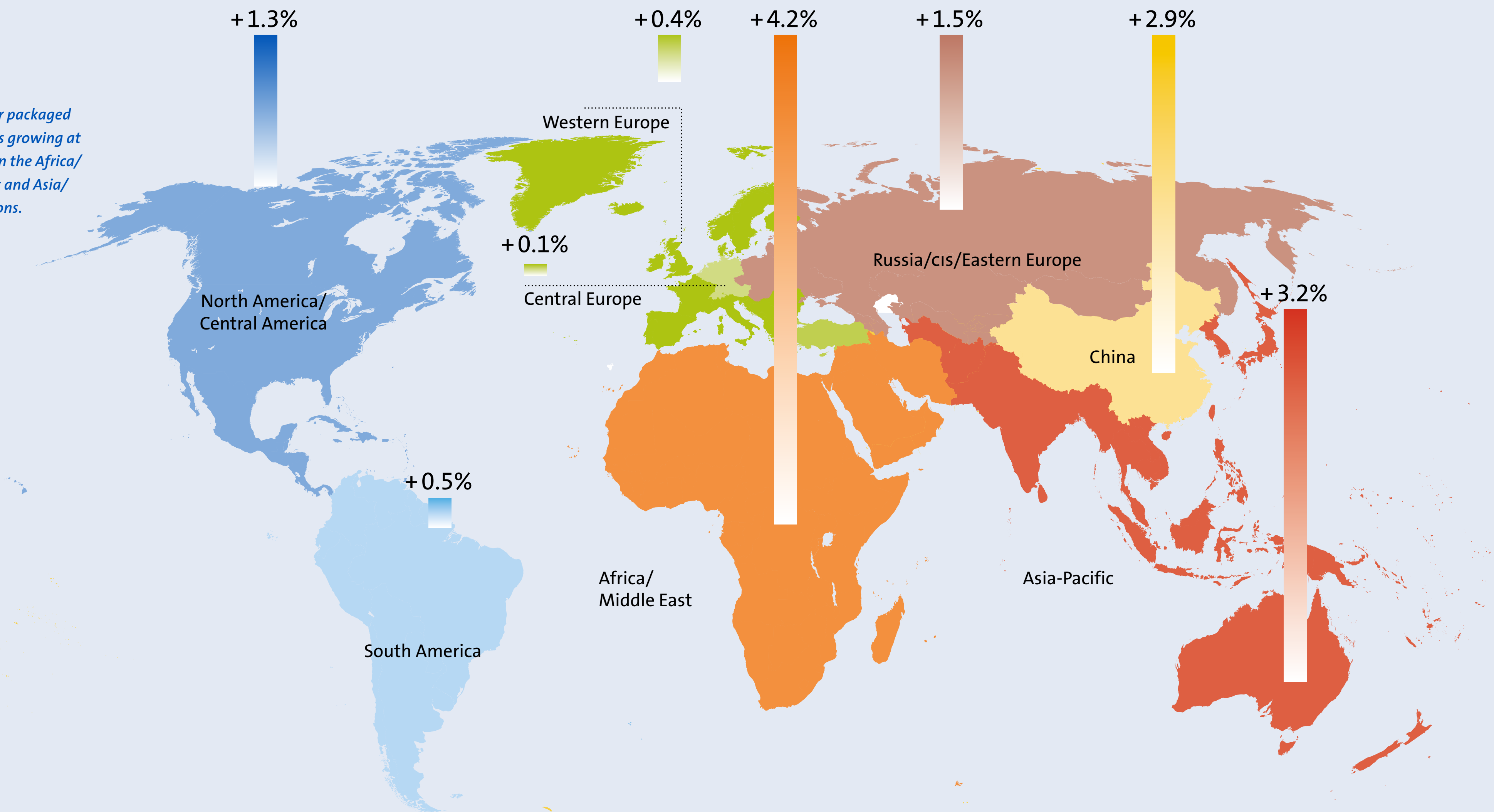
	2019 (e)		2022 (e)		Average annual growth (%)
	Billion litres	%*	Billion litres	%*	2019–2022
Asia-Pacific	321.8	23.5	354.2	24.3	3.2
China	249.2	18.2	271.7	18.6	2.9
North America/Central America	203.6	14.9	211.6	14.5	1.3
South America	184.1	13.4	186.7	12.8	0.5
Western Europe	138.3	10.1	139.9	9.6	0.4
Africa/Middle East	122.5	8.9	138.6	9.5	4.2
Russia/CIS/Eastern Europe	94.7	6.9	99.0	6.8	1.5
Central Europe	56.1	4.1	56.3	3.9	0.1
Worldwide	**1,370.3**	**100.0**	**1,457.9**	**100.0**	**2.1**

*Share of global consumption

Sources: Global Data

Global consumption of packaged beverages by region: annual growth **2019–2022**

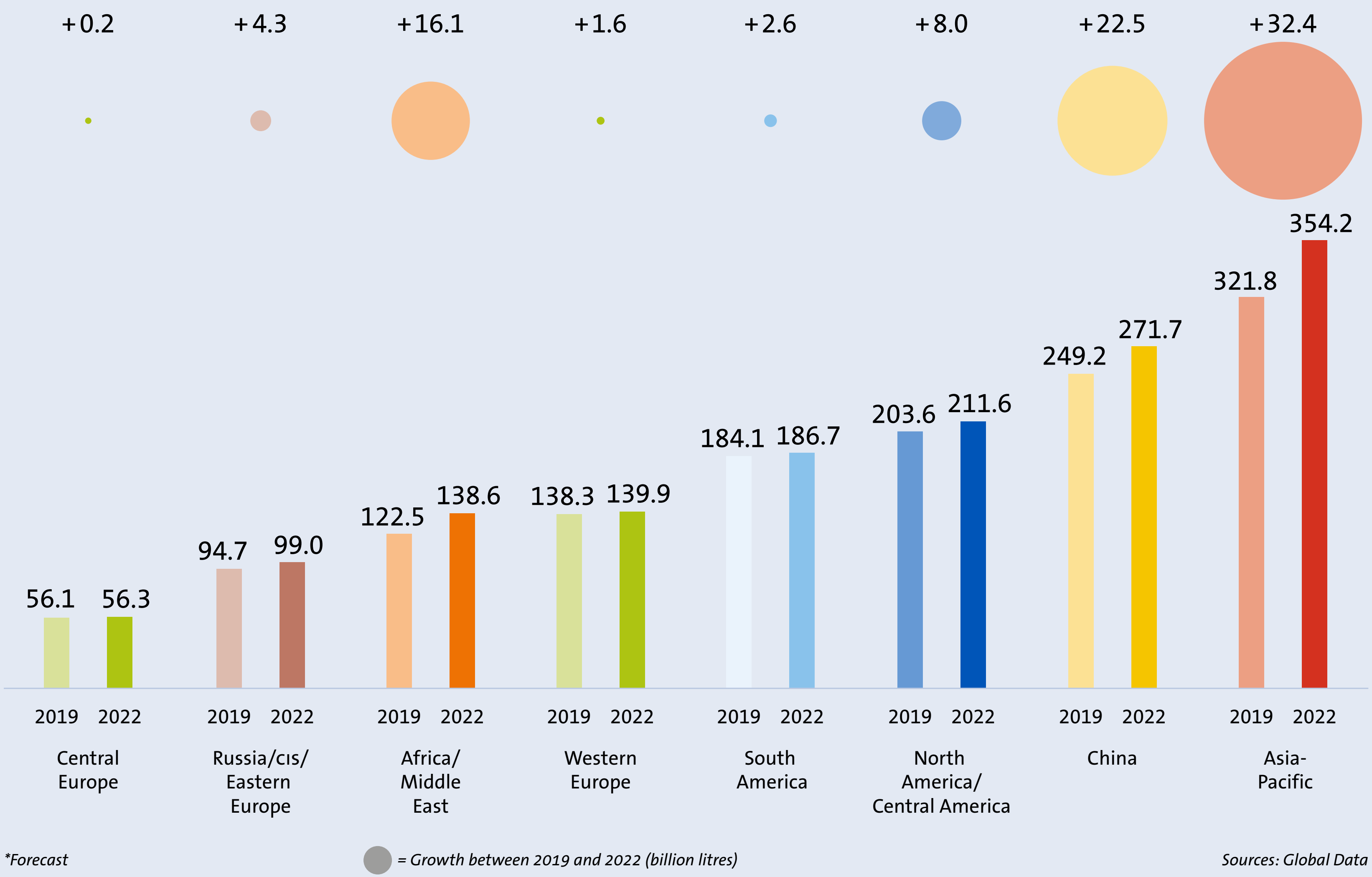
Demand for packaged beverages is growing at high rates in the Africa/Middle East and Asia/Pacific regions.



Sources: Global Data

Global consumption of packaged beverages by region: **billion litres***

In the Asia/Pacific region, it is expected that 354.2 billion litres of packaged beverages will be consumed in 2022. That is 32.4 billion litres more than in 2019. Consumption in China is expected to increase by 22.5 billion litres over the same period. The combined growth in the two regions roughly equals total consumption in Central Europe today.



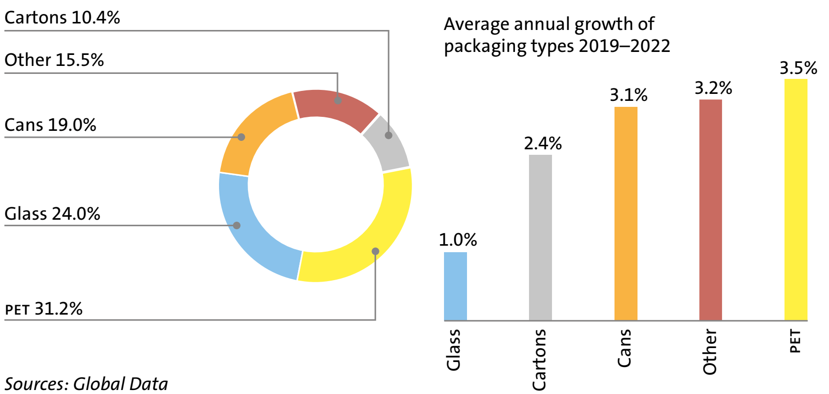
*Forecast

Sources: Global Data

PET plastic the preferred packaging material for beverages

According to preliminary figures from Global Data, some 1,690 billion containers will have been filled with beverages worldwide in 2019. That quantity is growing steadily with rising beverage consumption and is expected to increase by 2.7% per year on average to 1,827 billion by 2022. Most beverages are sold in plastic bottles, glass bottles, metal cans and paper-based cartons.

Global beverage market by packaging material in 2019 (based on units filled)



Sources: Global Data

The strongest growth is in demand for PET beverage packaging.

By far the most frequent packaging material for beverages is **polyethylene terephthalate (PET)**. This is primarily because water – globally the most widely consumed beverage – is mainly sold in PET bottles. According to figures from Global Data, some 525 billion or over a third of all beverage containers were made of PET in 2019. The quantity of PET beverage containers is expected to increase by an average of 3.5% per year through to 2022, which is faster than the overall beverage packaging market.

The second most frequent packaging material for beverages is **glass**. Glass accounted for 24.0% of all beverage containers in 2019. Glass bottles are primarily used for beer and other alcoholic beverages – that is, beverages for which demand is growing disproportionately slowly relative to the overall market. Accordingly, the number of beverage containers made of glass is expected to see annual average growth of just 1.0% from 2019 to 2022.

Significantly faster growth is expected for metal beverage packaging. 19.0% of beverage containers last year were **metal cans**. These are frequently used for beer and carbonated soft drinks (CSDs). The number of cans used for beverage packaging is likely to gain by an average of 3.1% per year through to 2022.

A further significant packaging material comprises **paper-based cartons**. Cartons are mainly used to package milk, dairy drinks and fruit and vegetable juices. The number of paper-based cartons (share of beverage packaging in 2019: 10.4%) is expected to grow by an average of 2.4% per year through to 2022.

As one of the leading providers of machines and lines for the production, filling, and packaging of PET containers, KRONES benefits from the continued growth in PET packaging. The company also has a strong market position in lines for filling and packaging beverages in glass bottles and cans. KRONES does not provide solutions for carton packaging.

KRONES in figures

- KRONES' consolidated revenue rose 2.7% in 2019 to €3.96 billion.
- Profitability has been hit by excessive labour costs and expenses for restructuring and impairments.
- KRONES plans to pay a dividend based on earnings excluding one-off effects. Shareholders are to receive a dividend of €0.75 per share for 2019.

	Forecast 2019	Actual 2019
Revenue growth	3%	2.7%
EBT margin	about 6%	1.1%*
Working capital/revenue	26%	26.9%

*Including expenses for structural measures

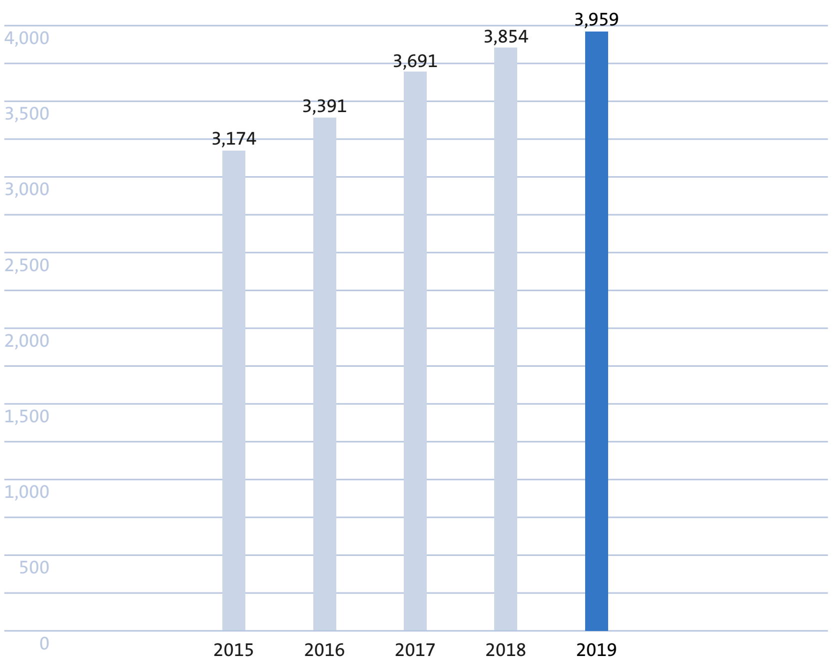
KRONES revenue up 2.7% to €3.96 billion

KRONES' revenue continued to grow and almost hit the €4 billion mark in 2019.

Despite the difficult general economic conditions, KRONES' markets were relatively stable in 2019. We were able to take advantage of this as a leading provider with a broad global footprint. Our full service range also benefited us. Revenue grew by 2.7% year-on-year in 2019, from €3,854.0 million to €3,958.9 million.

Revenue performance in the financial year was partly affected by the PET debate. In plastics technology, comprising machines and lines for filling and packaging in PET, revenue was down in 2019. KRONES was able to make up for this with growth in other areas. In total, KRONES attained its 3% growth target for consolidated revenue in 2019.

KRONES Group revenue (€ million)

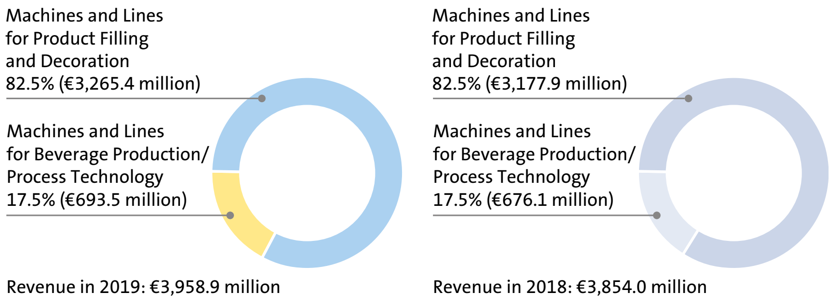


Revenue by Segment

KRONES generated revenue growth in both segments in 2019. The percentage increase was slightly greater in the core segment (+2.8%) than in process technology (+2.6%).

Revenue in the core segment, Machines and Lines for Product Filling and Decoration, rose by 2.8%, from €3,177.9 million in the previous year to €3,265.4 million in 2019. The segment's share of consolidated revenue was 82.5%, as in the previous year.

Share of consolidated revenue



Revenue in the Machines and Lines for Beverage Production/Process Technology segment went up by 2.6%, from €676.1 million in the previous year to €693.5 million in 2019. The segment contributed 17.5% of consolidated revenue (previous year: 17.5%).

Further information can be found under "Report from the segments" beginning on page 85 and under "Segment reporting" in the notes to the consolidated financial statements on page 137.

Revenue by region

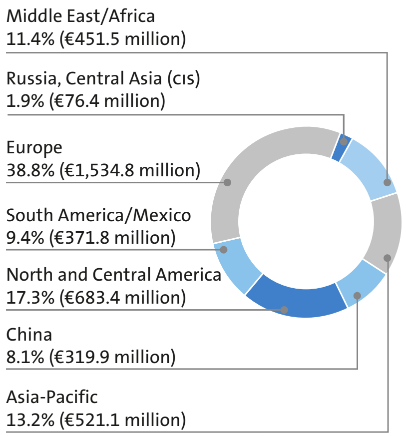
KRONES is strongly export-oriented. The company generated just under 90% of revenue internationally in 2019.

KRONES' revenue in Germany increased in 2019 by 29.3% year-on-year, from €362.3 million to €468.4 million. The German share of revenue was 11.8% in the reporting period (previous year: 9.4%). The base effect must also be taken into account here. In 2018, the share of revenue accounted for by Germany decreased from 10.5% to 9.4%.

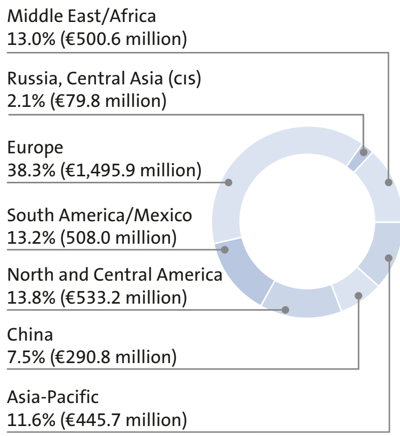
KRONES' revenue in Europe (excluding Germany) was slightly down, decreasing by 5.8% from €1,213.4 million in the previous year to €1,142.8 million in the reporting period. A major reason for this was lower revenue in the large Western Europe sales region, which was affected by the PET debate. Revenue there went down by 14.1% to €620.1 million. It should be noted, however, that business in Western Europe has grown strongly in recent years and the comparative figure is consequently very high. In Central Europe (Austria, Switzerland and the Netherlands), revenue decreased in 2019 by 10.5% to €200.9 million. Revenue in Eastern Europe climbed 31.0% in the reporting period to €245.4 million. Business in 2019 was relatively stable for KRONES in the Russia/CIS region. There, revenue was down by a slight 4.3% to €76.4 million.

Share of consolidated revenue	2019		2018		Change
	€ million	%	€ million	%	%
Germany	468.4	11.8	362.3	9.4	+29.3
Central Europe (excluding Germany)	200.9	5.1	224.6	5.8	−10.5
Western Europe	620.1	15.7	721.6	18.7	−14.1
Eastern Europe	245.4	6.2	187.4	4.9	+31.0
Russia, Central Asia (CIS)	76.4	1.9	79.8	2.1	−4.3
Middle East/Africa	451.5	11.4	500.6	13.0	−9.8
Asia-Pacific	521.1	13.2	445.7	11.6	+16.9
China	319.9	8.1	290.8	7.5	+10.0
North and Central America	683.4	17.3	533.2	13.8	+28.2
South America/Mexico	371.8	9.4	508.0	13.2	−26.8
Total	**3,958.9**	**100.0**	3,854.0	100.0	**+2.7**

Share of consolidated revenue



Revenue 2019: €3,958.9 million



Revenue 2018: €3,854.0 million

In total, the share of consolidated revenue in the reporting period accounted for by Europe (excluding Germany) decreased from 31.5% in the previous year to 28.9% in 2019.

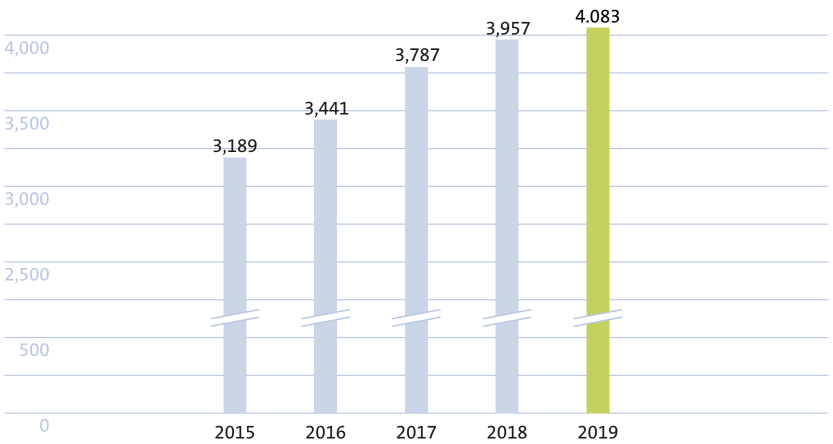
In past years, KRONES recorded in part strong growth in the Middle East/Africa region. Business there has most recently consolidated at a high level. In 2019, revenue in the region fell 9.8% year-on-year to €451.5 million. KRONES' business in China, on the other hand, continued its upward trend in 2019. Revenue there improved by 10.0% to €319.9 million. The core bottling and packaging equipment segment recorded growth above this rate. In the remainder of the Asia/Pacific region, revenue grew in 2019 by 16.9% to €521.1 million.

Business in North and Central America showed healthy growth during the reporting period due to the stronger general economic situation. Overall, revenue in the region was up 28.2% year-on-year to €683.4 million. KRONES' revenue was down in the South America/Mexico region. At €371.8 million, revenue there decreased in 2019 by 26.8% year-on-year. One reason for the decline consisted of the general economic situation in parts of South America.

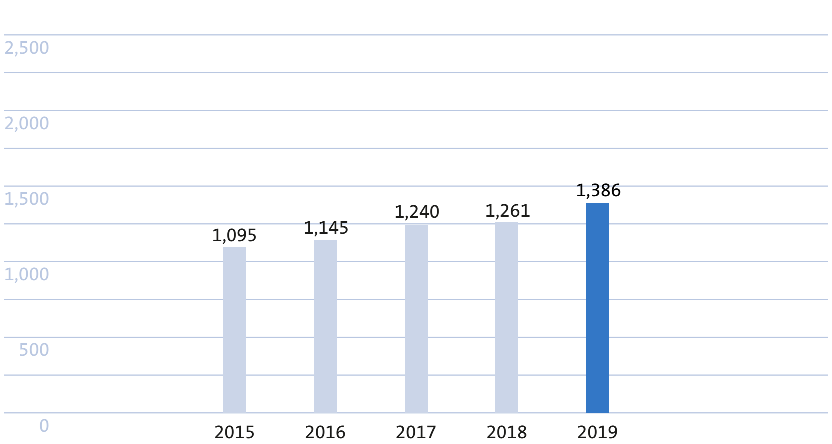
Overall, KRONES' revenue remains well balanced internationally in established and emerging markets. The company generated a total of 50.2% of consolidated revenue in emerging markets in 2019 (previous year: 52.2%). Mature industrialised economies accounted for 49.8% (previous year: 47.8%) of KRONES' revenue.

Order intake and order backlog

KRONES Group order intake (€ million)



KRONES Group orders on hand at 31 December (€ million)



Growth in demand for KRONES products and services in 2019

The contract value of orders increased by 3.2% year-on-year in 2019.

The many economic uncertainties hit investment confidence among our customers in 2019. This mainly affected the second quarter. Overall, we are satisfied with the demand trend in the reporting period. This is partly due to very strong sales at the end of the year. Orders rose sharply from October to December 2019, and the contract value of orders in the fourth quarter exceeded the previous year's figure by 10.6%. In the full year 2019, KRONES' order intake rose by 3.2% year-on-year, from €3,957.3 million to €4,083.5 million. KRONES was able to offset the lower demand in plastics technology thanks to its broad product and service range.

Contrary to what was planned, order intake went up by more than the average in 2019 in North America and Eastern Europe. In the regions of China, Asia-Pacific and South America, demand remained stable overall as planned. The contract value of orders was down in Europe in 2019.

Further increase in order backlog

KRONES had orders on hand totalling €1,385.7 million at the end of 2019. This represents growth of 9.9% compared with a year earlier (€1,261.1 million). At customers' request, however, some of these orders will not go into production until the end of the 2020 financial year.

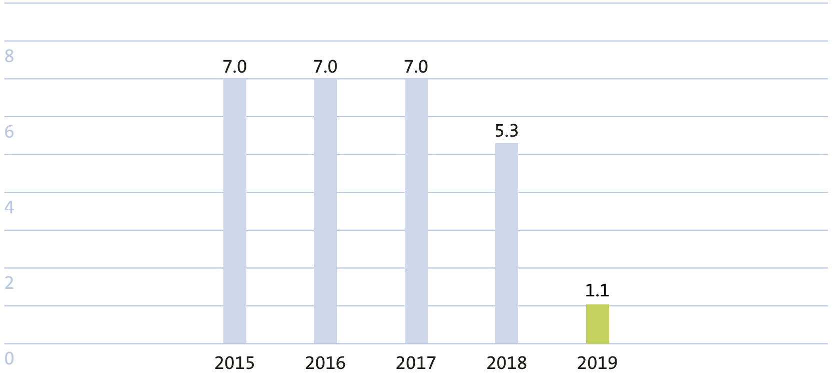
KRONES Group earnings

KRONES' profitability hit by excessively high costs

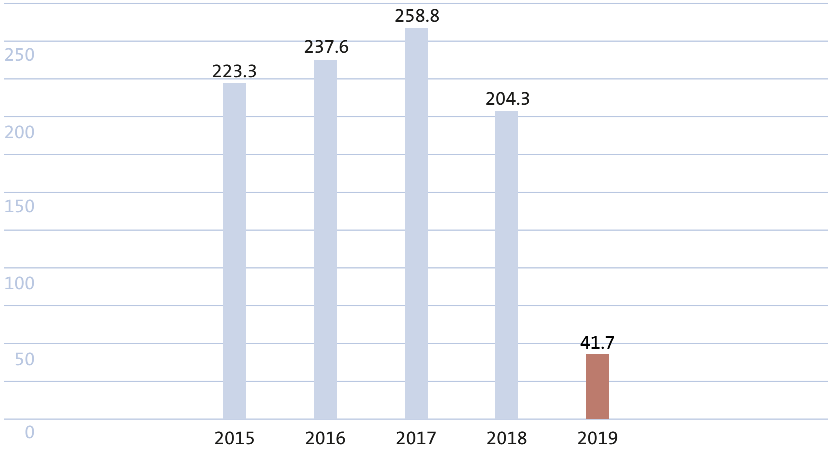
Partly due to expenditure for structural measures, the EBT margin went down from 5.3% in the previous year to 1.1% in 2019.

KRONES' earnings were hit in 2019 by high cost increases, especially for labour. The product mix also had a negative impact on profitability. In the first half year, for example, we had poor production capacity utilisation in plastics technology due to temporarily weak demand. The earnings performance also reflects service revenues being slightly below target in parts of the service business. In total, earnings before taxes (EBT) fell from €204.3 million in the previous year to €41.7 million in 2019. The EBT margin decreased from 5.3% to 1.1%. It should be noted

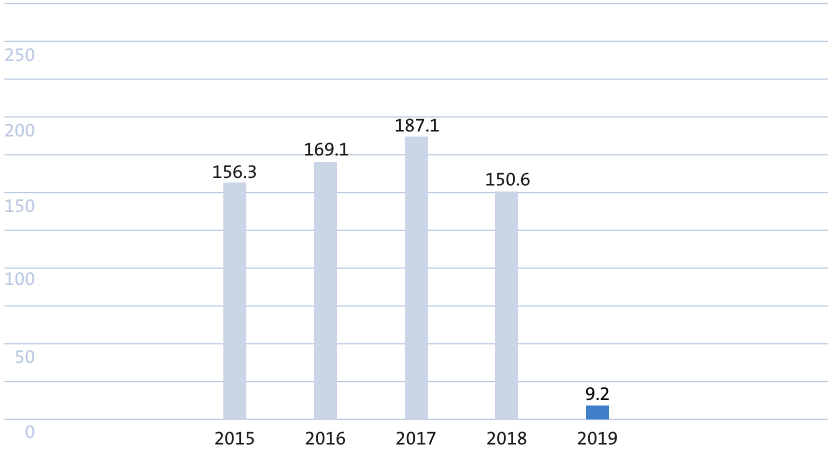
KRONES Group EBT margin (%)



KRONES Group EBT (€ million)

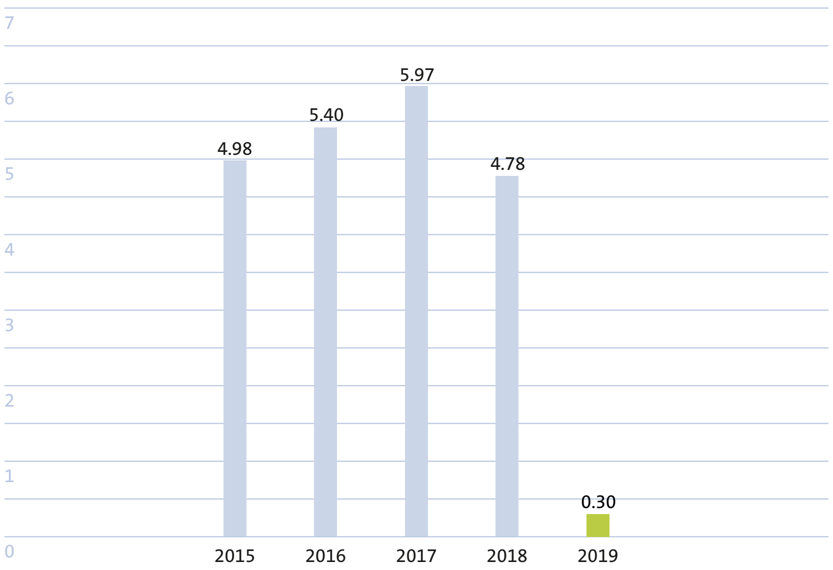


KRONES Group net income (€ million)

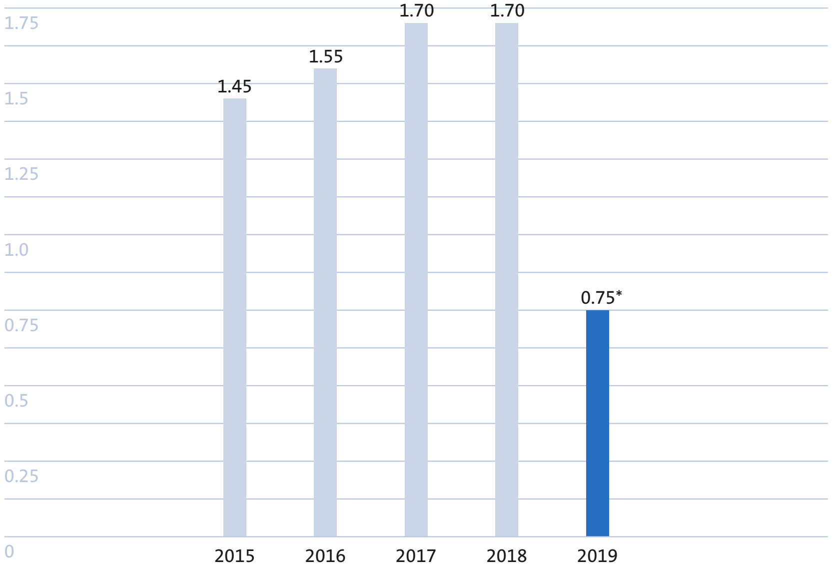


in this connection that KRONES recognised provisions and impairments totalling around €70 million in 2019 for measures to cut personnel expenses and streamline the portfolio. Had there been no expenses for structural measures in 2019, the EBT margin would have been 2.8%. This would have been in line with the July 2019 downward revision of our margin target to around 3%. The original guidance for 2019 was for an EBT margin of around 6%.

KRONES Group earnings per share (€)



KRONES Group Dividend per share (€)



* As per proposal for the appropriation of retained earnings available for distribution

KRONES' tax rate increased substantially from 26.3% in the previous year to 77.9% in 2019. This is because of higher, non-offsettable income taxes incurred alongside tax-neutral effects as a result of the one-off expenses. Consolidated net income consequently decreased more sharply in the reporting period than EBT, from €150.6 million to €9.2 million. Earnings per share went down from €4.78 to €0.30.

KRONES plans to pay a dividend of €0.75 per share for 2019

The impairments and provisions recognised by KRONES in connection with the structural measures in the reporting period have no effect on the dividend for the 2019 financial year. The proposed dividend is based on earnings excluding those one-off expenses. KRONES' policy is to pay out 25% to 30% of consolidated net income in the form of dividends. At the Annual General Meeting on 18 May 2020, the Executive Board and Supervisory Board will be proposing a dividend of €0.75 per share for the 2019 financial year (previous year: €1.70 per share).

KRONES Group earnings structure

€ million	2019	2018	Change
Revenue	3,958.9	3,854.0	+2.7%
Changes in inventories of finished goods and work in progress	+8.7	+1.1	–
Total operating performance	3,967.6	3,855.1	+2.9%
Other own work capitalised	+63.0	+49.6	+27.0%
Other operating income	+99.8	+114.5	−12.8%
Goods and services purchased	−2,041.8	−2,032.0	+0.5%
Personnel expenses	−1,275.5	−1,137.3	+12.2%
Other operating expenses	−585.9	−544.0	+7.7%
EBITDA	227.3	305.9	−25.7%
Depreciation and amortisation on fixed assets	−183.3	−102.7	+78.4%
EBIT	43.9	203.2	−78.4%
Financial income/expense	−2.2	+1.1	–
EBT	41.7	204.3	−79.6%
Income tax	−32.5	−53.7	−39.4%
Consolidated net income	9.2	150.6	−93.9%

For further information, please see the full statement of profit and loss on p. 130.

KRONES improved total operating performance in the full year 2019 by 2.9% to €3,967.6 million. This was slightly greater than the growth in revenue (which was up 2.7%) because inventories of finished goods and work in progress increased in the reporting period by €8.7 million, compared with €1.1 million in the previous year.

Personnel expenses increased more strongly than total operating performance in 2019, gaining 12.2% to €1,275.5 million. The substantial increase was due to pay rises under collective agreements, expansion of the workforce at international locations – primarily in Hungary – and acquisitions. Personnel expenses were also affected by around €30 million in provisions for cuts in the workforce. The ratio of personnel expenses to total operating performance went up from 29.5% in the previous year to 32.2% in 2019.

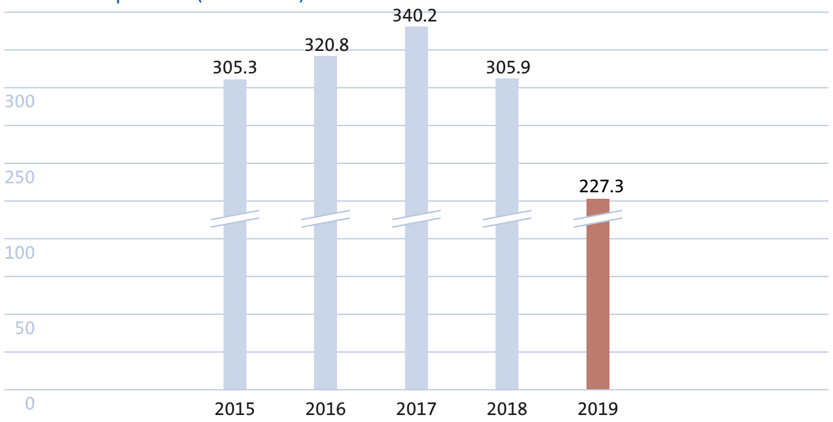
Around €70 million in provisions and impairments for structural measures reduced KRONES' profitability in 2019.

Goods and services purchased were slightly positive relative to the previous year, rising by 0.5% in the reporting period to €2,041.8 million. The ratio of goods and services purchased to total operating performance decreased from 52.7% to 51.5%. The additional measures taken to reduce material costs began to take effect in the second half of the year. Goods and services purchased as a percentage of total operating performance dropped in this period from 55.4% in the previous year to 51.9%. Despite the slight positive signals, the general trend to rising material purchase prices must be countered on a lasting basis with the measures taken.

Other operating expenses went up by more than total operating performance in the reporting period, increasing by 7.7% to €585.9 million. While other operating income fell from €114.5 million to €99.8 million, other own work capitalised increased in the financial year from €49.6 million to €63.0 million. The net balance of other operating income and expenses and own work capitalised changed by 11.4% from –€379.9 million to –€423.0 million. As a percentage of total operating performance, this represented an increase from 9.9% to 10.7%.

Overall, EBITDA (earnings before interest, taxes, depreciation and amortisation) went down by 25.7% in the reporting period, from €305.9 million to €227.3 million. The EBITDA margin consequently dropped from 7.9% to 5.7%. Depreciation and amortisation of fixed assets was significantly higher than in the previous year, increasing from €102.7 million in the previous year to €183.3 million. This includes approximately €40 million in impairment losses on intangible assets as a result of the portfolio streamlining in 2019. The increase also reflected the high level of capital expenditure in the preceding years and the application of the new IFRS 16 Leases, which led to €33.6 million higher depreciation in the reporting period.

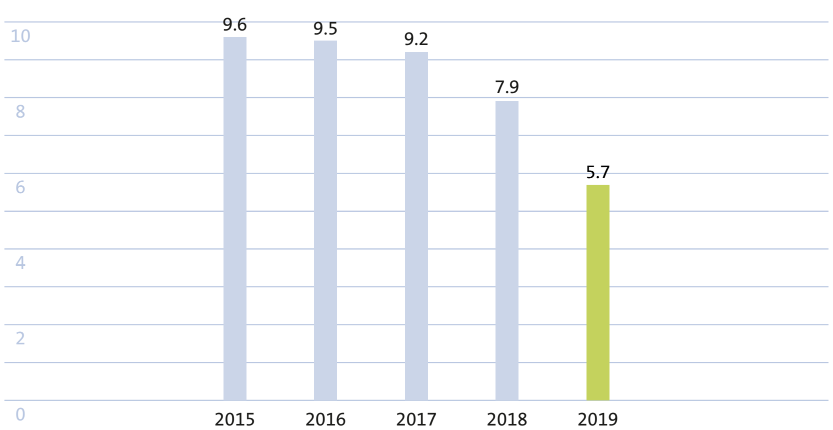
KRONES Group EBITDA (in € million)



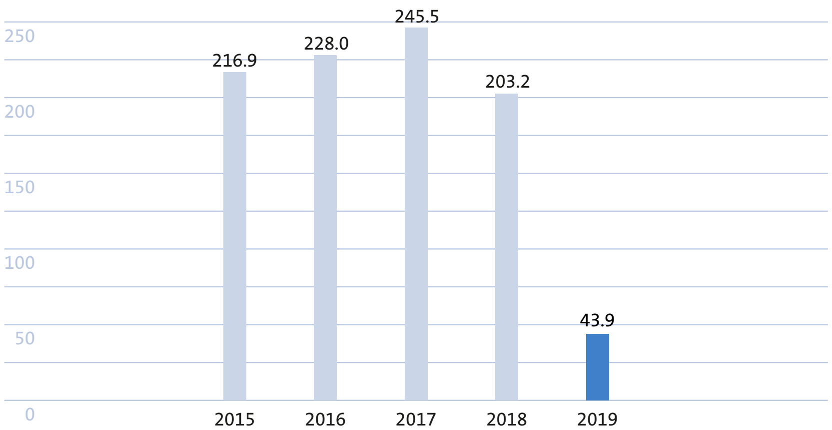
Due to the higher depreciation and amortisation, earnings before interest and taxes (EBIT) decreased more sharply than EBITDA, falling from €203.2 million to €43.9 million. Net financial income/expense went down from €1.1 million to –€2.2 million. This was mainly due to the reduction in investment income relating to non-consolidated companies from €8.7 million to €5.6 million.

Earnings before taxes (EBT) fell from €204.3 million to €41.7 million. This results in an EBT margin of 1.1% (previous year: 5.3%). Adjusted for the provisions and impairments totalling around €70 million as a result of the structural measures in the reporting period, the EBT margin was 2.8%. KRONES' tax rate was extremely high in 2019, at 77.9% (previous year: 26.2%). Consolidated net income went down in 2019 relative to the previous year by €141.4 million to €9.2 million.

KRONES Group EBITDA margin (%)



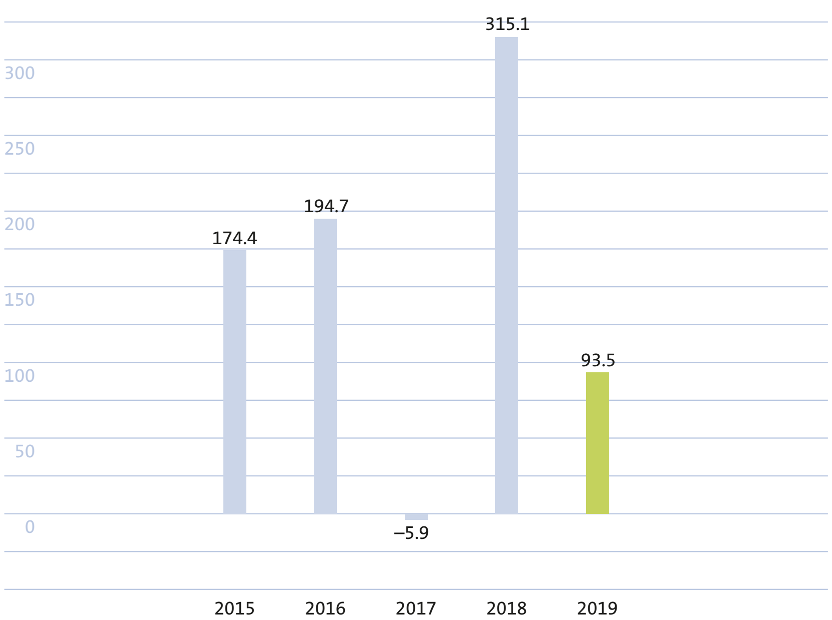
KRONES Group EBIT (€ million)



Consolidated cash flow

€ million	2019	2018
Earnings before taxes	**41.7**	204.3
Other non-cash changes	+309.4	+19.3
Changes in working capital	−202.3	+178.9
Changes in other assets and liabilities	−55.3	−87.4
Cash flow from operating activities	**93.5**	315.1
Capital expenditure for intangible assets and property, plant and equipment	−168.9	−179.1
M&A activities	−28.0	−28.3
Other	+9.0	+13.0
Free cash flow	**−94.4**	120.7
Cash flow from financing activities	−19.3	−77.9
Other	+5.3	−6.0
Net change in cash and cash equivalents	**−108.4**	36.8
Cash and cash equivalents at the end of the period	**110.4**	218.8

KRONES Group cash flow from operating activities (€ million)

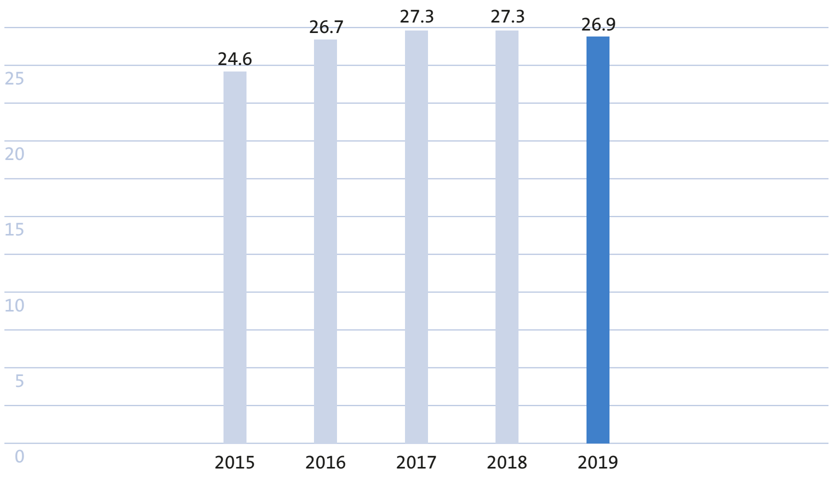


KRONES' cash flow from operating activities decreased to €93.5 million in 2019 (previous year: €315.1 million). This was mainly due to a substantial increase in working capital relative to the low prior-year figure.

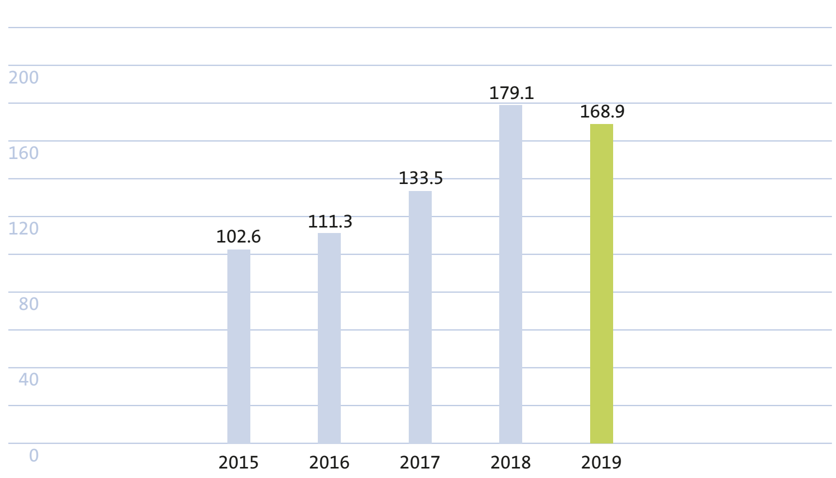
After a strong prior year, KRONES' cash flow was significantly lower in 2019. Cash flow from operating activities was thus down €221.6 million to €93.5 million. Alongside the lower earnings before taxes, the decrease was mainly due to a substantial rise in working capital. KRONES increased working capital by €202.3 million in the reporting period after having reduced it by €178.9 million in the previous year to a very low level. The non-cash changes in the amount of €309.4 million (previous year: €19.3 million) include the increase in provisions and primarily depreciation and amortisation in the amount of €183.3 million. Changes in other assets and liabilities amount to −€55.3 million on the cash flow statement (previous year: −€87.4 million)

For further information, please see the statement of cash flows on p. 134.

KRONES Group working capital to revenue (%, average over four quarters)



KRONES Group capital expenditure for PP&E and intangible assets (€ million)



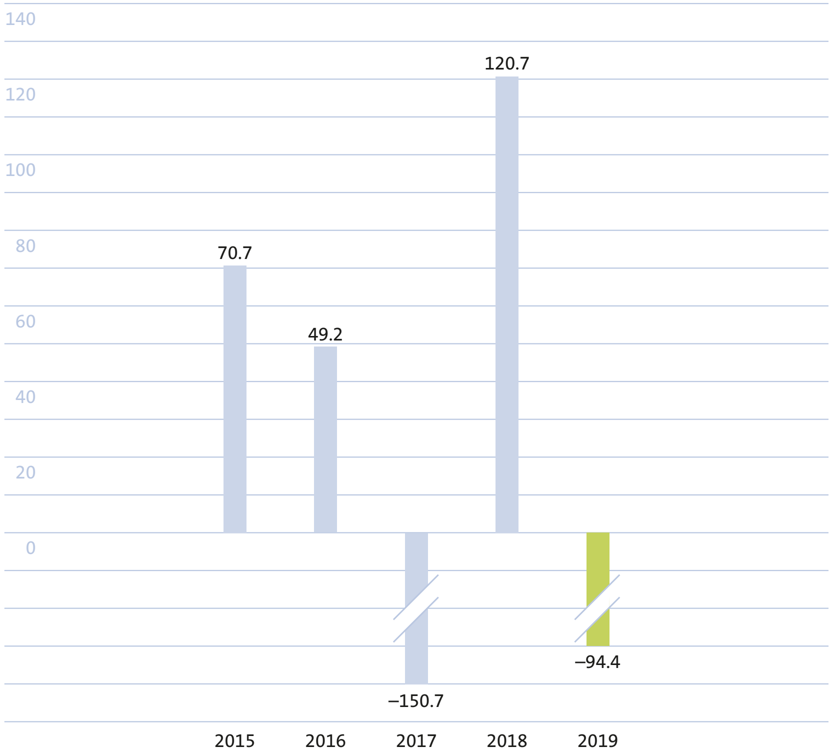
Working capital as a percentage of revenue down to 26.9%

KRONES was able to reduce average working capital over the past four quarters as a percentage of revenue from 27.3% to 26.9% in the reporting period. Despite the slight improvement, we did not meet our full-year target of 26% in 2019. While there was a decrease in trade receivables and contract assets, higher inventories and in particular lower trade payables and contract liabilities negatively impacted working capital as of the reporting date.

KRONES invested a total of €168.9 million in property, plant and equipment and intangible assets in the reporting period. As planned, this was below the very high prior-year figure of €179.1 million. Most of the capital expenditure was incurred at locations in Germany and in Hungary. Due to the exceptionally high depreciation and amortisation in the reporting period, the ratio of capital expenditure to depreciation and amortisation fell from 1.74 in the previous year to 0.92 in 2019.

KRONES reduced capital expenditure on property, plant and equipment and intangible assets by €10.2 million in 2019, from €179.1 million to €168.9 million.

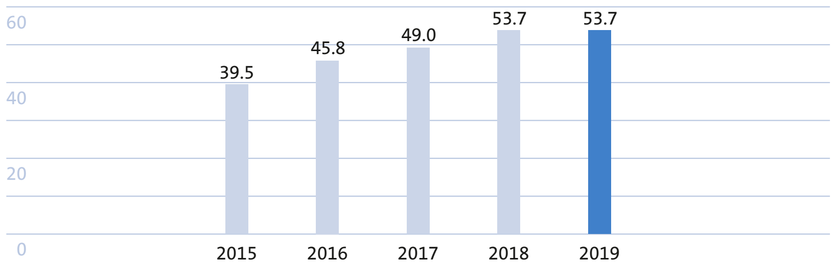
KRONES Group free cash flow (€ million)



KRONES' free cash flow went down in 2019 by €215.1 million to –€94.4 million.

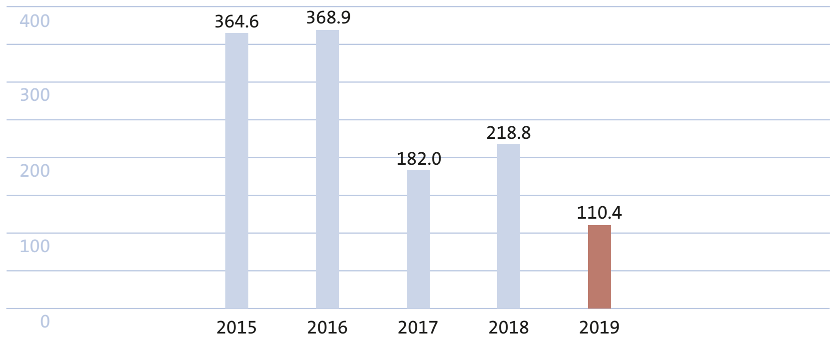
KRONES' free cash flow (net cash generated from operating activities) went down in the reporting period to a –€94.4 million (previous year: positive €120.7 million). Operating free cash flow, which is adjusted for acquisitions, came to a negative €66.4 million, likewise substantially below the previous year's positive €149.0 million.

KRONES Group dividend payout (€ million)



At €19.3 million in 2019, the cash outflow from financing activities was €58.6 million down on the previous year's €77.9 million. This was mainly due to short-term bank borrowings of €72.2 million (previous year: €0.6 million). In the opposite direction, there was a cash outflow from the repayment of lease liabilities in the amount of €32.1 million as a result of IFRS 16. As in the previous year, KRONES distributed €53.7 million to shareholders during the reporting period. Changes in exchange rates and the consolidated group increased liquidity by €5.3 million (previous year: €6.0 million). In total, cash and cash equivalents decreased in 2019 by €108.4 million to €110.4 million.

KRONES Group cash and cash equivalents at 31 December (€ million)



Assets and capital structure

€ million at 31 December	2019	2018	2017
Non-current assets	1,154	1,010	882
of which fixed assets	1,070	936	797
Current assets	2,165	2,312	2,158
of which cash and equivalents	110	219	182
Equity	1,370	1,433	1,330
Total debt	1,949	1,888	1,710
Non-current liabilities	452	359	314
Current liabilities	1,497	1,529	1,396
Total	**3,319**	**3,321**	**3,040**

For further information, please see the full balance sheet on p. 132 to 133.

After a substantial (9.3%) increase in the previous year, KRONES' total assets, at €3,319.4 million as of 31 December 2019, were virtually unchanged relative to the end of 2018.

The company's non-current assets totalled €1,154.0 million at the end of 2019, up 14.3% on the previous year (€1009.8 million). This was primarily due to a €1,069.8 million increase in fixed assets (previous year: €936.4 million). Much of that increase related to property, plant and equipment and right-of-use assets due to the first-time application of the new IFRS 16 lease accounting standard. The carrying amount as of the reporting date was €87.6 million. Property, plant and equipment went up in total by €122.4 million to €693.2 million. Intangible assets climbed – despite about €38 million in impairments – to €345.2 million (previous year: €328.2 million). Alongside additions to goodwill due to acquisitions in the reporting period, most of the increase related to the capitalization of development costs.

KRONES' total assets were virtually constant as of the reporting date. Non-current assets and liabilities increased while current assets and liabilities were down.

KRONES' current assets decreased. At the end of the 2019 financial year, the company had current assets totalling €2,165.4 million. That is a reduction of 6.3% or €146.2 million relative to the 2018 year-end. A contributing factor was a fall in cash and cash equivalents. Mostly due to the negative free cash flow and dividend payments, these dropped in the reporting period from €218.8 million to €110.4 million. Contract assets also decreased significantly. These went down from €647.1 million to €571.3 million. Trade receivables were also lower, at €932.9 million (previous year: €955.4 million). By contrast, KRONES reported significantly higher inventories, at €382.5 million as of the end of 2019 (31 December 2018: €320.7 million).

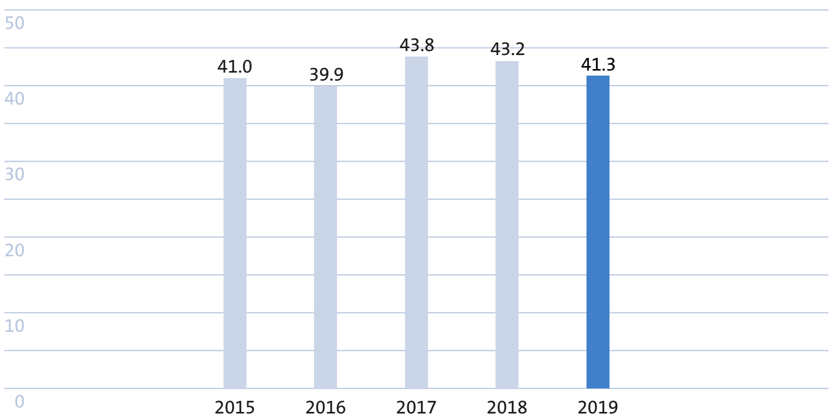
On the equity and liabilities side, KRONES' non-current liabilities increased significantly in the reporting period to €452.0 million (31 December 2018: €358.8 million). This was partly due to higher financial and lease liabilities, which climbed from €41.3 million to €104.9 million. Most of the increase in this balance sheet item – an amount of €58.8 million – relates to the application of the new IFRS 16 lease accounting standard. A rise in provisions for pensions to €260.2 million (previous year: €220.6 million) – mostly due to a reduction in the discount factor and mostly not recognized through profit or loss – also contributed to the increase in non-current liabilities. KRONES had non-current bank debt totalling €0.1 million at the end of 2019 (previous year: €3.2 million).

Current liabilities totalled €1,497.4 million at the end of 2019 (previous year: €1,529.4 million). KRONES reduced trade payables in the reporting period to €463.7 million (31 December 2018: €491.6 million). There was also a decrease in contract liabilities, which are mostly trade-related. These went down from €547.2 million to €442.9 million. Conversely, KRONES increased short-term bank debt. This came to €72.2 million as of the reporting date (31 December 2018: €0.6 million). Other liabilities and provisions likewise increased, mainly due to the increase in the provision for outstanding invoices. These amounted to €325.8 million (previous year: €261.7 million).

KRONES continues to have strong finances with an equity ratio of 41.3%, net cash and cash equivalents of €38.1 million and some €719 million in lines of credit.

KRONES had net cash and cash equivalents (cash and cash equivalents less bank debt) of €38.1 million at the 2019 reporting date (previous year: €215.1 million). In addition, the group has approximately €219 million in unused lines of credit. A backup facility of €500 million is also available. KRONES thus further advanced its primary financial management objective, which is to safeguard the company's strong financial resources and independence.

KRONES Group equity ratio (%)



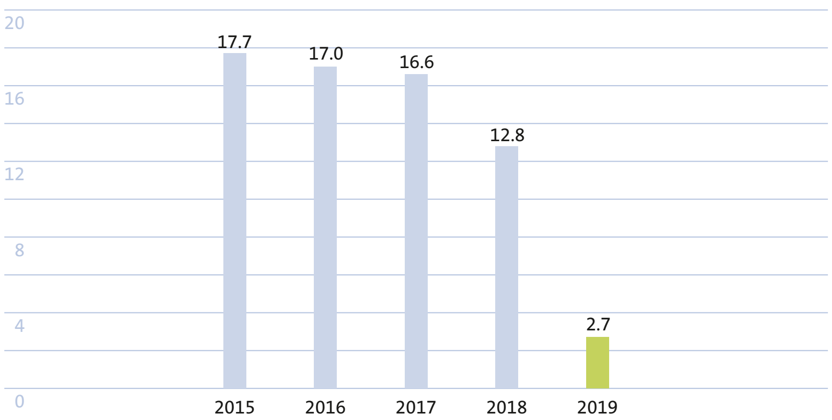
The low consolidated net income of €9.2 million, a €27.2 million decrease in other reserves and the €53.7 million dividend payout meant that equity decreased by 4.4% in 2019, from €1,433.2 million to €1,370.7 million. The equity ratio consequently went down from 43.2% to 41.3%. Overall, however, KRONES continues to possess an exceptionally robust financial and capital structure.

Return on capital employed (ROCE) down from 12.8% to 2.7%

Return on capital employed (ROCE) – the ratio of EBIT to average net capital employed – decreased from 12.8% in the previous year to 2.7% in the reporting period. This was mainly due to the lower EBIT, which was down significantly due to the one-off expenses.

Due to the lower EBIT, KRONES' ROCE went down from 12.8% to 2.7% in 2019.

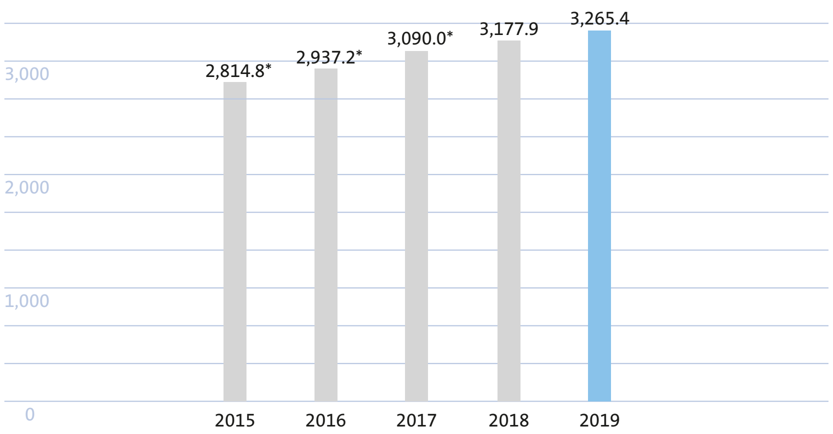
KRONES Group ROCE (%)



Report from the **segments**

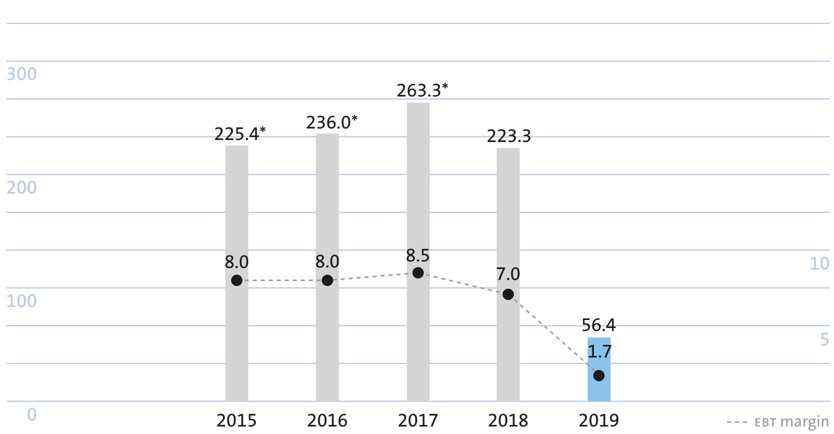
Machines and Lines for Product Filling and Decoration

Segment revenue (€ million)



* incl. Machines and lines for the Compact Class segment

Segment EBT (€ million) and EBT margin (%)



* incl. Machines and lines for the Compact Class segment

Segment revenue

KRONES' core segment met the growth target of around 3% for 2019

Revenue in the core segment, Machines and Lines for Product Filling and Decoration, grew overall in line with expectations in 2019. Despite a temporary weakness in demand in plastics technology, segment revenue increased by 2.8% year-on-year, from €3,177.9 million to €3,265.4 million. The core segment's share of consolidated revenue remained stable year-on-year at 82.5% in 2019.

Segment earnings

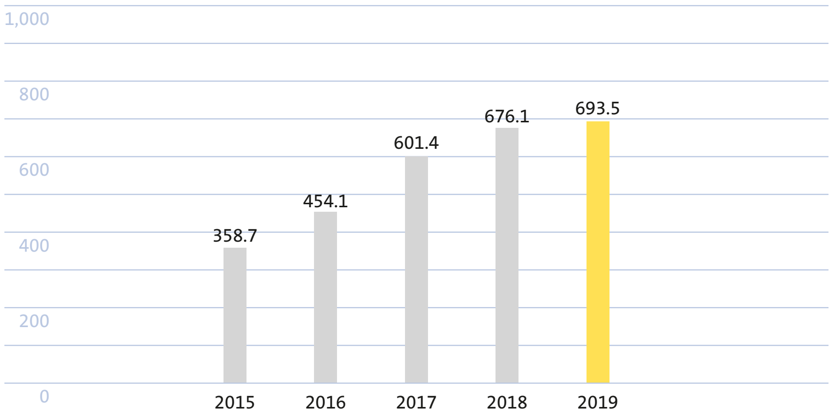
Due to high costs, an unfavourable product mix and additional expenses for structural measures, core segment earnings were significantly down in 2019.

Core segment profitability was mainly impacted in 2019 by high personnel expenses and temporarily low production capacity utilisation in plastics technology. Personnel expenses went up disproportionately, partly because of KRONES establishing the new plant in Hungary and recognising around €30 million in provisions in the fourth quarter of 2019 for job cuts. Impairments also reduced segment earnings by just under €30 million. In total, earnings before taxes (EBT) fell from €223.3 million in the previous year to €56.4 million. The EBT margin decreased from 7.0% to 1.7%.

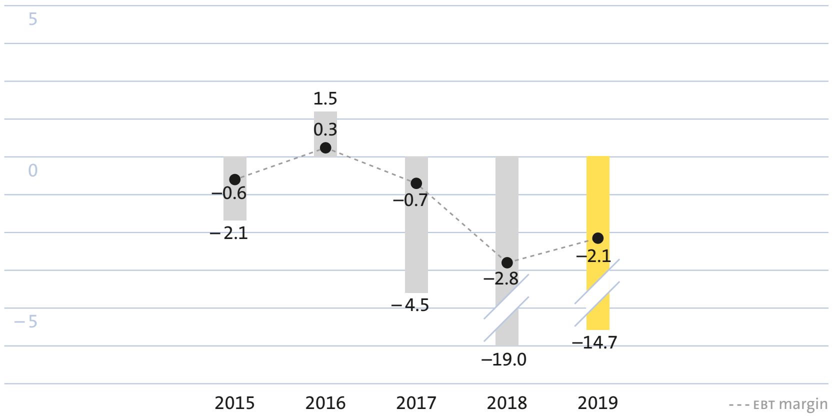
Machines and Lines for Product Filling and Decoration

Machines and Lines for Beverage Production/Process Technology

Segment revenue (€ million)



Segment EBT (€ million) and EBT margin (%)



Segment revenue

At €693.5 million, total segment revenue was slightly below expectations in 2019.

Revenue in the Machines and Lines for Beverage Production/Process Technology segment went up 2.6%, from €676.1 million in the previous year to €693.5 million in the period January to December 2019. Due to a weak fourth quarter, segment earnings thus did not grow faster than consolidated revenue as had been forecast. The segment's share of consolidated revenue was 17.5% in 2019, the same as in the previous year.

Segment earnings

KRONES was able to improve segment earnings in 2019 relative to the previous year but remains unsatisfied with profitability. Structural measures are intended to deliver sustained improvements in segment profitability.

Segment earnings before taxes (EBT) improved from −€19.0 million in the previous year to −€14.7 million in the reporting period. It should be noted that impairment losses and expenses for restructuring impacted EBT in 2019 by around €11 million. Even without this effect, however, segment earnings were still below expectations. This was mainly because of structural profitability problems in parts of the process technology business and start-up losses for the digitalisation activities, which are not yet profitable. The segment EBT margin was −2.1% in the reporting period (previous year: −2.8%).

Machines and Lines for Beverage Production/Process Technology

Overall assessment of **economic position**

In the opinion of the Executive Board, KRONES faces a challenging situation overall at the time of publication of this annual report. This is mainly due to the general economic situation, which is marked by numerous uncertainties. For example, it is hard to predict the impact of the coronavirus on the global economy. Overall, the Executive Board expects that due to the uncertainties, the market for packaging technology machinery and systems will not grow in the short term. KRONES has launched extensive structural measures to ensure that its profitability improves despite the flat revenue performance expected for 2020. On the whole, KRONES is in stable financial shape.

The company grew as planned in 2019. KRONES benefited in this from its broad global footprint and its full range of products and services. Revenue at KRONES rose by 2.7% year-on-year to €3,958.9 million in 2019. The company consequently attained its 3% growth target. In percentage terms, revenue in each of the two segments increased by about the same rate.

On the other hand, profitability fell short of the original expectations. This was mainly due to high labour costs and expenses for restructuring and impairments. Earnings before taxes (EBT) were down from €204.3 million in the previous year to €41.7 million in 2019. The EBT margin was 1.1% (previous year: 5.3%). It should be noted in this connection that KRONES recognised provisions and impairments totalling around €70 million in 2019 for measures to cut personnel expenses and streamline the portfolio. Had there been no expenses for structural measures, the EBT margin would have been 2.8%. With that, KRONES would have been in line with the July 2019 downward revision of the margin target to around 3%. The original guidance for 2019, published in the 2018 management report, was for an EBT margin of around 6%.

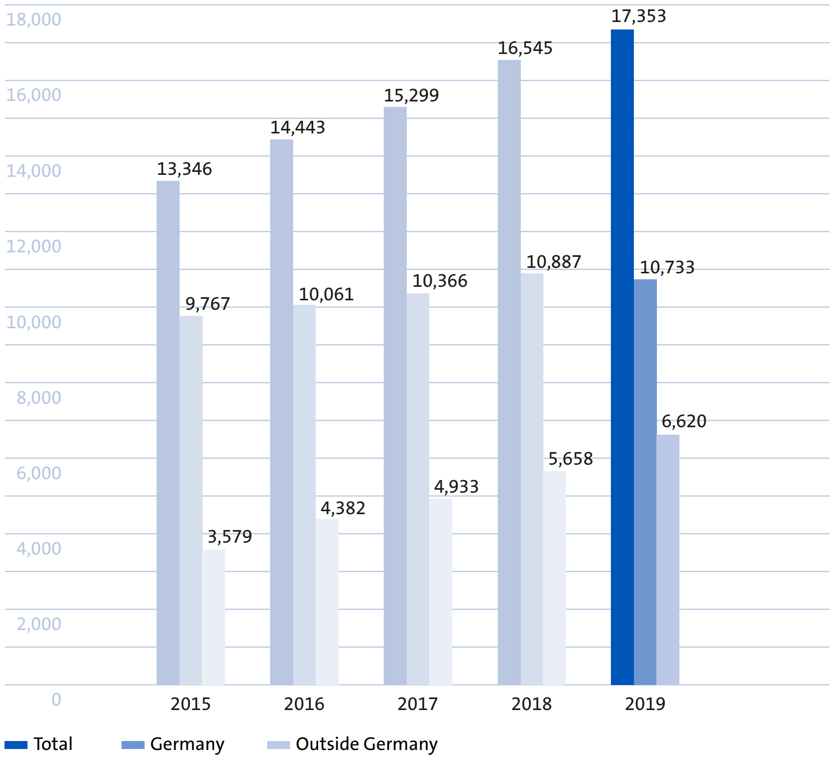
While EBT in the Machines and Lines for Beverage Production/Process Technology segment improved from –€19.0 million in the previous year to –€14.7 million in 2019, profitability deteriorated sharply in the core Machines and Lines for Product Filling and Decoration segment. The bulk of the expenditure for the structural measures – some €60 million – was incurred in the core segment. Partly for this reason, the segmental EBT margin dropped from 7.0% to 1.7%.

Working capital as a percentage of revenue – KRONES' third performance target – improved in 2019 from 27.3% to 26.9%. KRONES did not attain the forecast figure of 26%, however.

The company's financial and capital structure remains solid. At the end of 2019, it had cash and cash equivalents of €110.4 million. Net cash and cash equivalents (cash and cash equivalents less bank debt) came to €38.1 million. The equity ratio is comfortable at 41.3%. At the end of 2019, KRONES had undrawn credit lines totalling around €220 million and a reserve line of €500 million. KRONES thus further advanced its primary financial management objective, which is to safeguard the company's strong financial resources and independence.

Employees

Employees by region



Number of employees up 4.9% to 17,353 worldwide; slight decrease in Germany

KRONES significantly increased its international workforce in 2019 while reducing the number of jobs in Germany. The share of employees outside Germany rose from 34.2% to 38.1%.

While KRONES further added to its international workforce in 2019, the number of employees in Germany decreased. This reflected the strategic expansion of KRONES' global footprint, which is essential for such a strongly export-oriented company. In total, the company employed 17,353 people worldwide at the end of 2019, 4.9% more than in the previous year. The number employed in Germany fell by 154 to 10,733. The workforce outside Germany expanded by 962 to 6,620 people. The share of employees outside Germany rose from 34.2% to 38.1% at the end of 2019.

Strong growth in emerging markets workforce

Significantly more than half of the workforce outside of Germany is now employed in emerging markets. KRONES increased the number of employees in emerging market regions during the reporting period by 33.3% to 4,187. The bulk of the increase is due to acquisitions and to expansion of the Eastern European workforce for the new plant in Hungary.

Employees in the emerging markets 2015–2019

Year	South America	Africa	Asia-Pacific	CIS/Eastern Europe	China	**Total**
2015	519	376	502	147	451	**1,995**
2016	549	386	602	155	508	**2,200**
2017	581	393	734	398	608	**2,714**
2018	637	452	830	507	716	**3,142**
2019	782	671	1,009	933	792	**4,187**

KRONES increased its workforce in the emerging markets by 33.3% in 2019 to 4,187.

The company plans to continue its rapid growth in emerging markets, where KRONES has for years generated more than 50% of consolidated revenue. With our training centres in Africa, China and South America, we already have a good basis in this regard. The more people we recruit for our international locations from local regions, the closer we are to our customers and markets. In the medium term, given corresponding market growth, we will further increase the proportion of the workforce in emerging markets.

In order to exploit the opportunities offered by our attractive market, KRONES needs a qualified and motivate workforce. The company consequently continues to invest heavily in training and employee development in Germany and internationally.

More information on our labour practices can be found in our Non-financial Report. This is available online at https://www.krones.com/en/company/responsibility/downloads.php.

Sustainability at KRONES

In the context of its sustainability management activities, the KRONES Group contributes to sustainable development. In order to identify potential risks at an early stage, reduce our environmental footprint and continuously enhance our positive impact on the community, sustainability is incorporated in all major decisions. We are aware of our responsibility in the KRONES Group, not only for our business performance, but also for the effects of our business activities on the environment, employees, society and future generations.

Non-financial report for 2019

Under the CSR Directive Implementation Act, which entered into force in Germany in 2017, we disclose the policies we followed in the last financial year with respect to the non-financial aspects that are material to KRONES. The non-financial report for 2019, which is not part of the group management report, is simultaneously the combined separate consolidated non-financial report for the KRONES Group and KRONES AG for the 2019 financial year, within the meaning of Sections 315b and 315c read in conjunction with Sections 289c to 289e of the German Commercial Code (HGB).

The Non-financial Report is published online at https://www.krones.com/en/company/responsibility/downloads.php.

Risk and opportunity report

- Risks identified on an ongoing basis
- Efficient control and management tools limit risks

KRONES' risk management system

KRONES actively addresses potential risks. All key business processes are constantly subject to an internal control and management system.

KRONES is exposed to a variety of risks that are inextricably linked with doing business globally. We continuously monitor all significant business processes to identify risks early and to actively manage and limit them. Within our corporate strategy, we also identify, analyse and unlock opportunities. Unlike risks, business opportunities are not documented within our risk management system.

In essence, risks are defined as potential negative deviations from our earnings forecast for the 2020 financial year. Opportunities are potential positive deviations from our earnings forecast for the 2020 financial year. Because they share the same sales and procurement markets, the same risks and opportunities essentially also apply to both of the KRONES Group's operating segments.

KRONES' risk management system consists of an internal control system with which we record, analyse and assess all relevant risks. We monitor all material risks and any countermeasures already taken in a detailed, ongoing process that entails planning, information and control.

We assess risks on the basis of the likelihood of an event and its potential financial impact. Earnings before interest and taxes (EBIT) serve as the measure for potential financial impact. Starting with gross risk, we determine the net risk, which takes into account any mitigating actions taken.

KRONES presents risks using a three-column approach, which covers the maximum loss associated with a risk, the likelihood of an event and the financial impact – the latter being the product of the first two factors. Each factor is categorised as low, medium, or high.

The categories are defined as follows:

Maximum loss* (€ million)		Likelihood of an event (%)		Potential financial impact* (€ million)	
low	1.0 to 10.0	low	0 to 20	low	1.0 to 10.0
medium	10.1 to 50.0	medium	21 to 49	medium	10.1 to 50.0
high	> 50.0	high	50 to 100	high	> 50.0

*Based on EBIT

Multi-stage risk management system

We are continually improving our risk management system on the basis of practical experience. The system consists of the following modules: risk analysis, risk monitoring, and risk planning and control.

Risk analysis

In order to identify risks early, we continuously monitor all business activities. Material project-related risks are reduced or avoided before an order is accepted. We conduct a profitability analysis of all quotes prior to order acceptance. For orders that exceed a specified volume, we also conduct a multidimensional risk analysis. Apart from profitability, we also individually record and evaluate financing risks, technological risks and tax risks as well as scheduling and other contractual risks before accepting an order.

To manage risks that arise from changes in the market and competitive situation, we create detailed market and competition analyses for all segments and business areas on a regular basis.

In addition, we conduct a comprehensive risk inventory annually for KRONES AG and all significant group companies. The results of the risk inventory and mitigating actions are used in our annual planning and forecasting. The basic principles and the process are documented in our risk policy. The risk management system serves not only the purpose mandated by law – early detection of going concern risks – but also covers all risks that may have a significant negative impact on earnings.

Risk monitoring

We use a variety of interlinked controlling processes to monitor risks within the KRONES Group. Regular comprehensive reports from the individual business units keep the Executive Board and other decision-makers apprised in a timely manner of all possible risks and deviations from company planning and of the status of mitigating actions. For projects with a high contract value, potential risks are examined and evaluated in regular meetings. Employees who identify risks pass their information on without delay through the company's internal reporting system.

Risk planning and control

We primarily use the following tools to plan our business activities and control risk within our internal control system:

- Annual planning
- Medium-term planning
- Strategic planning
- Rolling forecasts
- Monthly and quarterly reports
- Capital expenditure planning
- Production planning
- Capacity planning
- Project controlling
- Accounts receivable management
- Exchange rate hedges
- Insurance policies

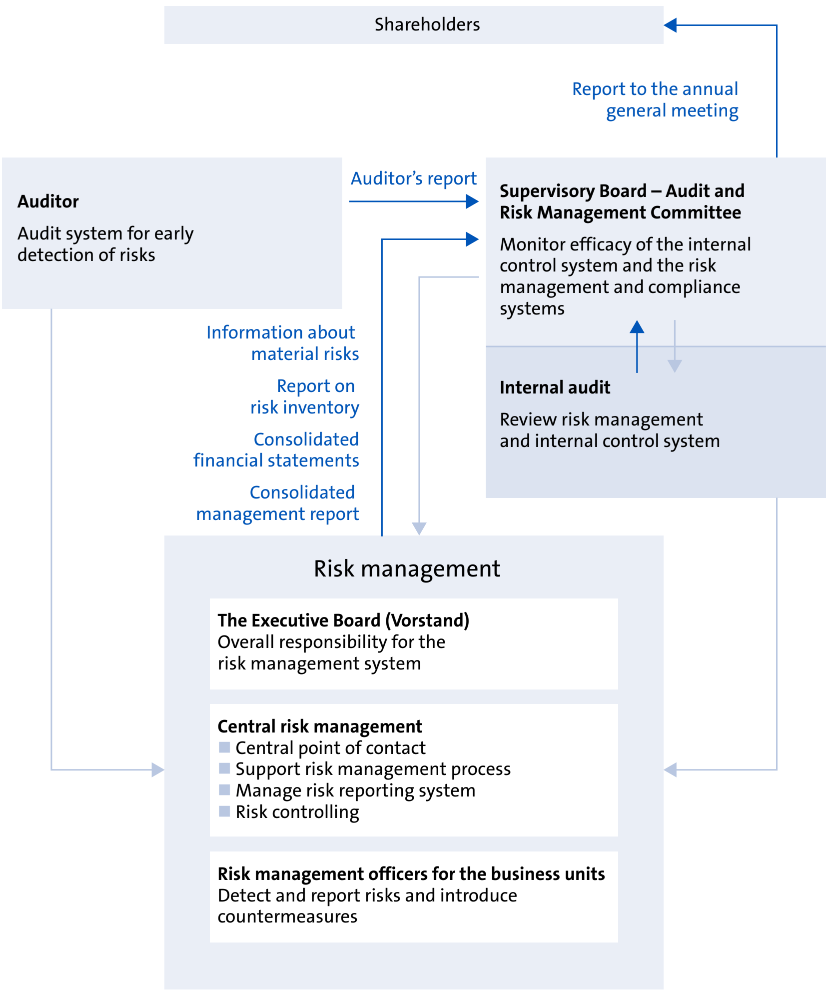
Risk management organisation

KRONES' risk management system is continuously monitored and reviewed. This is governed by clear areas of responsibility and accountability.

Risk management at KRONES is part of Controlling. The risk management system is reviewed by Internal Audit.

All relevant information is collated in Controlling, where it is processed and made available in a management tool for the Executive Board. In addition, the various segments and business units also have risk management officers who are responsible for risk management. This includes identifying and reporting risks as well as introducing and implementing measures to actively control them.

Risk management organisation at KRONES



Key features of the internal control system and the risk management system as relates to accounting and financial reporting

KRONES has an internal control and risk management system for accounting and financial reporting processes to ensure that all business transactions are always correctly recorded, processed, recognised and included in financial reporting. KRONES' internal control and risk management system comprises all principles, methods and measures to ensure that the company's accounting and financial reporting are effective, efficient and proper and in compliance with all relevant regulations and standards.

The aim of the internal control and risk management system is to ensure that all business transactions are correctly recorded, processed, recognised and included in financial reporting.

The key features of KRONES' internal control and risk management system relating to (group) accounting and financial reporting can be described as follows:

The KRONES Group has a clear management and corporate structure. Cross-cutting key functions are centrally managed.

- The duties of the units that are materially involved in accounting and financial reporting processes are explicitly segregated and responsibilities clearly assigned.
- Regular reviews and audits are conducted within the various units, primarily by Controlling.
- Commercial off-the-shelf software is used for accounting and financial reporting as far as possible.
- Special security precautions protect the software and IT systems used for accounting and financial reporting against unauthorised access.
- Sufficient binding policies (e.g. for payments and travel expenses) are in place and updated on an ongoing basis.
- All of the departments involved in the accounting and financial reporting process work constantly to assure the quality of their work.
- Regular spot checks are used to continuously verify the completeness and accuracy of our accounting data.
- The software used in accounting performs programmed plausibility checks.
- We use dual verification for all accounting-related processes.

Overview and description of material risks

Risk categories	Maximum loss	Likelihood of event	Potential financial impact
General business environment and industry-specific risks			
General economic risks	high	medium	medium
Industry-specific risks	high	low	medium
Financial risks			
Default risks	high	low	medium
Liquidity risk	low	low	low
Interest rate risk	low	low	low
Currency risk	medium	medium	low
Operational risks			
Price risk	high	medium	medium
Procurement risks	low	low	low
Cost risk	high	low	high
Personnel risk	low	low	low
Legal risks	high	medium	medium
Environmental and safety risks	high	low	low
IT risks	medium	low	low

KRONES classifies the maximum loss, the likelihood of an event and the potential financial impact of material risks into the three risk categories low, medium and high. Definitions are provided below on page 92.

General business environment and industry-specific risks

General economic risks

As a provider of products and services for the food and beverage industries, KRONES is less dependent on economic cycles than other machinery manufacturers. However, the company cannot escape the influence of the general economic situation entirely. Our direct impact from international trade conflicts is minor. If, however, global economic growth were to be considerably weaker than expected, for example due to sustained trade conflicts, this would have a negative impact on KRONES' revenue and earnings. The coronavirus outbreak at the beginning of 2020 significantly impacted the Chinese economy. KRONES manufactures a small share of its products in China. We also generate a substantial portion of consolidated revenue there. If economic growth in China were to be severely hit by the effects of the coronavirus, this could have a negative impact on revenue and earnings. However, it is not currently possible to predict the impacts on the global economy.

A global financial crisis could likewise have a negative impact on investment in machines and lines from KRONES because financing options would worsen in general. The company's broad international base puts KRONES in a position to at least attenuate any decline in business in individual regions.

Impact of general economic risks: We rate the maximum loss as high, the likelihood of an event as medium and the financial impact as medium.

Industry-specific risks

KRONES is exposed to industry-specific risks primarily through the development of the global packaging market and the actions of competitors. The competitive environment could intensify if KRONES' competitors resort to price dumping in an effort to win orders and thus more fully utilise their production capacities. We are addressing the risk of loss of market share by further expanding our technology leadership. KRONES' strong focus on service also sets the company apart from the competition.

A debate on plastic and PET packaging flared up temporarily in 2019, mainly in Europe. This resulted in our customers delaying investment decisions for machines and lines for filling and packaging beverages in PET bottles. KRONES generates a large proportion of revenue with such products. It cannot be ruled out that the PET debate will intensify and spread regionally in the long term. This could have a negative impact on our customers' willingness to invest in plastics technology and hence on consolidated revenue and earnings.

Impact of industry-specific risks: We rate the maximum loss as high, the likelihood of an event as low and the financial impact as medium.

Financial risks

The financial risks to which KRONES is exposed are default risks, liquidity risks, interest rate risks and currency risks. Our description of these risks and suitable actions below is in keeping with the disclosure requirements under IFRS 7 on the reporting of risks relating to financial instruments. Because of regional and customer-related diversification, there is no material concentration of risk.

1. Default risks

Default risk is the maximum potential risk arising from each individual exposure at the reporting date. Any counter-exposures are not taken into account.

1.1 Trade receivables

Credit risk in trade receivables is the risk of economic loss arising from a customer's failure to fulfil contractual payment obligations.

KRONES manages credit risk on trade receivables on the basis of internal policies. Most trade receivables are backed by various, sometimes country-specific, forms of security. These include retentions of title, guarantees and documentary credits. In order to prevent credit risk, we also run external credit checks on customers. In addition, there are processes in place for continually monitoring receivables that may be at risk of default. Write-downs on bad debt (non-recoverable trade receivables) are taken on an individual basis. The very low volume of actual defaults, as measured against the total volume of receivables, attests to the effectiveness of the measures taken.

The theoretical maximum credit risk from trade receivables corresponds to the carrying amount.

€ thousand	Carrying amount	Of which not overdue at the reporting date	Of which overdue by the following number of days at the reporting date: up to 90 days	between 90 and 180 days	between 180 and 360 days	more than 360 days
31 Dec 2019 Trade receivables and contract assets	1,533,050	1,368,344	115,204	21,677	19,501	8,324
31 Dec 2018 Trade receivables and contract assets	1,635,059	1,460,726	116,017	21,212	24,337	12,767

1.2 Derivative financial instruments

KRONES uses derivative financial instruments on the basis of individual contracts solely for risk management purposes. Not using derivative financial instruments would expose the company to greater financial risks. These instruments essentially cover the risks arising from changes in exchange rates between the euro and the US dollar, the Canadian dollar, the Norwegian krone and the Japanese yen. The material contractual details (amount and term) of the underlying and hedge transactions are largely identical. Default risk relating to derivative financial instruments in the event of counterparty default is limited to the balance of the positive fair values. More on this topic is in the notes to the consolidated financial statements.

1.3 Other financial assets

The maximum credit risk position arising from other financial assets corresponds to the carrying amount of the instruments. KRONES is not exposed to any material default risk arising from its other assets, all of which are current assets.

Impact of default risks: We rate the maximum loss as high, the likelihood of an event as low and the financial impact as medium.

2. Liquidity risk

Liquidity risk is the risk of a company being unable to sufficiently fulfil its financial obligations.

KRONES generates most of its cash and cash equivalents through operating activities. These funds primarily serve to finance working capital and capital expenditures. KRONES manages its liquidity by reserving sufficient cash and cash equivalents and credit lines with banks in addition to the regular inflow of payments from operating activities. The company's liquidity management for operations consists of a cash management system that is based in part on rolling monthly liquidity planning with a planning horizon of one year. This enables KRONES to be proactive about any possible liquidity bottlenecks. Apart from cash on hand, KRONES' cash and cash equivalents consist primarily of demand deposits. The following overview of maturities shows how the undiscounted cash flows relating to liabilities as of 31 December 2019 influence the company's liquidity situation.

€ thousand	Carrying amount at 31 Dec 2019	Cash flow for 2020		Cash flow for 2021–2024		Cash flow for 2024 or later	
		Interest	Repayment	Interest	Repayment	Interest	Repayment
Derivative financial instruments	3,392	0	2,828	0	564	0	0
Liabilities to banks	72,242	0	72,178	3	64	0	0
Liabilities from trade receivables	463,736	0	463,722	0	14	0	0
Liabilities from leases	89,048	2,082	29,802	5,125	56,034	611	3,212
Other financial liabilities	146,013	0	100,347	0	47,216	0	0
	774,431	**2,082**	**668,877**	**5,128**	**103,892**	**611**	**3,212**

€ thousand	Carrying amount at 31 Dec 2018	Cash flow for 2019		Cash flow for 2020–2023		Cash flow for 2023 or later	
		Interest	Repayment	Interest	Repayment	Interest	Repayment
Derivative financial instruments	1,982	0	1,980	0	2	0	0
Liabilities to banks	3,724	0	555	680	3,169	0	0
Liabilities from trade receivables	491,586	0	491,585	0	1	0	0
Liabilities from leases	295	6	118	15	177	0	0
Discounted trade bills	106,670	0	106,670	0	0	0	0
Other financial liabilities	111.201	0	69,899	44	41,302	0	0
	715,458	**6**	**670,807**	**739**	**44,651**	**0**	**0**

Impact of liquidity risk: We rate the maximum loss as low, the likelihood of an event as low and the financial impact as low.

3. Interest rate risk

KRONES is exposed to risk arising from possible fluctuations in market interest rates. As of the 2019 reporting date, KRONES made comparatively minor use of bank borrowings relative to its business volume.

Impact of interest rate risk: We rate the maximum loss as low, the likelihood of an event as low and the financial impact as low.

4. Currency risk

Because exports to countries outside the eurozone make up a significant portion of total revenue, we are exposed in principle to currency risk. We use exchange rate hedges to counter such risk as far as possible. In addition, we make most purchasing and sales transactions in euros or the relevant functional currency.

Material items denominated in foreign currencies in accordance by IFRS 7 classes:

31 Dec 2019 € thousand	Currency USD	Currency NOK	Currency CAD	Currency CNY	Currency JPY
Cash and cash equivalents	310	0	450	0	0
Trade receivables	0	1.920	0	0	0
Other financial receivables	0	0	0	0	0
Derivatives at positive market values	395	0	0	1	474
Total assets	**705**	**1.920**	**450**	**1**	**474**
Liabilities					
Trade payables	2,044	18	8,117	317	−3,129
Due to banks	0	0	0	0	0
Other liabilities	0	0	0	0	0
Derivatives at negative market values	1,611	24	1,198	545	−8
Total liabilities	**3,655**	**42**	**9,315**	**862**	**−3,137**
Balance of assets and liabilities	**−2,950**	**1,878**	**−8,865**	**−861**	**−2,663**
Net exposure at 31 Dec 2019	**−2,950**	**1,878**	**−8,865**	**−861**	**−2,663**

A 10% change in the closing rate at the reporting date would have the following effects on consolidated net income:

€ thousand	Currency USD	Currency NOK	Currency CAD	Currency CNY	Currency JPY
Consolidated statement of profit and loss	−2,958	−12	536	−2,512	206
Consolidated equity	5,590	0	1,654	1,953	1,478

Impact of currency risk: We rate the maximum loss as medium, the likelihood of an event as medium and the financial impact as low.

Operational risks

1. Price risk

KRONES operates in a highly competitive market in which some orders are generated by way of prices that do not cover costs. Fixed-price contracts with customers also entail price risks as KRONES must bear any additional costs that arise. KRONES has introduced a multidimensional order analysis process to minimise this risk. Any enquiry or order equal to or greater than a specific amount is assessed on the basis of financial, technical/technological, tax, legal and regional risks.

Impact of price risk: We rate the maximum loss as high, the likelihood of an event as medium and the financial impact as medium.

2. Procurement risks

KRONES is exposed to market price risk relating to its procurement of parts and raw materials for operations. Geopolitical and macroeconomic developments are the primary factors influencing raw materials prices. Essentially, the risk is that raw material prices will develop to our disadvantage. The company mitigates this risk through targeted procurement management and long-term supply contracts to reduce material commodity price risks. With respect to suppliers, we also face risks relating to products, deadlines and quality. A specially designed process for supplier selection, monitoring and management helps minimise these risks.

Impact of procurement risks: We rate the maximum loss as low, the likelihood of an event as low and the financial impact as low.

3. Cost risk

Our earnings forecast is based on us reducing costs as a result of structural measures. Examples include our new plant in Hungary and increasing material procurement in best-cost countries. We seek to optimise cost structures along the entire value chain. KRONES is exposed to the risk that these cost savings will be less than expected. We mitigate this risk by continually monitoring the projects underway across the company.

Impact of cost risk: We rate the maximum loss as high, the likelihood of an event as low and the financial impact as high.

4. Personnel risk

KRONES intends to step up growth, in particular on the services and digital side. For that purpose we need highly qualified employees in Germany and abroad. There is a risk that the company will not find enough suitable employees. We will ensure early access to qualified employees through ongoing cooperation with colleges and universities. We regularly employ students pursuing their bachelor's and master's degrees. We also use professional HR consultants.

Impact of personnel risk: We rate the maximum loss as low, the likelihood of an event as low and the financial impact as low.

Legal risks

KRONES is exposed to risks arising from operating activities in connection with possible legal disputes. KRONES addresses legal risks with its rules of conduct, codes and an internal compliance structure. In addition, the company has taken out insurance policies that are customary for our sector.

Impact of legal risks: We rate the maximum loss as high, the likelihood of an event as medium and the financial impact as medium.

Environmental and safety risks

As a manufacturing company, KRONES is exposed to risks relating to the environment and safety that could lead to possible harm to individuals, goods or the company's reputation. Any harm caused by technical or human error in production can have a direct impact on our financial position. Such an event and any resulting fines, claims for damages or harm to our reputation can also have an indirect financial impact. KRONES mitigates environmental and safety risks with high technical standards in production, training, rules of conduct and insurance policies customary in our industry.

Impact of environmental and safety risks: We rate the maximum loss as high, the likelihood of an event as low and the financial impact as low.

IT risks

All of KRONES' material business processes are based on functioning IT systems. The risks here are failure or malfunction of or unauthorised access to critical systems. Such events could result in the loss of important confidential data. KRONES uses internationally recognised IT security measures to protect against these risks. We have redundant IT systems in place for critical business processes.

Impact of IT risks: We rate the maximum loss as medium, the likelihood of an event as low and the financial impact as low.

Overview and description of material opportunities

Material opportunities

KRONES does not record business opportunities within the risk management system. For this reason, we do not report in the following on likelihood of event or possible financial impact. We describe opportunities in general below.

General economic opportunities

General economic opportunities arise for KRONES as a result of the company's good international positioning. We stand to benefit if the economy develops better than predicted in individual world regions. In particular, KRONES has considerably strengthened its market position in the emerging markets in the Asia-Pacific region and in Africa and the Middle East in recent years. Additional opportunities would therefore arise for us if the overall economy in emerging markets grows faster than expected. International Monetary Fund experts expect that economic growth in the euro area and the USA will slow down in 2020. If this forecast does not prove accurate and GDP grows more strongly than expected in these regions, this could result in earnings above our guidance.

Industry-specific opportunities

Beverage and food producers are increasingly focused on conserving energy and other resources. There is a chance of this trend intensifying and customers being more willing to accept higher prices. That would open additional selling and revenue opportunities for KRONES due to the company's competitive advantages in this area. With enviro, our certified management system, we have established the basis for ensuring that KRONES machines and lines feature especially low energy and media consumption. The company has also developed a competitive advantage here.

Opportunities arising from acquisitions

KRONES' focus in 2020 is on integrating past acquisitions. No major acquisitions are planned for 2020. However, the company's sound financial position and capital structure enable KRONES to seize any favourable opportunities for external growth that may arise. Acquisitions are not included in our earnings forecasts. External growth could open up opportunities for KRONES.

Operational opportunities

1. **Selling prices**
   KRONES aims to achieve its target for earnings improvement by way of a better cost base. In addition, we are making sustained efforts to uphold the price increases we announced in May 2018 for all bottling and packaging equipment and process technology. If market prices should develop better than expected, this would yield opportunities for the company.

2. **Procurement prices**
   The company increasingly buys standardised parts and complete assemblies from suppliers. In addition, KRONES increasingly procures materials locally at the company's locations worldwide and in best-cost countries. The opportunity exists that, overall, we might save more in this way than forecast. Additional opportunities arise if commodity prices are generally lower than expected.

3. **Costs**
   KRONES has launched a range of short-term and structural measures to optimise the company's cost structure. Opportunities arise for KRONES if specific measures have greater or more rapid effect than planned.

Summary of risks and opportunities

Viewed from today's perspective, KRONES is not exposed to any going concern risks. Compared with the previous year, our assessment of the risks and opportunities has not materially changed. The main risks remain in the general business environment and in industry-specific and financial risks.

Events after the reporting period

The outbreak and rapid spread of the coronavirus (COVID-19) since the beginning of 2020 has affected business and economic activity not only in China, but also worldwide. The financial effect of this event on KRONES could not be estimated at the time of publication of the annual report because it was not possible to estimate the extent of the spread and the consequences for KRONES' business.

Report on **expected developments**

- **Global economic outlook stable at a low level but subject to many uncertainties**
- **KRONES focusing in 2020 on increasing profitability**
- **From 2020, the EBITDA margin is KRONES' key performance indicator for profitability**

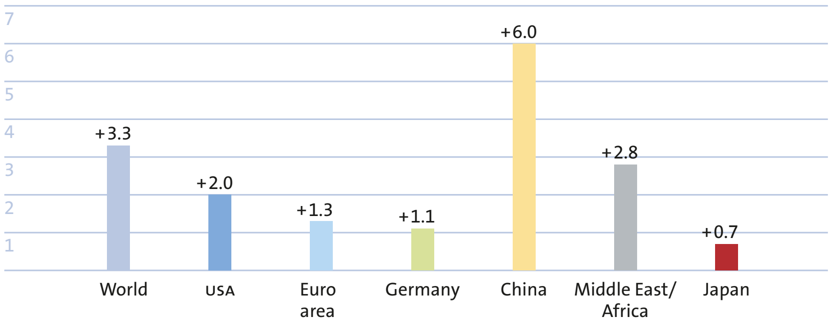
Global economy expected to grow 3.3% in 2020

In January 2020, the International Monetary Fund (IMF) slightly lowered its forecast for global economic growth in the full year 2020 from 3.4% to 3.3% (previous year: 2.9%). This was mainly due to a slowdown in some emerging markets – especially India – and to social unrest in a number of regions. According to the IMF, positive effects on the global economy will come in 2020 as the trade dispute eases between China and the USA and the main central banks continue to apply very loose monetary policy. The experts see further downside risks most of all in a worsening of the political conflict between the USA and Iran and in further tariff disputes between the USA and its trading partners.

The IMF's January forecast of 3.3% for global growth in 2020 does not include any potential impact of the coronavirus.

Growth in emerging and developing economies is likely to pick up again compared with the weak prior year, at 4.4% in 2020 (previous year: 3.7%). In October 2019, however, the IMF experts had still expected growth of 4.6%. The slight markdown mainly related to India. India's gross domestic product (GDP) is now expected to increase by only 5.8% in 2020 (previous year: 4.8%), compared with the October 2019 forecast of 7.0%. While the IMF expects the Chinese economy to see a slight decline in GDP growth to 6.0% in 2020 (previous year: 6.1%), its forecast for the Middle East/Central Asia region is for a significant increase to 2.8% (previous year: 0.8%). The growth rate in Latin America is likewise expected to accelerate, with GDP growth of 1.6% relative to 2019 (previous year: +0.1%).

Percentage GDP growth in 2020 (forecast)

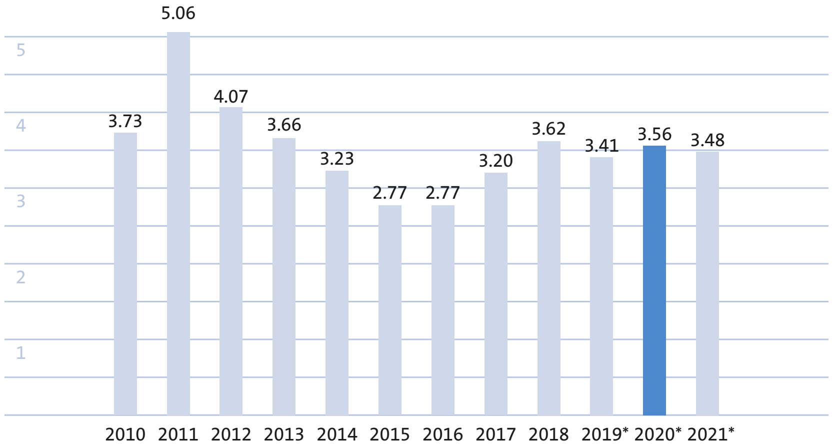


Source: IMF, without Corona

For industrialised economies, the IMF forecasts 1.6% GDP growth in 2020 (previous year: 1.7%). The experts expect growth to accelerate in Germany especially, where they forecast a 1.1% GDP increase in 2020 after only 0.5% in the previous year. For the euro area, the IMF forecasts 1.3% growth (previous year: 1.2%). As the effects of the fiscal incentives in the USA taper off, the world's largest economy is expected to increase GDP by only 2.0% in 2020 (previous year: 2.3%). For Japan, the IMF is forecasting 0.7% growth (previous year: 1.0%).

Strong employment and moderate inflation rates support consumer spending

Global inflation rate 2010 to 2018 and forecast to 2021, in %



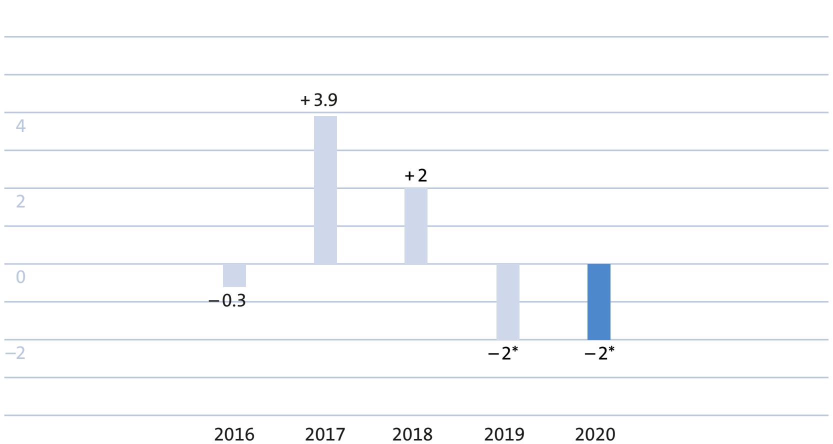
* Forecast

Source: Statista 2020

In the medium and long term, the propensity to consume and therefore demand for packaged beverages depends on purchasing power. Low unemployment and inflation rates have a positive effect on consumer's buying power. This supports demand for packaged food and beverages and indirectly influences demand for KRONES' products and services. If more beverages and liquid foods have to be packaged, beverage and food producers need suitable and efficient technology for the purpose. We do not expect the unemployment rate and inflation to have any negative effect on KRONES' business overall in 2020. However, due to the many overall economic uncertainties, KRONES' customers are postponing investment decisions despite rising end consumer demand.

Further downturn expected in German machinery and industrial equipment output

Year-on-year change in German mechanical engineering output, in %



* Forecast

Source: Germany's Federal Statistical Office, VDMA

The German Mechanical Engineering Industry Association (VDMA) once again does not expect a significant improvement in the situation in 2020, with machinery and equipment output decreasing 2% in value as in the previous year. Factors affecting the industry this year continue to be the relatively weak global economy, simmering trade conflicts and the radical structural change in the automotive industry. Potential impacts of the coronavirus are not yet taken into account here.

The German Mechanical Engineering Industry Association (VDMA) expects another difficult year for the industry in 2020, forecasting a further 2% decrease in output.

KRONES expecting no growth for 2020

After a difficult year in 2019, KRONES is making a moderate start to the 2020 financial year with a view to the short-term demand trend. There are sufficient reasons for exercising a degree of caution. While the economic forecasts for this year are still positive overall, 2020 will once again be marked by political and economic uncertainties. In particular, it is not yet possible to predict the negative impacts of the coronavirus on the global economy. These uncertainties are also affecting order placement by KRONES customers. Although consumer demand for packaged beverages is expected to continue rising in 2020, companies in the international beverage industry are temporarily holding back on investment due to the unstable overall economic situation. We therefore expect no short-term growth in the global market for bottling and packaging equipment for the full year 2020. For the same reason, both competition in our markets and cost pressure will remain strong this financial year.

However, KRONES only expects the market to stay flat for the short term. The medium and long-term outlooks remain positive. This is because consumer demand for packaged beverages and liquid foods is steadily growing due to a number of megatrends such as the growing world population. Food and beverage providers need suitable technology to meet the increasing demand. For this reason, the market for packaging machinery is growing at a relatively stable rate in the medium and long term.

Focus in 2020 on improving profitability in both segments

Due to the adopted structural measures, KRONES will initiate a sustained turnaround in profitability in 2020. The clear-cut goal is to increase profitability in both segments. A major contribution to this will come from further expansion of the global footprint and from cost reductions. No major acquisitions are planned in either segment for 2020. Efforts are focused on integrating the acquisitions made in the group in previous years.

The focus in the core **Machines and Lines for Product Filling and Decoration segment** in 2020 is on the start of production at the new plant in Hungary. The new plant will go into full operation at the end of 2020. The new production facility is expected to save KRONES about €5–10 million in 2020. Annual cost savings of €20 million are expected when it is fully established. We will expand the core segment with further attractive products and rid the portfolio of less profitable activities and technologies. A continued focus is also on countering the rising cost of material.

For the core segment in 2020, KRONES does not expect any increase in revenue, especially considering the short-term uncertainty among our clients. It is not currently possible to predict the full impacts of the coronavirus on the global economy. This could have a further substantial effect on the targets for 2020. The EBITDA margin is expected to be around 7.5% to 8.0% (equivalent to an EBT margin of around 4.0–4.5%).

The Process Technology Segment is expected to be in profit in 2020.

Implementing the structural measures is likewise the focus in the **Machines and Lines for Beverage Production/Process Technology segment**. The carve-out of the beverage production business has priority here. We are going to make this a legally independent unit. This enables us to better assess how the individual businesses, specifically with regard to the different types of beverages, are developing on a standalone basis. KRONES will leverage additional revenue and earnings potential from the full integration and positive business development of, the acquisitions made in the preceding years. Intralogistics continues to see good demand for our products and services. We will push ahead with the further internationalisation of our business in 2020. For this purpose, we have pooled all intralogistics activities in SYSTEM LOGISTICS and made this a legally independent unit.

In all, for the Process Technology segment in 2020, we plan stable revenue with an EBITDA margin of around 2.5% to 3.5% (equivalent to an EBT margin of around 0% to 1%). It is not currently possible to predict the full impacts of the coronavirus on the global economy. This could have a further substantial effect on the targets for 2020.

KRONES aims to keep revenue stable and increase the EBITDA margin in 2020.

Based on the prevailing macroeconomic outlook and the current expected development of the markets relevant to KRONES, which is affected in the short term by reluctance by customers to invest, the company expects that consolidated revenue in 2020 will match the previous year's level. We only expect the market to stay flat temporarily. The medium and long-term growth trend remains intact. Our customers' short-term reluctance to invest due to the many uncertainties will mainly be noticeable in the first half of 2020. It is not currently possible to predict the full impacts of the coronavirus on the global economy. This could have a further substantial effect on the targets for 2020.

EBITDA replaces EBT as key performance indicator for profitability – EBITDA margin of around 6.7% to 7.2% targeted for 2020

KRONES is now positioned in such a way that the expected zero revenue growth will not fully affect profitability. We plan to improve profitability this year as a result of the measures taken. From 2020, KRONES manages profitability using the EBITDA margin instead of the EBT margin. This is because EBITDA (earnings before interest, taxes, depreciation and amortisation) is closer to cash flow and more comparable because it does not include depreciation and amortisation, financial income/expense and taxes.

For the group in 2020, KRONES expects an EBITDA margin of around 6.7% to 7.2%. That is equivalent to an EBT margin of around 3.2% to 3.7%.

For its third performance target, working capital to revenue, KRONES expects a figure of 26%. We intend to improve on this target this year by means of more intensive receivables management.

	Forecast 2020	Actual 2019
Revenue growth	0 %	2.7%
EBITDA margin	around 6.7% to 7.2%	5.7%
Working capital to revenue	26%	26.9%

Disclosures required under Sections 315 a (1) and 289 a (1) of the German Commercial Code (HGB)

Pursuant to Section 4 (1) of the articles of association, the share capital of KRONES Aktiengesellschaft amounts to €40,000,000.00 and is divided into 31,593,072 ordinary bearer shares.

Under Section 20 (1) of the articles of association, each share entitles its holder to one vote in the annual general meeting. Unless mandatory provisions of law stipulate otherwise, resolutions of the annual general meeting are made with a simple majority of votes cast or, in cases in which the law prescribes a majority of shares in addition to a majority of votes, with a simple majority of the share capital represented in the vote.

Pursuant to Section 18 (1) of the articles of association, only those shareholders who register with the company in writing in German or English and provide proof of their shareholding prior to the annual general meeting are entitled to participate and vote in the annual general meeting. Special verification of the shareholding in text form, issued in German or English by the institution with which the custody account is held, shall constitute sufficient evidence of the shareholding. The evidence of shareholding must relate to the start of the twenty-first day prior to the annual general meeting.

Pursuant to Section 18 (2) of the articles of association, voting rights can be exercised by proxy. Granting, revocation, and evidence of proxy authorisation must be submitted to the company in text form. The notice convening the annual general meeting may specify a relaxation of this requirement without prejudice to Section 135 of the German Stock Corporation Act (AktG).

In the annual general meeting, the chair of the meeting can set appropriate time limits for shareholders' questions and comments (Section 19 (3) of the articles of association).

The Executive Board of the company is not aware of any other restrictions relating to voting rights or the transfer of shares.

The company is aware of the following direct and indirect shareholdings in the company's capital that exceed 10% of the voting rights:

Name of shareholder	Total share of voting rights	Of which: indirect voting rights attributable pursuant to Section 34 (2) of the Securities Trading Act
Familie Kronseder Konsortium GbR, Neutraubling, Germany	52.24%	52.24%

Changes to the shareholdings listed above that are not required to be reported to the company may have occurred since the specified date (December 2019). Because the company's shares are bearer shares, the company is generally only aware of changes in shareholdings if the changes are subject to reporting requirements.

The appointment and dismissal of Executive Board members is governed by Sections 84 and 85 of the German Stock Corporation Act (AktG). Pursuant to Section 6 (1) of the articles of association, the Executive Board consists of at least two members. Pursuant to Section 6 (2) of the articles of association, determination of the number of Executive Board members, the appointment of regular and deputy members of the Executive Board, the execution of their employment contracts and revocation of appointments are the responsibility of the Supervisory Board.

Amendments to the articles of association are subject to the provisions of Sections 179 et seq. of the German Stock Corporation Act. Such amendments are to be adopted by resolution of the annual general meeting (Section 119 (1) No. 5 and Section 179 (1) of the German Stock Corporation Act). The Supervisory Board is authorised to make amendments that affect only the wording of the articles of association (Section 13 of the articles of association).

Pursuant to Section 4 (4) of the articles of association, the Executive Board may, with the approval of the Supervisory Board, increase the share capital by a total of up to €10 million (authorised capital) by issuing ordinary bearer shares against cash contributions on one or more occasions up to and including 15 June 2021. Shareholders must normally be granted subscription rights to such shares. The Executive Board may exclude shareholders' subscription rights, with the approval of the Supervisory Board, for any fractional amounts that may arise.

By resolution of the annual general meeting of 13 June 2018, the Executive Board is authorised, up to and including 12 June 2023, with the approval of the Supervisory Board, to buy treasury shares totalling up to 10% of the company's share capital at the time that the resolution was adopted or, if smaller, at the time that the authorisation is exercised.

By resolution of the annual general meeting of 13 June 2018, the Executive Board is authorised to use any treasury shares bought pursuant to the aforementioned authorisation in accordance with Section 71 (1) No. 8 of the Stock Corporation Act, besides for sale on the stock exchange or by offer to all shareholders, for any permissible purpose, and in particular as follows:

1) The shares may be cancelled, without the cancellation or its execution requiring a further resolution by the annual general meeting.

2) The shares may be offered and transferred to third parties in return for non-cash contributions, in particular in connection with business combinations or on the acquisition of companies, businesses, parts of companies or equity interests. In addition, the shares may also be used for the termination or settlement of shareholder actions at affiliates of the company.

3) The shares may be sold to third parties against cash payment if the price at which the shares in the company are sold is not significantly lower, within the meaning of sections 71 (1) no. 8 sentence 5 and 186 (3) sentence 4 of the Stock Corporation Act, than the stock exchange price of a company share at the time of sale.

4) The shares may be used to service obligations or rights to purchase shares in the company arising from and in connection with convertible bonds or bonds with warrants, or profit-sharing rights with conversion rights or warrants, issued by the company or any of its group companies.

Shareholders' statutory subscription rights to such shares are excluded to the extent that the shares are used in exercise of the authorisations set out above under 2) to 4) inclusive or, in the case of sales of treasury shares to all shareholders, to the extent necessary to avoid fractional amounts.

KRONES AG has not made any material agreements containing special provisions relating to a change or acquisition of control following a takeover offer.

The company has not made any agreements with members of the Executive Board or company employees relating to compensation in the event of a takeover offer.

Dependecy report

Pursuant to Section 17 of the German Stock Corporation Act (AktG), Familie Kronseder Konsortium GbR, Neutraubling, has a controlling influence over KRONES AG. Thus, in keeping with Section 312 AktG, the Executive Board has prepared a report which contains the following final declaration:

KRONES AG did not carry out any legal transactions with third parties at the instigation or in the interests of the shareholders of Familien-GbR or their affiliates. Measures requiring reporting within the meaning of Section 312 AktG were neither taken nor omitted.

For every transaction made between KRONES AG and the owners of Familie Kronseder Konsortium GbR and affiliated companies in the reporting period, KRONES AG made arrangements for appropriate consideration within the meaning of Section 312 AktG and – to the extent that it was to be fulfilled in the reporting period – also received said consideration.

The statement on corporate governance is also available online at https://www.krones.com/en/company/investor-relations/corporate-governance-statement.php

Remuneration report

The remuneration report presents the basic features, structure and amounts of Executive Board and Supervisory Board remuneration at KRONES AG. In the interest of clarity and transparency, the disclosures on individual remuneration and the description of the basic features of the remuneration system have been combined in the following remuneration report, which forms part of the consolidated management report. As such, it covers the disclosures required under Section 314 (1) No. 6a of the German Commercial Code (HGB).

Executive Board remuneration

Basic principles of Executive Board remuneration

Determining the total remuneration of the individual Executive Board members is the responsibility of the Supervisory Board's plenary meetings. The Standing Committee prepares the Supervisory Board resolutions relating to remuneration and makes recommendations.

The criteria for determining the appropriateness of the remuneration include but are not limited to the tasks, responsibilities, personal performance and experience of each member of the Executive Board and the economic position, performance and expected development of the enterprise, taking into account its peer companies.

The Supervisory Board reviews the appropriateness of the system on a regular basis using external benchmarks and comparisons with senior management and the entire workforce.

The current remuneration system for the Executive Board was last revised in 2017.

In this connection, the previous five-year long-term incentive (LTI) was replaced by a new three-year long-term incentive arrangement awarded on a revolving basis.

A transitional phase beginning 1 January 2018 was agreed to ensure neutrality in allocation.

The new arrangement was adopted by resolution of the Supervisory Board on 29 November 2017 and approved by the Annual General Meeting on 13 June 2018.

Remuneration components

The remuneration system for the Executive Board consists of the following remuneration components:

- Fixed components (basic salary and fringe benefits)
- Variable components which are payable annually and based on business performance (short-term incentives) and which contain risk elements
- Variable components that serve as long-term incentives containing risk elements, with a measurement period of three years
- Post-employment benefits

All in all, the remuneration structure breaks down as follows: 59% fixed remuneration and 41% variable remuneration. In sum, the remuneration system is designed to provide an incentive for successful long-term management. The long-term components of variable remuneration thus account for 64% of total variable remuneration. Moreover, variable remuneration is subject to caps and to requirements that must be met for payment to occur.

Fixed components (basic salary and fringe benefits)

The fixed amount is the base salary stipulated in members' contracts and is paid out in equal monthly amounts. It is reviewed on a regular basis. For the 2019 financial year, the base salaries of the five members of the Executive Board who were active in 2019 totalled €2,668 thousand (previous year: €2,930 thousand).

In addition, the members receive fringe benefits which are essentially the cost or non-cash benefit of customary insurance premiums, housing expenses, school fees and the use of a company car. For the 2019 financial year, the members of the Executive Board received fringe benefits totalling €182 thousand (previous year: €280 thousand).

Variable components

The variable remuneration contains risk elements and is thus not guaranteed. The incentive package for the Executive Board has consisted of the following since 2017:

- Short-term incentive (STI, measurement period: one year)
  - Awarded annually
  - Target bonus: Three months' salary per annum (at 100% target attainment)
  - Reference figures: EBT margin (primary), order intake, consolidated revenue and net working capital
  - Capped at 200% (max. six months' salary)
  - No payment if EBT is negative

The STI payment for the financial year 2019 amounts to €27.6 thousand in 2020 (previous year: €220 thousand). In addition, the Supervisory Board can, at its equitable discretion, pay out a special bonus if extraordinary events or exceptional performance warrant it. No special bonuses were paid out for the 2019 financial year.

- Mid-term incentive (MTI, measurement period: three years)
  - Replaced by three-year LTI and therefore last awarded in 2017
  - Target bonus: Three months' salary per annum (at 100% performance target attainment)
  - Reference figures: Net working capital, revenue, EBT margin and quality costs
  - Capped at 200% (max. six months' salary)
  - No payment if EBT is negative on average

The provision for the medium-term incentive amounted at the end of the financial year to €99.0 thousand (previous year: €807 thousand), of which €17.6 thousand relates to remuneration for 2019 (prior year: €398 thousand).

- Long-term incentive (LTI, measurement period: three years)
  - Awarded annually (on a revolving basis) (from 2018)
  - Target bonus: 5.4 months' salary per annum (at 100% target attainment)
  - Reference figures: Enterprise value on three-year average (EBT times nine, EBITDA times seven, revenue times one) for start and end value plus net cash and less pension provisions
  - Up to 2018: capped at 200% (max 10.8 months' salary); from 2019: capped at 250% (max. 13.5 months' salary)
  - No payment if EBT is negative on average (up to 2018); from 2019: paid out if the calculated enterprise value is at least 100% of the starting level

The provision for the long-term incentive amounted at the end of the financial year to €1,342.7 thousand (previous year: €238 thousand), of which €793.4 thousand relates to remuneration for the 2019 financial year.

The transitional LTI pays out at the end of the 2020 financial year provided that the reference figures have been attained or exceeded. If an Executive Board member leaves before the end of the measurement period, payment is pro-rated.

Total Executive Board remuneration amounted to €3,131 thousand (previous year: €6,479 thousand).

The change in remuneration partly relates to the four active members of the Executive Board waiving the payment due for the STI 2019 and for the MTI 2017–2019 and to Mr Andersen's paid notice leave and early contract termination (base salary and fringe benefits €322 thousand). The termination agreement between KRONES AG and Mr Andersen includes a severance payment of €2,350 thousand and a pro-rata payment of €109 thousand in variable remuneration, consisting of €19.7 thousand STI, €12.5 thousand MTI and €76.6 thousand LTI.

There are and have been no stock-option plans or comparable share-based long-term incentive components of remuneration for Executive Board members at KRONES AG.

Post-employment benefits

The company has made post-employment benefit commitments to the members of the Executive Board.

For Executive Board members who joined the board in 2012 or later, the post-employment benefits are contribution-based. Annual contributions in the amount of 40% of the respective member's annual base salary are paid into an external pension liability insurance policy in which the benefits are pledged to the beneficiary. There they accrue annual interest until the benefits fall due, at the rate guaranteed when the policy was established plus any annual investment returns. Post-employment pension benefits are granted when a member reaches the age of 62 and only after the member leaves the Executive Board. Executive Board members can choose to receive a lump-sum payout of the post-employment benefits instead of annuity-based payments. Executive Board members' entitlements to post-employment benefits based on contributions from KRONES AG become vested immediately. Executive Board members may elect to receive supplemental monthly benefits for permanent disability and/or a monthly widow(er)'s pension.

Members of the Executive Board who entered the board before 2012 received benefit commitments under a defined benefit plan. The benefit commitment equals 30% of the last base salary received (average of the last 12 months of employment). The commitments include post-employment, permanent disability and surviving dependant benefits. Here, too, post-employment benefits are granted after a member reaches the age of 62 and leaves the Executive Board. If a member of the Executive Board leaves the company before reaching the age of 62 for reasons of permanent disability or because the employment contract is terminated or not renewed, the amount of the pension entitlement in relation to the company is reduced by a certain percentage for each calendar year up to age 62; the percentage is determined in the individual's contract. If an Executive Board member dies, the member's spouse receives the full amount of the annuity that would have been owed to the Executive Board member for the first six months following the member's death. Thereafter, the widow(er)'s annuity is reduced to 70% of that benefit amount. Vesting of benefits is determined based on the provisions of the laws applicable at the inception of each contract.

In the case of both contribution-based plans and defined benefit plans, the individual employment contracts contain provisions that govern discontinuation, reduction or cancellation of benefits (including widow(er)'s benefits in the event of particularly substantial changes in accordance with the provisions of the German Stock Corporation Act.

IFRS pension provisions of €2,735 thousand (previous year: €2.087 thousand) were recognised for active members of the Executive Board. At the end of 2019, following changes in the actuarial discount rate, the corresponding defined benefit obligation (DBO) amounted to the following: for Mr Klenk €4,715 thousand, for Mr Ricker €52 thousand, for Mr Tischer €58 thousand, and for Mr Goldbrunner €40 thousand.

In addition, €1,172 thousand (previous year: €1,172 thousand) was paid into the contribution-based post-employment benefits plan in 2019. Such contributions amounted to the following in 2019: for Mr Klenk €320 thousand, for Mr Anderson €252 thousand, for Mr Ricker €216 thousand, for Mr Tischer €192 thousand, and for Mr Goldbrunner €192 thousand.

Additional benefits in the event of termination of employment
The members' employment contracts contain a non-compete clause that includes suitable compensation to be paid for the non-compete period. Further benefits in the event of termination have not been agreed.

Advances and loans
No loans or advances were provided to members of the Executive Board in 2019.

Benefits paid to former members of the Executive Board
Benefits granted to former members of the Executive Board and their surviving dependants amounted to €1,842 thousand (previous year: €1,688 thousand). This mainly consists of pension benefits. IFRS pension provisions were recognised in the amount of €12,069 thousand (previous year: €8,761 thousand). The increase relates to changes in the actuarial discount rate.

Total remuneration paid to members of the Executive Board in 2018/2019

Remuneration 2019 pursuant to GAS 17 (€ thousand)

Name	Position		Base salary	Fringe benefits	Total	Short-term incentive	Medium-term incentive	Long-term incentive	**Total remuneration**
Christoph Klenk	CEO Human Resources, Intralogistics, Digitalisation, Communication, Quality, Information Management	since 2003	800	29	829	0	0	0	**829**
Michael Andersen	CFO Finance, Controlling, Process Technology, Strategic Purchasing	since 2016	368	83	450	27	99	155	**732**
Thomas Ricker	Sales and Marketing	since 2012	540	22	562	0	0	0	**562**
Markus Tischer	International Operations and Services	since 2014	480	17	497	0	0	0	**497**
Ralf Goldbrunner	Bottling and Packaging Equipment	since 2014	480	31	511	0	0	0	**511**

The incentive amounts are amounts that will be paid out in the subsequent year.

Remuneration 2018 pursuant to GAS 17 (€ thousand)

Name	Position		Base salary	Fringe benefits	Total	Short-term incentive	Medium-term incentive	Long-term incentive	**Total remuneration**
Christoph Klenk	CEO Human Resources, Intralogistics, Digitalisation, Communication, Quality, Information Management	since 2003	800	28	828	60	133	920	**1,942**
Michael Andersen	CFO Finance, Controlling, Process Technology, Strategic Purchasing	since 2016	630	182	812	47	85	0	**945**
Thomas Ricker	Sales and Marketing	since 2012	540	21	561	41	67	669	**1,337**
Markus Tischer	International Operations and Services	since 2014	480	18	498	36	57	569	**1,160**
Ralf Goldbrunner	Bottling and Packaging Equipment	since 2014	480	31	511	36	57	493	**1,096**

The incentive amounts are amounts that will be paid out in the subsequent year.

Supervisory Board remuneration

Remuneration of the members of the Supervisory Board is governed by Section 15 of the articles of association and resolved by the annual general meeting. For the 2019 financial year, the articles of association as amended by the annual general meeting on 13 June 2018 apply.

The members of the Supervisory Board receive remuneration that is commensurate with their responsibilities and the company's position. In keeping with the recommendations of the German Corporate Governance Code, the Chairperson and Deputy Chairperson of the Supervisory Board as well as the chairpersons and members of committees receive additional compensation.

The Supervisory Board's remuneration consists of an annual fixed remuneration of €35,000. The Chairperson of the Supervisory Board receives two-and-a-half times the amount of the fixed remuneration and the Deputy Chairperson of the Supervisory Board receives one-and-a-half times the fixed remuneration amount. Moreover, the members of the Supervisory Board receive a flat €1,500 fee per meeting as reimbursement for their expenses unless they submit proof of having incurred higher expenses.

Members of the Supervisory Board who belong to special committees within the Supervisory Board receive additional remuneration of €7,000 annually as well as a €1,500 flat-rate reimbursement for expenses per meeting.

Members of the Supervisory Board who belonged to the board for only a portion of the financial year receive pro-rated remuneration.

The total remuneration paid to members of the Supervisory Board for the financial year 2019 amounted to €812 thousand (previous year: €712 thousand) and is shown in the table below with individualised disclosure:

Total remuneration paid to members of the Supervisory Board in 2018/2019

Remuneration 2019 pursuant to GAS 17 (€ thousand)

Name	Position	Base compensation	Additional compensation for committee work	Meeting attendance fee	**Total remuneration in 2018**
Volker Kronseder	Chairman of the Supervisory Board	87.5	7.0	15.0	**109.5**
Werner Schrödl*,**	Deputy Chairman of the Supervisory Board	52.5	7.0	15.0	**74.5**
Robert Friedmann	Regular member	35.0		4.5	**39.5**
Klaus Gerlach*	Regular member	35.0		6.0	**41.0**
Oliver Grober*,**	Regular member	35.0		6.0	**41.0**
Thomas Hiltl*,**	Regular member	35.0		6.0	**41.0**
Norman Kronseder	Regular member	35.0	7.0	15.0	**57.0**
Prof. Dr. jur. Susanne Nonnast	Regular member	35.0		6.0	**41.0**
Dr. phil. Verena Di Pasquale*,**	Regular member	35.0		6.0	**41.0**
Beate Eva Maria Pöpperl*,**	Regular member	35.0		6.0	**41.0**
Norbert Samhammer	Regular member	35.0		6.0	**41.0**
Petra Schadeberg-Herrmann	Regular member	35.0		6.0	**41.0**
Jürgen Scholz*,**	Regular member	35.0	7.0	9.0	**51.0**
Hans-Jürgen Thaus	Regular member	35.0	7.0	12.0	**54.0**
Josef Weitzer*,**	Regular member	35.0	7.0	15.0	**57.0**
Matthias Winkler	Regular member	35.0		6.0	**41.0**

* Employee representative ** A share of remuneration is donated in accordance with the current rules of the Hans-Böckler-Stiftung

Remuneration 2018 pursuant to GAS 17 (€ thousand)

Name	Position	Base compensation	Additional compensation for committee work	Meeting attendance fee	**Total remuneration in 2018**
Volker Kronseder	Chairman of the Supervisory Board	87.5	7.0	15.0	**109.5**
Werner Schrödl*,**	Deputy Chairman of the Supervisory Board	52.5	7.0	13.5	**73.0**
Robert Friedmann	Regular member	17.5		4.5	**22.0**
Klaus Gerlach*	Regular member	35.0		6.0	**41.0**
Oliver Grober*,**	Regular member	17.5		4.5	**22.0**
Thomas Hiltl*,**	Regular member	17.5		4.5	**22.0**
Norman Kronseder	Regular member	35.0	7.0	15.0	**57.0**
Prof. Dr. jur. Susanne Nonnast	Regular member	35.0		4.5	**39.5**
Dr. phil. Verena Di Pasquale*,**	Regular member	35.0		6.0	**41.0**
Beate Eva Maria Pöpperl*,**	Regular member	35.0		4.5	**39.5**
Norbert Samhammer	Regular member	17.5		4.5	**22.0**
Petra Schadeberg-Herrmann	Regular member	35.0		4.5	**39.5**
Jürgen Scholz*,**	Regular member	35.0	7.0	10.5	**52.5**
Hans-Jürgen Thaus	Regular member	35.0	7.0	10.5	**52.5**
Josef Weitzer*,**	Regular member	35.0	7.0	15.0	**57.0**
Matthias Winkler	Regular member	17.5		4.5	**22.0**

* Employee representative ** A share of remuneration is donated in accordance with the current rules of the Hans-Böckler-Stiftung

Responsibility statement

"To the best of our knowledge, and in accordance with the applicable reporting principles, the consolidated financial statements give a true and fair view of the assets, liabilities, financial position, and profit or loss of the group, and the consolidated management report includes a fair review of the development and performance of the business and the position of the group, together with a description of the principal opportunities and risks associated with the expected development of the group."

Neutraubling, 12 March 2020
KRONES AG
The Executive Board

Christoph Klenk
CEO

Norbert Broger

Thomas Ricker

Markus Tischer

Ralf Goldbrunner

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CORPORATE GOVERNANCE

Statement on **corporate governance**

KRONES recognises its responsibilities

For KRONES, the German Corporate Governance Code is an integral part of corporate governance. The following is the report from the Executive Board and the Supervisory Board on corporate governance at KRONES in accordance with Section 3.10 of the German Corporate Governance Code.

The Code comprises essential statutory requirements for the management and supervision (governance) of German listed companies and contains internationally and nationally recognised standards of good and responsible corporate governance. The management of KRONES takes the principles and rules of corporate governance into account in all business activities.

Declaration of compliance pursuant to Section 161 of the German Stock Corporation Act

"The Executive Board and the Supervisory Board of KRONES AG declare that the recommendations of the Government Commission on the German Corporate Governance Code established by the German federal government regarding the management and supervision of German listed companies as amended on 7 February 2017 have been and continue to be complied with in accordance with the German Corporate Governance Code (hereinafter the Code), which is published on the website of KRONES AG, with the following exceptions:

- The D&O policy for the Supervisory Board does not include a deductible (Section 3.8 of the Code).

  No specific deductible has been agreed for the policy because the Supervisory Board duly performs its duties at all times irrespective of any deductible.

- The remuneration report is required to present certain information about Executive Board remuneration in prescribed model tables (Section 4.2.5 Sentences 5 and 6 of the Code).

  Some points of interpretation are unclear and, moreover, it is doubtful that the additional use of the model tables would serve to make the remuneration report more clear and generally understandable, as the company aims to do in its compliance with financial reporting requirements (see Section 4.2.5 Sentence 3 of the Code).

- There is currently no nominating committee at KRONES AG (Section 5.3.3 of the Code).

  Committees are primarily useful for larger bodies if they make the body's work more efficient. There are eight shareholder representatives on the Supervisory Board of KRONES AG, who suggest nominees. We do not therefore consider it necessary to create a separate nominating committee. The tasks concerned are performed by the Standing Committee.

- In its election recommendations to the annual general meeting, the Supervisory Board does not currently disclose the personal and business relationships of every candidate with the enterprise, the company's governing bodies and any shareholders with a material interest in the company (Section 5.4.1 paragraphs 5 and 6 of the Code).

  The Supervisory Board deems the requirements of paragraphs 5 and 6 to be unclear and vague in the details and to potentially violate the privacy of those affected.

- No special consideration is given to chairmanship of Supervisory Board committees in terms of remuneration (Section 5.4.6 of the Code).

  The Supervisory Board is of the opinion that, given the size of the committees, the current additional remuneration paid to members of committees is also appropriate for the committee chairs."

Neutraubling, 22 January 2020

For the Executive Board:	For the Supervisory Board:
Christoph Klenk CEO	Volker Kronseder Chairman

Composition of the Supervisory Board

Pursuant to Item 5.4.1 of the German Corporate Governance Code, the Supervisory Board must specify concrete objectives relating to its composition and develop a profile of skills and expertise for the board as a whole. With consideration to the company's specific situation, the composition of the board should duly take into account the company's international activities, potential conflicts of interest, the number of independent Supervisory Board members within the meaning of Section 5.4.2, an age limit to be specified for Supervisory Board members, a regular limit on the length of membership to be specified for the members of the Supervisory Board, and diversity. With respect to the elected employee representatives, the specific requirements of codetermination law must be taken into account.

In keeping with the above, the Supervisory Board of KRONES has specified the following objectives:

a) Composition based on suitable knowledge, skills and experience

The Supervisory Board of KRONES AG shall be composed in such a way that its members possess the knowledge, skills, and professional experience required to properly complete the tasks of a member of the Supervisory Board of an international corporation and to preserve KRONES AG's public reputation.

Motivation, integrity, character, professionalism and independence should also be taken into account when considering candidates for election.

b) Potential conflicts of interest (independence of the members)

The independence of the members of the Supervisory Board shall be ensured in order to prevent conflicts of interest. Potential candidates shall not serve as advisors or board members to major competitors of KRONES AG and shall not hold management positions at companies that are customers, suppliers or KRONES AG group companies. The Supervisory Board shall contain no more than two former members of the Executive Board.

Moreover, the members of the Supervisory Board shall meet the criteria for independence under Section 5.4.2 of the Corporate Governance Code. Presuming that execution of a Supervisory Board mandate as employee representative casts no doubt on compliance with the criteria for independence under Item 5.4.2 of the Code, the majority of the members of the Supervisory Board shall be independent within the meaning of Item 5.4.2 of the Code. At least two shareholder representatives on the Supervisory Board must be independent. In the reporting period, those were Prof. Dr. Susanne Nonnast, Hans-Jürgen Thaus and Robert Friedmann.

Each member of the Supervisory Board shall agree to submit a declaration to the Chairman of the Supervisory Board if there is any conflict of interest. If a conflict of interest persists over an extended period or is material, the Supervisory Board member in question must resign.

c) Age limit

The age limit for members of the Supervisory Board is 70 years. A member's term in office ends at the conclusion of the annual general meeting that follows his or her 70th birthday. Reasons must be given for any deviation from this rule.

d) Limit on duration of membership

The Supervisory Board has not set a limit (cap) on the duration of Supervisory Board membership. We believe that such a cap does not make sense because the expertise of experienced Supervisory Board members should remain available to the company. The Supervisory Board of KRONES will continue to examine the suitability of Supervisory Board members on an individual basis, regardless of how long members have already been on the board. Because we have not set a term limit, we also have nothing to report on the status of implementation.

e) International experience

KRONES AG operates internationally and has subsidiaries and offices in many countries around the globe. Therefore, international experience must be taken into consideration when selecting members of the Supervisory Board.

International experience relates not only to foreign language skills but also to employment in other international companies.

f) Diversity

The Supervisory Board of KRONES AG takes diversity into account in the selection of its members. Under Germany's Act on Equal Participation of Women and Men in Leadership Positions in the Private and Public Sectors, which entered into force on 1 May 2015, at least 30 percent of Supervisory Board seats at KRONES must be held by women and men, respectively. Employee and shareholder representatives on the Supervisory Board of KRONES AG have both decided to each meet the gender quota separately. In accordance with the law and the articles of association, the Supervisory Board of KRONES AG comprises eight shareholder representatives and eight employee representatives. Thus, the Supervisory Board should have at least two female employee representatives and two female shareholder representatives. Petra Schadeberg-Herrmann and Prof. Dr. Susanne Nonnast represent shareholders on the Supervisory Board. The Supervisory Board also has two female employee representatives, Dr. Verena Di Pasquale and Beate Eva Maria Pöpperl.

The Supervisory Board of KRONES implemented all of the objectives a) through f) in the financial year 2019.

Information on corporate governance practices

Corporate governance at KRONES is based on fairness and transparency. This principle applies both to cooperation between the Executive Board and the Supervisory Board and to our interaction with employees, customers, suppliers and the general public.

Compliance at KRONES is an overarching concept denoting conduct consistent with the rules, where the rules to be observed within the company far exceed statutory requirements. They also include internal guidelines and regulations, and embody the moral values and standards that correspond to KRONES' ethical principles.

KRONES revised its Code of Conduct in 2019. Subjects covered in the Code of Conduct include corporate values, acting in accordance with the law and ethics, social responsibility and handling information and knowledge. Concrete examples on each topic help employees implement and adhere to the rules set out in the Code of Conduct in their daily work.

In order to strengthen compliance, KRONES introduced a compliance whistleblower portal in 2018. This reporting system on the KRONES website allows company employees and outsiders to anonymously bring attention to potential infringements of the law or rules and regulations.

We review all strategic decisions for their long-term probability of success. Our aim is to optimise profits and cash flow in a sustainable manner. To secure the company's long-term survival, we review all of our activities with respect to sustainability, factoring in not only our social and economic responsibilities but also the ecological impact of the manufacture and use of our products. KRONES maintains eco-friendly production operations and not only complies with statutory regulations but makes every effort to remain as far as possible below prescribed limits.

Our governance principles ensure that the welfare of the very people who contribute to our success is never subordinated to economic interests. In order to prevent accidents at the workplace and work-related illness, KRONES creates a safe environment that is conducive to the good health of our employees. All of our workflows are designed with employee safety and health in mind, and we ensure that the workplace is ergonomic.

When choosing our suppliers, we look at their performance with respect to sustainable, socially responsible business practices. KRONES has developed a suppliers' code for this purpose. The code covers safety and health, the environment, working conditions and compliance. In addition, selected suppliers are regularly audited to verify that KRONES suppliers meet the required standards.

Diversity policy and succession planning for the Executive Board

The Executive Board, the Supervisory Board and the Standing Committee are responsible for succession planning and for monitoring diversity. For the appointment of members of the Executive Board, preference is given to candidates whose accomplishments and knowledge make them the best qualified to safeguard the interests of the company and its stakeholders for the long term. The company's diversity policy is also taken into account in such appointment processes. When filling a position on the Executive Board, the Supervisory Board considers diversity with respect to candidates' professional and educational backgrounds, age, gender and international management qualifications. The policy consists of the following aspects in detail:

- The Supervisory Board has set a standard age limit for members of the Executive Board. The standard age limit is 62 years (62nd birthday). The Supervisory Board also gives due consideration to ensuring a balanced age structure.
- At least two members of the Executive Board are required to have a technical/engineering background. At least two members are required to have international management experience. The Executive Board as a whole is required to represent the best possible composition for the KRONES Group, its core business and all stakeholders.
- With the current all-male composition of the Executive Board, the percentage of women on the Executive Board is 0%. The reason for the current all-male composition of the Executive Board is that the Supervisory Board, despite the existence of suitable female candidates, has been unable to recruit any of those candidates for a position on the Executive Board. Pursuant to Section 111 (5) of the German Stock Corporation Act, the Supervisory Board of KRONES AG has accordingly established a target of 0% participation of women on the Executive Board. This quota applies for as long as the Executive Board remains in its current composition on the basis of the agreed lengths of contract, including any extensions. However, under the company's diversity policy, women will be given priority consideration for filling any openings on the Executive Board.
- The Supervisory Board has set the contract term for first-time appointees to Executive Board positions at three years.

Duties and activities of the Executive Board and the Supervisory Board

The Executive Board of KRONES AG consisted of five members until 24 July 2019. Michael Andersen stepped down from the Executive Board on 24 July. From that date until the end of 2019, the Executive Board consisted of four members. Until the end of 2019, Michael Andersen's responsibilities were temporarily assumed by CEO Christoph Klenk. Members of the Executive Board are each responsible for their respective Executive Board portfolio (*see pages 27 and 192*). The Executive Board manages the company and its affairs. The members of the Executive Board hold daily Executive Board meetings. At these meetings, the Executive Board discusses current and strategic topics and makes decisions. For strategically important decisions, the Executive Board involves the Supervisory Board in the decision-making process in a timely manner. The work of the Executive Board, such as the majority required for resolutions and transactions that require Supervisory Board approval, is governed by rules of procedure for the Executive Board issued by the Supervisory Board.

The Supervisory Board oversees the Executive Board. In accordance with the articles of association, the Supervisory Board has 16 members. The Executive Board and the Supervisory Board communicate on a regular basis. The Executive Board informs the Supervisory Board in a timely manner about business development, the company's financial situation, risk management, business forecasts and strategy. In addition to regular oral reports, the members of the Supervisory Board receive written reports on the company's earnings and financial situation from the Executive Board each month.

The Chairman of the Supervisory Board coordinates the work of the Supervisory Board (*see pages 32/33 and 192 for a listing of the members*). The Chairman or Deputy Chairman presides over the Supervisory Board's meetings.

The Supervisory Board adopts resolutions either in its meetings or in exceptional cases by circulation. Members of the Executive Board participate in meetings of the Supervisory Board at the invitation of the Chairman or Deputy Chairman of the Supervisory Board. The Executive Board members give oral or written reports on the agenda items and respond to questions from Supervisory Board members.

Each year, the Chairman of the Supervisory Board describes the Board's activities in his report to shareholders in the annual report and at the annual general meeting.

The Supervisory Board has adopted rules of procedure of its own, governing matters such as responsibilities and rules for the passage of resolutions.

In order to perform its work in the most efficient manner possible, the Supervisory Board has formed an Audit and Risk Management Committee and a Standing Committee.

Composition, duties and activities of the Audit and Risk Management Committee

The Audit and Risk Management Committee consists of Supervisory Board Chairman Volker Kronseder, his deputy Werner Schrödl and Supervisory Board members Norman Kronseder, Hans-Jürgen Thaus, Josef Weitzer and Jürgen Scholz. Its Chairman is Hans-Jürgen Thaus.

The Audit and Risk Management Committee meets regularly and oversees the accounting and financial reporting process and the audit of the financial statements and prepares corresponding proposals for resolutions for the Supervisory Board. The Committee also prepares the Supervisory Board's review of the annual financial statements, the management report and the auditor's report for the separate and consolidated financial statements and makes recommendations. In addition, the Audit and Risk Management Committee monitors the effectiveness of the internal control system, the risk management system and the compliance system.

Composition, duties and activities of the Standing Committee

The Standing Committee consists of Volker Kronseder, Werner Schrödl, Norman Kronseder and Josef Weitzer. Volker Kronseder chairs the committee. The Standing Committee meets regularly and deals with all other topics that do not fall within the scope of the Audit and Risk Management Committee. These include corporate strategy, human resources strategy, Supervisory Board remuneration and Executive Board remuneration.

Determinations pursuant to Sections 76 (4) and 111 (5) of the German Stock Corporation Act

Under Section 76 (4) of the German Stock Corporation Act, the Executive Board is required to determine targets for the participation of women in the two levels of management below the Executive Board. It must also set a deadline for compliance with the targets. Despite intensive efforts, the heavily engineering-oriented context at KRONES has meant that only a small number of vacant management positions have so far been filled with women possessing comparable qualifications. As of 31 December 2017, the percentage of women in each of these two levels of management came to 10.9%. The Executive Board of KRONES AG has set itself the goal of at least holding this figure stable through to 30 June 2020. At the end of the 2019 financial year, the figure was 9.3%.

So far, despite intensive efforts, the Supervisory Board has not been able to recruit suitable women candidates for the Executive Board. Because the lengths of current contracts mean that no changes can be expected on the Executive Board in the medium term, the Supervisory Board has set a target of 0% for the percentage of women on the Executive Board of KRONES AG and thus complies with the requirements under Section 111 (5) of the German Stock Corporation Act. There is therefore no need to set a deadline for compliance.

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CONSOLIDATED FINANCIAL STATEMENTS

Consolidated statement of **profit and loss**

€ thousand	Notes	2019		2018	
Revenue	19	3,958,875		3,853,980	
Changes in inventories of finished goods and work in progress	5	8,737		1,102	
Other own work capitalised	20	63,017		49,622	
Other operating income	21	99,826	4,130,455	114,492	4,019,196
Goods and services purchased	22				
Expenses for materials and supplies and for goods purchased		−1,525,551		−1,523,504	
Expenses for services purchased		−516,237	−2,041,788	−508,521	−2,032,025
Personnel expenses	23				
Wages and salaries		−1,065,065		−944,876	
Social security contributions and expenses for pension plans and for benefits		−210,453	−1,275,518	−192,390	−1,137,266
Depreciation and amortisation of intangible assets and property, plant and equipment	1/2		−183,315		−102,736
Other operating expenses	24		−585,885		−544,018
EBIT			**43,949**		**203,151**
Investment income	25	5,588		8,747	
Profit or loss shares attributable to associates that are accounted for using the equity method	4	−686		821	
Income from other securities and loans classified as non-current financial assets	25	0		2	
Interest and similar income	25	7,520		6,121	
Interest and similar expenses	25	−14,628		−14,592	
Financial income/expense	25		**−2,206**		**1,099**
Earnings before taxes			**41,743**		**204,250**
Income tax	8/26		−32,501		−53,650
Consolidated net income			**9,242**		**150,600**
Profit share of non-controlling interests			−249		−483
Profit share of KRONES Group shareholders			**9,491**		**151,083**
Earnings per share (diluted/basic) in €	27		0.30		4.78

Consolidated statement of **comprehensive income**

€ thousand	Notes	2019	2018
Consolidated net income		**9,242**	150,600
Items that will not be reclassified subsequently to profit or loss			
Remeasurement of defined benefit plans	12	−26,568	4,396
		−26,568	4,396
Items that may be reclassified subsequently to profit or loss			
Exchange differences on translation		7,868	−2,279
Cash flow hedges	12	−585	−2,380
		7,283	−4,659
Other comprehensive expenses and income after income taxes	9	**−19,285**	−263
Total comprehensive income	9	**−10,043**	150,337
of which attributable to non-controlling interests		−249	−483
of which attributable to KRONES Group shareholders		−9,794	150,820

Consolidated statement of financial position – **Assets**

€ thousand	Notes	31 Dec 2019		31 Dec 2018	
Intangible assets	1	345,152		328,183	
Property, plant and equipment	2	693,185		570,820	
Non-current financial assets	3	28,127		8,770	
Investments accounted for using the equity method	4	3,369		28,661	
Fixed assets		**1,069,833**		**936,434**	
Deferred tax assets	8	41,617		32,450	
Trade receivables	6	28,913		32,578	
Tax receivables		252		49	
Other assets	6	13,434		8,248	
Non-current assets			**1,154,049**		**1,009,759**
Inventories	5	382,523		320,734	
Trade receivables	6	932,876		955,392	
Contract assets	6/19	571,261		647,089	
Tax receivables		16,360		11,733	
Other assets	6	151,985		157,880	
Cash and cash equivalents	7	110,382		218,802	
Current assets			**2,165,387**		**2,311,630**
Total			**3,319,436**		**3,321,389**

Consolidated statement of financial position – **Equity and liabilities**

		31 Dec 2019		31 Dec 2018	
€ thousand	Notes				
Subscribed capital	9	40,000		40,000	
Capital reserves	10	141,724		141,724	
Profit reserves	11	340,278		331,521	
Other reserves	12	−116,313		−89,160	
Consolidated retained earnings		964,966		1,009,193	
Consolidated equity of the parent company			**1,370,655**		**1,433,278**
Non-controlling interests	13	−629		−72	
Equity			**1,370,026**		**1,433,206**
Provisions for pensions	14	260,194		220,550	
Deferred tax liabilities	8	3,673		23,344	
Other provisions	15	75,192		63,658	
Tax liabilities		5,356		4,434	
Liabilities to banks	16	64		3,169	
Trade payables	16	14		1	
Other financial obligations and lease liabilities	16	104,912		41,302	
Other liabilities	16	2,600		2,298	
Non-current liabilities			**452,005**		**358,756**
Other provisions	15	141,048		107,230	
Liabilities to banks	16	72,178		555	
Contract liabilities	16/19	442,884		547,222	
Trade payables	16	463,722		491,585	
Tax liabilities		16,868		14,510	
Other financial obligations and lease liabilities	16	34,887		106,670	
Other liabilities and accruals	16	352,818		261,655	
Current liabilities			**1,497,405**		**1,529,427**
Total			**3,319,436**		**3,321,389**

Consolidated statement of **cash flows**

€ thousand	Notes	2019	2018
Earnings before taxes		41,743	204,250
Depreciation and amortisation and reversals	1/2	183,315	102,736
Increase (previous year: decrease) in provisions and accruals	15/16	105,928	−85,721
Interest and similar expenses and income	25	7,108	8,471
Gains and losses from the disposal of non-current assets	21/24	−216	27
Other non-cash expenses and income		13,252	−6,234
Decrease in trade receivables, contract assets and other assets not attributable to investing or financing activities		114,345	10,189
Increase in inventories	5	−59,421	−39,102
Decrease (previous year: increase) in trade payables, contract liabilities and other liabilities not attributable to investing or financing activities		−258,388	195,221
Cash generated from operating activities		**147,666**	**389,837**
Interest paid		−4,354	−923
Income tax paid and refunds received		−49,787	−73,861
Cash flow from operating activities		**93,525**	**315,053**
Cash payments to acquire intangible assets	1	−61,265	−57,581
Proceeds from the disposal of intangible assets	1	411	43
Cash payments to acquire property, plant and equipment	2	−107,644	−121,547
Proceeds from the disposal of property, plant and equipment	2	8,994	2,363
Cash payments to acquire non-current financial assets		−12,692	−7,159
Proceeds from the disposal of non-current financial assets		92	680
Cash payments to acquire affiliated companies		−27,952	−24,753
Interest received		5,325	2,819
Dividends received		6,807	10,740
Cash flow from investing activities		**−187,924**	**−194,395**
Cash payments to owners		−53,708	−53,708
Proceeds from new borrowing		72,178	524
Cash payments to service debt		−3,660	−24,620
Cash payments to acquire non-controlling interests		−1,915	0
Cash payments for the repayment of lease liabilities		−32,156	−98
Cash flow from financing activities		**−19,261**	**−77,902**
Net change in cash and cash equivalents		**−113,660**	**42,756**
Changes in cash and cash equivalents arising from changes in exchange rates		1,475	−6,417
Changes in cash and cash equivalents arising from changes in the consolidated group		3,765	468
Cash and cash equivalents at the beginning of the period		218,802	181,995
Cash and cash equivalents at the end of the period	7	**110,382**	**218,802**

Consolidated statement of **changes in equity**

	Parent company							Non-controlling interests	Consolidated equity
€ thousand	Share capital	Capital reserves	Profit reserves	Currency differences in equity	Other reserves	Group retained earnings	Equity	Equity	
Notes	9	10	11	11	12			13	
At 1 January 2018	**40,000**	**141,724**	**377,381**	**−35,864**	**−91,176**	**912,794**	**1,344,859**	**−3,085**	**1,341,774**
Dividend payment (€1.70 per share)						−53,708	**−53,708**		**−53,708**
Consolidated net income 2018						151,083	**151,083**	−483	**150,600**
Allocation to profit reserves			776			−776	**0**		**0**
Changes in the consolidated group			−8,493			−200	**−8,693**	3,496	**−5,197**
Other comprehensive expenses and income				−2,279	2,016		**−263**		**−263**
At 31 December 2018	**40,000**	**141,724**	**369,664**	**−38,143**	**−89,160**	**1,009,193**	**1,433,278**	**−72**	**1,433,206**
Dividend payment (€1.70 per share)						−53,708	**−53,708**		**−53,708**
Consolidated net income 2019						9,491	**9,491**	−249	**9,242**
Allocation to profit reserves						0	**0**		**0**
Changes in the consolidated group			889			−10	**879**	−308	**571**
Other comprehensive expenses and income				7,868	−27,153		**−19,285**		**−19,285**
At 31 December 2019	**40,000**	**141,724**	**370,553**	**−30,275**	**−116,313**	**964,966**	**1,370,655**	**−629**	**1,370,026**

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NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

Consolidated **segment reporting**

€ thousand	Machines and Lines for Product Filling and Decoration		Machines and Lines for Beverage Production/ Process Technology		KRONES Group	
	2019	2018	2019	2018	2019	2018
Revenue	**3,265,417**	**3,177,850**	**693,458**	**676,130**	**3,958,875**	**3,853,980**
Depreciation, amortisation and impairments	155,600	89,949	27,715	12,787	183,315	102,736
of which impairments	29,201	1,644	8,931	0	38,132	1,644
Interest income	5,812	4,770	477	788	6,289	5,558
Interest expense	4,537	2,456	1,747	1,387	6,284	3,843
EBT	**56,405**	**223,295**	**−14,662**	**−19,045**	**41,743**	**204,250**
Share of profit or loss of associates accounted for using the equity method	−330	821	−356	0	−686	821
EBIT	**62,850**	**223,544**	**−18,901**	**−30,393**	**43,949**	**203,151**
EBT margin (EBT to revenue)	**1.7%**	**7.0%**	**−2.1%**	**−2.8%**	**1.1%**	**5.3%**

General **disclosures**

Legal basis

KRONES provides machinery and systems for bottling and packaging and for beverage production. Innovative digitalisation and intralogistics solutions round out the portfolio. KRONES AG, which is registered in the Commercial Register of Regensburg Local Court (HRB 2344) and is headquartered in Neutraubling, Germany.

The consolidated financial statements of KRONES AG, Neutraubling (the "KRONES Group") for the period ended 31 December 2019 have been prepared in accordance with the International Financial Reporting Standards (IFRS) of the International Accounting Standards Board (IASB), London, applicable at the reporting date, including the interpretations issued by the International Financial Reporting Interpretation Committee (IFRIC), as adopted by the European Union.

The group has not undertaken early application of IFRS standards and interpretations that have not yet entered into force. *A list of such standards and interpretations and of standards applied for the first time is provided on page 186.* The commercial law stipulations under Section 315e (1) of the German Commercial Code (HGB) have been complied with in addition. The Executive Board authorised the publication of the consolidated financial statements on 12 March 2020.

Non-controlling interests in consolidated equity are presented on the statement of financial position as a separate item within equity. On the statement of profit and loss, the share of profit or loss attributable to non-controlling interests is presented as a component of consolidated net income. The shares of consolidated net income attributable to the owners of the parent and to non-controlling interests are presented separately.

Non-controlling interests are additionally shown on the statement of changes in equity.

The explanatory notes provided in the following comprise disclosures and commentary that, in accordance with IFRS, must be included as notes to the interim consolidated financial statements in addition to the statement of financial position, statement of profit and loss, statement of comprehensive income, statement of changes in equity and statement of cash flows.

The statement of profit and loss was prepared using the nature of expense method.

The group currency is the euro.

Unless otherwise stated, all financial information presented in euros is rounded to the nearest thousand.

Consolidated group

Besides KRONES AG, the consolidated financial statements of KRONES AG for the period ended 31 December 2019 include all domestic and foreign subsidiaries over which KRONES AG has direct or indirect control on account of a majority of voting rights.

In a step acquisition over the course of the 2019 financial year, 100% of the remaining ownership interest was acquired in AUTOMATA S.A., Guatemala City, Guatemala. In addition, the remaining 60% ownership interest was acquired in INTEGRATED PACKAGING SYSTEMS (IPS) FZCO, Dubai, United Arab Emirates (UAE). KRONES now has a 100% ownership interest in the company. It was previously accounted for using the equity method.

Also during the financial year, KRONES MIDDLE EAST AFRICA FZCO, Dubai, United Arab Emirates, was established and included in the scope of consolidation together with KRONES INDIA PVT. LTD., Bangalore, India.

On 1 April 2019, KRONES acquired the remaining 60% ownership interest in INTEGRATED PACKAGING SYSTEMS (IPS) FZCO, Dubai, United Arab Emirates (UAE). This acquisition strengthens KRONES' distribution structure in the Middle East/Africa region.

With the acquisition of 100% of the business operations of AUTOMATA S.S., Guatemala City, Guatemala on 1 June 2019, KRONES strengthened its capabilities in process technology.

Initial accounting of the acquired business operations was completed as of the acquisition date. For the effect on profit or loss from measurement of the previously held interests at fair value, please see under financial income/expense.

The table below presents the consideration transferred for the acquisitions and the fair values of the assets identified and liabilities assumed at the acquisition date.

€ thousand	IPS DUBAI	Other	Total
	Fair value	Fair value	Fair value
Goodwill	34,408	2,881	37,289
Non-current assets	6,634	1,358	7,992
Current assets	23,837	1,154	24,991
(of which trade receivables)	9,710	1,063	10,773
Cash and cash equivalents	1,794	1,395	3,189
Total assets acquired	**66,673**	**6,788**	**73,461**
Liabilities	18,032	3,526	21,558
Total liabilities acquired	**18,032**	**3,526**	**21,558**
Net assets acquired	**48,640**	**3,262**	**51,902**
Non-controlling interests	**0**	**0**	**0**
Purchase prices	48,640	3,262	51,902
of which paid in cash	29,184	1,957	31,141
of which fair value of previously held interests	19,456	1,304	20,761

The goodwill recognised for INTEGRATED PACKAGING SYSTEMS (IPS) FZCO relates to the strengthening of the sales, distribution and service structure in the Middle East/Africa region. This earnings potential, which cannot be allocated to items capable of recognition as assets under IFRS, is reflected in goodwill.

The goodwill recognised for AUTOMATA S.S. relates to the strengthening of the service structure by the integration of AUTOMATA S.S. and its workforce in the group. This earnings potential, which cannot be allocated to items capable of recognition as assets under IFRS, is reflected in goodwill.

The total amount of goodwill that is expected to be deductible for tax purposes is €0 thousand.

The fair value of trade receivables equals the gross amount. None of the trade receivables are impaired and the contractually agreed amounts are expected to be recoverable in their entirety.

INTEGRATED PACKAGING SYSTEMS (IPS) FZCO contributed a net profit of €370 thousand and revenue of €2,188 thousand to KRONES from the acquisition date to 31 December 2019. Had initial accounting for INTEGRATED PACKAGING SYSTEMS (IPS) FZCO been completed as of January 1, 2019, revenue of €2,917 thousand and a net profit of €493 thousand would have been recognised in the consolidated statement of profit and loss.

AUTOMATA S.S. contributed a net profit of €20 thousand to KRONES from the acquisition date to 31 December 2019. As the company only provides services within the group, no consolidated revenues are included. Had initial accounting for AUTOMATA S.S. been completed as of January 1, 2019, the net profit would have been €34 thousand.

The costs directly attributable to the acquisitions amount to €181 thousand and were recognised as expense.

Consolidation principles

The annual financial statements of KRONES AG and of the domestic and foreign subsidiaries included in the consolidated financial statements have been prepared using uniform accounting policies, in accordance with IFRS 10. They are all prepared as of the reporting date of the consolidated financial statements.

Acquisition accounting is performed in accordance with IFRS 3 (Business Combinations), under which all business combinations must be accounted for using the acquisition method. The acquired assets and liabilities are therefore recognised at fair value.

Goodwill that arose before 1 January 2004 continues to be accounted for as a deduction from equity.

Shares in the equity of a subsidiary that are not attributable to the parent are presented as non-controlling interests. If an acquisition includes put options granted to non-controlling interests for their interests in group companies and KRONES has identical call options, the options are accounted for as if they had already been exercised and each is recognised as a liability at fair value instead of recognising non-controlling interests (anticipated acquisition method). The liabilities are measured through profit or loss at fair value as of the reporting date.

Inter-company receivables, liabilities, provisions, income and expenses between consolidated companies are eliminated in consolidation. This also applies for inter-company profits or losses from deliveries made or services provided between group companies provided the inventories from these transactions are still held by the group at the reporting date.

Companies for which KRONES has the ability to exercise significant influence over their business and financial policies (generally by indirectly or directly holding between 20% and 50% of voting rights), are accounted for in the consolidated financial statements using the equity method and initially recognised at cost. Any excess of the cost of the investment over KRONES' share of the net fair value of an associate's identifiable assets and liabilities is adjusted on a fair-value basis and the remaining amount is recognised as goodwill. Goodwill relating to the acquisition of an associate is included in the carrying amount of the investment and is not amortised. Instead, it is tested for impairment as part of the entire carrying amount of the investment in the associate. KRONES' share in an associate's profit or loss subsequent to the acquisition date is recognised in the consolidated statement of profit and loss. The carrying amount of the associate is increased or decreased to recognise cumulative changes in fair value subsequent to the acquisition date. KRONES' share in associates' gains or losses resulting from transactions between KRONES and its associates is eliminated.

Currency translation

The consolidated financial statements are presented in euros, the functional currency of KRONES AG.

The financial statements of consolidated companies that are prepared in a foreign currency are translated on the basis of the functional currency approach. Because the subsidiaries primarily operate independently in the economic environment of their respective countries, the functional currency is normally the local currency for each subsidiary. In the consolidated financial statements, assets and liabilities are therefore translated at the closing rate at the reporting date, while income and expenses from the financial statements of subsidiaries are translated at average annual rates.

Any exchange differences resulting from translation using these different rates in the statement of financial position and the statement of profit and loss are recognised directly in other comprehensive income. Exchange differences resulting from the translation of equity using historical exchange rates are also recognised in other comprehensive income.

Exchange rate differences compared with the previous year arising from acquisition accounting are normally recognised outside profit or loss, in other profit reserves.

In the separate financial statements of KRONES AG and its subsidiaries, receivables and liabilities in foreign currencies are translated using the exchange rate at the time of the transaction and exchange differences are recognised in profit or loss at the closing rate at the reporting date. Non-monetary items in foreign currencies are carried at historical cost.

Exchange rates of subsidiaries' functional currencies against the euro:

		Closing rate		Average rate	
		31 Dec 2019	31 Dec 2018	2019	2018
US dollar	USD	1.123	1.145	1.120	1.182
British pound	GBP	0.850	0.897	0.878	0.885
Swiss franc	CHF	1.086	1.127	1.113	1.155
Danish krone	DKK	7.471	7.468	7.466	7.453
Canadian dollar	CAD	1.462	1.560	1.486	1.530
Japanese yen	JPY	121.930	125.960	122.061	130.454
Brazilian real	BRL	4.513	4.445	4.413	4.305
Chinese renminbi (yuan)	CNY	7.833	7.860	7.719	7.806
Mexican peso	MXN	21.239	22.520	21.566	22.707
Ukrainian hryvnia	UAH	26.610	31.735	28.934	32.136
South African rand	ZAR	15.765	16.470	16.172	15.617
Kenyan shilling	KES	113.794	116.642	114.219	119.671
Nigerian naira	NGN	408.970	416.290	405.052	425.572
Russian rouble	RUB	69.844	80.026	72.477	74.008
Thai baht	THB	33.445	37.048	34.770	38.182
Indonesian rupiah	IDR	15,587.100	16,468.500	15,833.329	16,801.557
Angolan kwanza	AOA	537.803	352.423	404.416	296.577
Turkish lira	TRY	6.680	6.056	6.357	5.700
Kazakhstan tenge	KZT	429.940	440.150	428.853	407.128
Australian dollar	AUD	1.601	1.623	1.611	1.580
New Zealand dollar	NZD	1.666	1.706	1.700	1.707
Swedish krona	SEK	10.445	10.251	10.587	10.257
Vietnamese dong	VND	26,018.000	26,564.000	26,006.790	27,201.202
Philippine peso	PHP	56.869	60.125	58.000	62.253
Bangladeshi taka	BDT	95.319	95.753	94.522	99.179
Singapore dollar	SGD	1.511	1.560	1.527	1.593
Myanmar kyat	MMK	1,657.230	1,769.390	1,704.062	1,701.225
United Arab Emirates dirham	AED	4.124	4.207	4.113	4.341
Hungarian forint	HUF	330.610	321.060	325.278	318.819
Malaysian ringgit	MYR	4.593	4.733	4.638	4.764
Pakistani rupee	PKR	173.880	160.104	168.356	143.257
Polish zloty	PLN	4.260	4.298	4.298	4.261
Norwegian krone	NOK	9.866	9.940	9.852	9.600
Indian rupee	INR	80.150	79.909	78.803	80.711
Guatemalan quetzal	GTQ	8.651	8.850	8.622	8.887
Cambodian riel	KHR	4,575.300	4,601.600	4,542.179	4,779.214
Bulgarian lev	BGN	1.956	1.956	1.956	1.956

Estimates and judgements

In preparing the consolidated financial statements, management makes judgements, estimates and assumptions that affect the reported amounts of assets and liabilities as of the reporting date, the disclosure of contingent liabilities and the reported amounts of expenses and income. The uncertainty inherent in such assumptions and estimates can, however, lead to events that result in material adjustments to the carrying amounts of affected assets and liabilities in future periods.

Major assumptions made about the future, and other sources of estimation uncertainty at the end of the reporting period that have a significant risk of resulting in material adjustments to the carrying amounts of assets and liabilities within the next financial year, are explained in the following.

Development costs are capitalised if they are associated with a future economic benefit and the remaining requirements in IAS 38.57 are met.

If there are indications that intangible assets are impaired or if annual impairment testing is required (intangible assets with an indefinite useful life, intangible assets in the development phase and goodwill), an impairment test is applied.

This is done by comparing the carrying amount of an asset (or cash-generating unit) with its recoverable amount. The first step of this comparison consists of determining value in use. If value in use is less than the carrying amount, fair value less costs of disposal is determined and compared with the carrying amount. If fair value less costs of disposal is less than the carrying amount, an impairment loss is recognised by reducing the carrying amount to the higher of value in use and fair value less costs of disposal.

Impairment testing involves making estimates and assumptions that may differ from the actual amounts in particular with regard to future cash and cash equivalents, cash flows and the planning period. The actual amounts may differ from the assumptions and estimates made if the conditions referred to change contrary to expectations.

KRONES determines value in use using a present value method (the discounted cash flow method). The cash flows used in the calculation are based on long-term corporate planning prepared by management. They are discounted at market discount rates.

The cash flows used in testing goodwill are taken as a rule from the detailed planning for the next three financial years. Revenue growth at the end of the forecast period is the long-term growth rate of the respective industrial sectors and countries in which the cash-generating units do business. They are discounted at market discount rates. Cash-generating units are tested for impairment using the pre-tax weighted average cost of capital (WACC). For the main assumptions made in impairment testing of cash-generating units, sensitivity analyses are carried out in order to rule out the possibility that reasonably possible changes in the assumptions used to determine the recoverable amount would lead to an impairment.

Purchase agreements for acquisitions include options for KRONES to acquire the remaining minority interests. If the seller holds identical put options, the group assumes that the option will be exercised and therefore does not present the minority interests in the consolidated financial statements (anticipated acquisition method). Instead, a liability from the acquisition is recognised at fair value. The fair value is measured using the discounted cash flow method; the main input factors are medium-term planning and the discount rate. With regard to the exercise date, it is assumed as a rule that the probability of exercise is evenly distributed unless otherwise indicated. Impairment testing involves making estimates and assumptions about the timing. The actual amounts may differ from the assumptions and estimates made if the conditions referred to change contrary to expectations. Further details are provided in Note 18.

Accounting for deferred tax assets, which are mainly recognised for unused tax loss carryforwards, requires management to make estimates and judgements regarding the size of the future taxable profits that will be available against which the unused tax losses can be utilised. Tax planning strategies and the expected timing of events under such strategies are taken into account if they are sufficiently probable. Deferred tax assets are recognised as a rule to the extent that deductible deferred tax liabilities are expected in the same amount and with the same timing. Otherwise, deferred tax assets are only recognised if it is highly likely that sufficient future taxable profits will be available against which the deferred tax assets recognised for loss carryforwards and temporary differences can be utilised. For the purpose of this assessment, expected taxable income is taken from corporate planning prepared according to the principles described above. In the case of loss-making entities, deferred tax assets are not recognised until turnaround is imminent or future profits are highly probable. When measuring loss allowances for deferred tax assets recognised for loss carryforwards, due account is taken of rules restricting loss utilisation (minimum taxation). Further details are provided in Note 8.

The post-employment pension expense from defined benefit plans is determined on the basis of actuarial calculations. Those calculations are based on assumptions and judgements regarding discount rates on the net obligation, mortality and future pension increases. Such estimates are subject to significant uncertainties due to the long-term nature of such plans. Details of those uncertainties, together with sensitivities, are presented in Note 14.

Provisions for warranties are accounted for on the basis of expected costs from customer orders. The estimates for the warranty obligations are based on experience in recent financial years and generally relate to a warranty term of between one and two years from the acceptance date. It is therefore expected that the majority of provisions for warranties will be settled within the next two years. *Further details are provided on page 168*.

KRONES has already cut jobs in 2019 as part of its efficiency programme. This programme continues in 2020. The restructuring provisions recognised for this purpose were determined on the basis of estimates and are therefore subject to uncertainty.

For the purpose of accounting in accordance with IFRS 15, judgements are made regarding whether revenue is realised over time. KRONES has come to the conclusion that revenue for highly customer-specific projects is to be recognised over time rather than at a point in time, as the resulting assets have no alternative use as a rule and KRONES has a legal right to payment, including a profit margin, for performance already completed. KRONES has determined that an input method is the most suitable for determining progress as there is a direct relationship between production cost being incurred and transfer of the product or service to the customer. The percentage of completion is the ratio of contract costs incurred up to the reporting date to the total estimated cost of the projects. Changes in estimates and differences between actual costs and estimated costs affect the profit on such projects.

Intangible assets

Acquired and internally generated intangible assets, excluding goodwill, are recognised in accordance with IAS 38 if it is sufficiently probable that the use of an asset will result in a future economic benefit and the cost of the asset can be reliably determined. The assets are recognised at cost and amortised systematically on a straight-line basis over their estimated useful lives. Amortisation of intangible assets is normally applied over a useful life of between three and five years and is presented in “Depreciation and amortisation of intangible assets and property, plant and equipment”. Intangible assets that are not yet available for use are tested annually for impairment.

Research and development expenditure

Development costs in the KRONES Group are capitalised at cost if all recognition criteria in IAS 38.57 are met. In accordance with IAS 38, research expenditure cannot be capitalised and is therefore immediately recognised as an expense in profit or loss. Borrowing costs are capitalised as cost at a capitalisation rate of 0.15%.

Goodwill

Goodwill is not amortised. Instead, it is tested annually for impairment. It is also tested for impairment if an event occurs or circumstances arise that suggest that the recoverable amount may be less than the carrying amount. Goodwill is recognised at cost less cumulative impairment losses.

Goodwill is tested for impairment at the level of the cash-generating unit or group of cash-generating units represented by a division (or corresponding unit).

The cash-generating unit or group of cash-generating units represents the lowest level at which the goodwill is monitored for internal management purposes.

For the purposes of impairment testing, goodwill acquired in a business combination is allocated to the cash-generating unit or group of cash-generating units that is expected to benefit from the synergies of the business combination. If the carrying amount of the cash-generating unit or group of cash-generating units to which the goodwill is allocated exceeds the recoverable amount, an impairment loss is recognised for the goodwill allocated to the cash-generating unit or group of cash-generating units. The recoverable amount is the fair value less costs of disposal or value in use, whichever is higher, of the cash-generating unit or group of cash-generating units. If either of these exceeds the carrying amount, it is not always necessary to determine both values. The values are normally measured on the basis of discounted cash flows. Even if the recoverable amount of the cash-generating unit or group of cash-generating units to which goodwill is allocated exceeds the carrying amount in subsequent periods, impairment losses on that goodwill are not reversed.

Property, plant and equipment

The KRONES Group's property, plant and equipment are accounted for at cost less systematic depreciation on a straight-line basis over their estimated useful lives. The cost of self-constructed assets comprises all directly attributable costs and an allocation of overheads.

No revaluation of property, plant and equipment has been undertaken in accordance with IAS 16.

Systematic depreciation is based on the following useful lives, which are applied uniformly throughout the group:

Useful life	Years
Buildings	14 – 50
Technical equipment and machinery	5 – 18
Furniture and fixtures and office equipment	3 – 15

The useful lives take into account the different components of assets with significant differences in cost.

Government grants are only recognised if there is reasonable assurance that the conditions attaching to them will be complied with and the grants will be received.

Government grants related to assets are deducted from the cost of the assets and reversed in future periods to profit or loss in depreciation and amortisation of intangible assets and property, plant and equipment.

Leases

A lease is a contract that conveys the right to use an asset for a period of time in exchange for consideration.

Until 31 December 2018, leases in which the KRONES Group, as the lessee, bore substantially all the risks and rewards incidental to ownership of the leased asset were accounted for on inception as finance leases in accordance with IAS 17. The leased asset was recognised as a non-current asset at fair value or, if lower, at the present value of the minimum lease payments. The leased asset was depreciated systematically on a straight-line basis over the shorter of the lease term and the useful life of the asset. Payment obligations for future lease instalments were recognised under other liabilities. In the case of operating leases, the leased assets were treated as assets belonging to the lessor as the lessor bore the risks and rewards. The lease expense was recognised in profit or loss.

From 1 January 2019, KRONES normally recognises all leases and related contractual rights and obligations in the statement of financial position. KRONES recognises a right-of-use asset and a corresponding lease liability at the time the leased item is available for use by the group.

Lease liabilities include the present value of the following lease payments:

- Fixed payments less any lease incentives payable by the lessor;
- Variable lease payments that depend on an index or a rate;
- Amounts expected to be payable under residual value guarantees;
- The exercise price of a purchase option, if the option is reasonably certain to be exercised;
- Payments of penalties for terminating the lease, if the lease term reflects the exercising of an option to terminate the lease.

The lease payments are discounted using the interest rate implicit in the lease, if that rate can be readily determined. If not, they are discounted using the incremental borrowing rate. The finance costs are recognised in profit or loss over the lease term. The carrying amount of lease liabilities is remeasured if there is a change in the lease or in the assessment of an option to purchase the underlying asset.

Right-of-use assets are measured at cost, which comprises:

- The amount of the initial measurement of the lease liability;
- Lease payments made at or before the commencement date, less any lease incentives received;
- Initial direct costs incurred;
- Dismantling obligations.

Subsequent measurement is at cost less any accumulated depreciation and any accumulated impairment losses. Right-of-use assets are depreciated on a straight-line basis over the shorter of the useful life and the lease term. Right-of-use assets are likewise tested for impairment.

With regard to the practical expedients provided for in the standard, KRONES makes use of the practical expedients for low-value assets and for short-term leases (less than 12 months). The payments for short-term leases and leases of low-value assets are recognised as an expense on a straight-line basis.

Furthermore, the new rules are not applied to leases of intangible assets. In the case of contracts that contain non-lease components as well as lease components, use is made of the option not to separate non-lease components from lease components. *Please also see the information on page 180.*

- **Financial instruments**

In accordance with IFRS 9, KRONES classifies financial assets into three categories: financial instruments at amortised cost (AC), financial instruments at fair value through profit or loss (FVTPL) and financial instruments at fair value through other comprehensive income (FVOCI).

The classification of financial assets is made on the basis of KRONES' business model for managing the financial assets and their contractual cash flow characteristics.

In accordance with IFRS 9, KRONES classifies financial liabilities into three categories: financial instruments at amortised cost (AC), financial instruments at fair value through profit or loss (FVTPL) and financial instruments at fair value through other comprehensive income (FVOCI).

For the various classes of financial assets and liabilities, the carrying amounts are generally a reasonable approximation of fair value.

The fair value of financial assets and liabilities is determined on the basis of financial accounting models using inputs observable in the market at the reporting date (Level 2 within the meaning of IFRS 13.72). Level 2 assets and liabilities are primarily hedging and non-hedging derivatives.

The fair value of Level 1 financial assets and liabilities is based on unadjusted quoted prices in active markets for financial instruments.

For Level 3 inputs within the meaning of IFRS 13.72, the fair values are the same as the carrying amounts. Measurement is based on estimates from forecasts of future developments.

Transactions against cash settlement are accounted for at the settlement date. Derivative financial instruments are accounted for at the trade date.

Net gains and losses include impairments and measurement changes for derivative financial instruments and are set out in the explanatory notes on the various measurement categories.

Loss allowances are therefore measured on the basis of one of the following:

- 12-month expected credit losses: Expected credit losses that result from default events that are possible within twelve months after the reporting date.
- Lifetime expected credit losses: Expected credit losses that result from all possible default events over the expected life of a financial instrument.

Loss allowances are measured on the basis of lifetime expected credit losses if the credit risk on a financial asset at the reporting date has increased significantly since initial recognition; otherwise, loss allowances are measured on the basis of 12-month expected credit losses. An entity may assume that the credit risk on a financial asset has not increased significantly if the financial asset is determined to have low credit risk at the reporting date. However, loss allowances must always be measured on the basis of lifetime expected credit losses for trade receivables and contract assets without a significant financing component; KRONES also measures loss allowances on this basis for trade receivables and contract assets with a significant financing component.

The expected credit losses on trade receivables and on contract assets are estimated on the basis of external ratings and historical credit loss experience over the last 36 months. Within each group of financial instruments, credit risks are segmented on the basis of shared credit risk characteristics.

Trade receivables and contract assets have been grouped on the basis of shared credit risk characteristics for the purpose of measuring expected credit losses. The contract assets generally have the same risk characteristics as trade receivables.

Information on risk reporting in accordance with IFRS 7 is provided in the risk report in the group management report.

Derivative financial instruments and hedge accounting

The derivative financial instruments used in the KRONES Group are used to hedge against currency risks from operating activities. The election has been made to apply the hedge accounting requirements of IAS 39 instead of the requirements in IFRS 9.

The main categories of currency risk at KRONES comprise transaction risk arising from exchange rates and cash flows in foreign currencies. The main such currencies are the US dollar, the Canadian dollar, the Norwegian krone, the Japanese yen and the euro.

Within the hedging strategy, 100% of items denominated in foreign currencies are generally hedged. The instruments used for this purpose are mostly forward exchange contracts and, in isolated cases, swaps, including currency swaps.

The strategy objective is to minimise currency risk by using hedging instruments that are judged to be highly effective, thus hedging the exchange rate and providing planning certainty.

The derivative financial instruments are measured on initial recognition and in subsequent measurement at fair value as of the reporting date. Fair value is determined using Level 2 inputs within the meaning of IFRS 13.72. Gains and losses on measurement are recognised in profit or loss unless the criteria for hedge accounting are met.

The derivative financial instruments for which hedge accounting is applied comprise forward currency contracts and currency swaps whose changes in fair value are presented in profit or loss or as a component of equity. In the case of cash flow hedges of currency risks on hedged items, changes in fair value are initially recognised directly in equity and subsequently reclassified to profit or loss when the hedged item affects profit or loss.

These derivative financial instruments are measured on the basis of the forward rates provided by the commercial bank concerned. They are derecognised/reclassified when the corresponding hedged items are recognised in the statement of financial position.

Receivables and other assets

Receivables and other assets, with the exception of derivative financial instruments, are accounted for at amortised cost. Non-interest-bearing and low-interest receivables with maturities of more than one year are discounted.

The group makes use of the possibility as a rule of selling export receivables that are covered by credit insurance and/or documentary letters of credit. Receivables sold without recourse as of the reporting date were derecognised in full. In the case of receivables covered by credit insurance, the risk relating to the exporter's deductible is generally retained. The group assumes in such cases that substantially all the risks and rewards of the receivables transfer to the purchaser of the receivables if the deductible does not exceed 10% of the value of each individual receivable. The fair value of the expected recourse obligation under the retained deductibles was recognised as an expense.

The sale of receivables from the spare parts business as of the reporting date was carried out under an established master factoring agreement. Subject to the legal validity of the receivables, the factor bears the credit risk on the receivables it has purchased.

Inventories

Inventories are carried at the lower of cost and net realisable value. Cost includes costs that are directly related to the units of production and an allocation of fixed and variable production overheads.

The allocation of overheads is based on normal capacity.

Selling costs and general and administrative costs are not capitalised. Inventory risks arising from increased storage periods or reduced usability are accounted for with write-downs.

The FIFO and weighted-average cost methods are applied as simplified measurement methods for raw materials, consumables and supplies.

Income tax

The tax expense comprises current and deferred taxes. Current taxes and deferred taxes are recognised in profit or loss except to the extent that they relate to a business combination or to an item recognised directly in equity or in other comprehensive income.

Current taxes are the amounts of taxes expected to be paid or recovered in respect of the taxable profit or tax loss for the financial year on the basis of the tax rates that apply at the reporting date or will apply in the near future together with all adjustments recognised for current tax of prior periods.

Deferred tax assets and deferred tax liabilities are accounted for using the liability method and are recognised for all temporary differences between the tax base and the carrying amounts in accordance with IFRS and for consolidation adjustments recognised in profit or loss. Deferred tax assets are only recognised to the extent that it is probable that the related tax benefits can be realised.

Deferred taxes are measured on the basis of the income tax rates that apply in the various countries at the time of realisation. Changes in the tax rates are taken into account if it is sufficiently certain that they will occur. Where legally permissible, deferred tax assets and liabilities have been offset.

Tax liabilities are recognised in the event that amounts in tax returns will probably not be realised (uncertain tax items). The amount is the best estimate of the expected tax payment (the expected amount or most likely amount of the uncertain tax item). Tax receivables from uncertain tax items are recognised if it is probable that they can be realised. Only if there is a tax loss carryforward or unused tax credit is no tax liability or tax receivable recognised for the uncertain tax item; the deferred tax asset for the unused tax loss carryforwards and tax credits is then adjusted instead.

The IFRIC published a clarification on accounting for income taxes in 2019. In accordance with that clarification, the previous provisions for income taxes must be presented in future as income tax liabilities. As a result, the current and non-current provisions for income taxes (€9,000 thousand and

€4,434 thousand respectively) as of 31 December 2018 were reclassified as current and non-current tax liabilities respectively. The reclassification has no effect on financial performance or the financial position.

Provisions for pensions

Provisions for pensions are measured using the projected unit credit method in accordance with IAS 19. This method takes into account known vested benefits at the reporting date together with expected future increases in state pensions and salaries based on a prudent assessment of relevant variables. The provisions are calculated on the basis of actuarial appraisals that take into account biometric factors.

Actuarial gains and losses have a direct impact on the consolidated statement of financial position, resulting in an increase or decrease in provisions for pensions and similar obligations and a reduction or increase in other reserves in equity. The consolidated statement of profit and loss is not affected by actuarial gains and losses as they are required to be recognised in other comprehensive income. Net interest on the net defined benefit obligation is determined by multiplying the net defined benefit obligation by the discount rate used to measure the defined benefit obligation. Because the net defined benefit obligation is reduced by any plan assets, the same discount rate is used to calculate return on plan assets. Current and past service costs and net interest are recognised in profit or loss.

Partial retirement benefit obligations

According to the definition of post-employment benefits in IAS 19, top-up payments under partial retirement agreements come under other long-term employee benefits. Such top-up payments are therefore not recognised in full as liabilities at their net present value. Instead, they are accrued on a pro-rated basis across the relevant years of active service of the employees taking partial retirement.

Other provisions

Other provisions are recognised when the group has an obligation to a third party as a result of a past event, an outflow is probable, and the amount of the obligation can be reliably estimated. The provisions are measured at fully attributable costs or on the basis of the most probable settlement amount.

Restructuring provisions are recognised in connection with measures that materially change the scope of the business undertaken by a segment or business unit or the manner in which that business is conducted. Most such measures involve the termination of employment relationships. Restructuring provisions are recognised when implementation of a detailed formal plan has started or such a plan has been announced.

Provisions with a residual term of more than one year are recognised at the settlement amount discounted to the reporting date. The discount rate reflects the risks specific to the liability. The increase in the provision due to the passage of time is recognised as an interest expense.

Revenue

The basic criterion for revenue recognition under IFRS 15 is transfer of control. A distinction is made between transfer of control at a point in time and transfer of control over time:

KRONES provides machinery and systems for bottling and packaging and for beverage production. KRONES recognises revenue for highly customer-specific projects over time rather than at a point in time, as the resulting assets have no alternative use as a rule and KRONES has a legal right to payment, including a profit margin, for performance already completed. Progress is measured using an input method. The percentage of completion is the ratio of contract costs incurred up to the reporting date to the total estimated cost of the project.

A further important part of KRONES' business model consists of services. The company maintains service centres and offices around the world. KRONES provides a comprehensive range of products and services for customers under the heading of lifecycle service (LCS). KRONES recognises revenue from sales of spare parts at a point in time, on delivery of the goods (transfer of control). Revenue for services that come under LCS is mostly recognised over time as the customer simultaneously receives and consumes the benefits provided by the group's performance as the group performs. Accordingly, revenue is mostly recognised over time using an input method on the basis of the costs incurred. Revenue is only recognised on a straight-line basis in the case of longer-term maintenance services.

A provision is recognised in accordance with IAS 37 for anticipated losses relating to customer orders.

Costs to obtain contracts where the amortisation period of the costs would be one year or less are immediately recognised as expense.

KRONES receives payments from customers on the basis of a payment plan that is part of the contracts. The payment terms vary among business units and countries. Contract assets relate to our conditional right to consideration for contractual performance obligations satisfied to date. Trade receivables are recognised when the right to receive the consideration becomes unconditional.

Contract liabilities relate to payments received in advance, meaning before contractual performance obligations have been satisfied. Contract liabilities are recognised as revenue when we satisfy the contractual performance obligations. If performance exceeds advance payments, the resulting positive balance is presented in contract assets.

Financing components are not included in the amount of revenue to be recognised if it is expected at inception of the contract that the period between the transfer of the promised good or promised service and payment for that good or service will be one year or less.

Revenue is presented net of reductions.

Segment reporting

KRONES reports on two operating segments, which are the strategic business units. The two segments are organised by product divisions and services and managed separately due to the different technologies they cover. The Executive Board, as the chief operating decision maker, manages the company as a whole on the basis of monthly reports from the segments. Segment 1 comprises machines and lines for product filling and decoration.

Segment 2 comprises machines and lines for beverage production and process technology. The accounting policies used are the same as those described under "General disclosures" above. Segment performance is measured on the basis of internal reporting to the Executive Board, primarily segment revenue and segment EBT.

The table below shows revenue generated through business with third parties in each country (based on the location of customer headquarters).

€ thousand	2019	2018
Germany	468,354	362,344
North America	683,459	533,063
Rest of the world	2,807,062	2,958,573
	3,958,875	**3,853,980**

The table below shows non-current assets in each country:

€ thousand	2019	2018
Germany	747,465	687,477
North America	54,618	63,141
Rest of the world	278,852	189,260
	1,080,935	**939,878**

Notes to the **consolidated statement of financial position**

1 Intangible assets

The carrying amount of intangible assets changed as follows:

€ thousand	Industrial property rights and similar rights and assets as well as licenses	Goodwill	Capitalised development expenditure	Advance payments made	Total
31 December 2017					
Cost	181,789	62,736	377,595	5	622,125
Accumulated depreciation	123,484	0	235,078	0	358,563
Net carrying amount	**58,305**	**62,736**	**142,517**	**5**	**263,562**
Changes in 2018					
Cost					
Consolidated additions	5,253	39,782	0	0	45,035
Additions	24,214	0	38,506	158	62,878
Disposals	5,485	0	0	0	5,485
Transfers	53	0	0	–1	52
Exchange differences	282	742	0	0	1,024
Amortisation					
Additions	21,408	0	21,083	0	42,491
Disposals	5,450	0	0	0	5,450
Transfers	88	0	0	0	88
Exchange differences	1,755	0	0	0	1,755
Net carrying amount at 31 December 2018	**64,821**	**103,260**	**159,940**	**162**	**328,183**
31 December 2018					
Cost	208,411	103,260	416,100	162	727,933
Accumulated depreciation	143,590	0	256,160	0	399,750
Net carrying amount	**64,821**	**103,260**	**159,940**	**162**	**328,183**

Table continued on next page

€ thousand	Industrial property rights and similar rights and assets as well as licenses	Goodwill	Capitalised development expenditure	Advance payments made	Total
Changes in 2019					
Cost					
Consolidated additions	6,124	37,289	0	0	43,413
Additions	25,376	0	32,516	36	57,928
Disposals	7,489	0	155	0	7,644
Transfers	165	0	0	−170	−5
Exchange differences	218	514	0	0	732
Amortisation					
Additions	25,837	17,545	41,155	0	84,537
Disposals	7,208	0	25	0	7,233
Transfers	−32	0	0	0	−32
Exchange differences	208	−25	0	0	183
Net carrying amount at 31 December 2019	**70,410**	**123,543**	**151,171**	**28**	**345,152**
31 December 2019					
Cost	232,805	141,063	448,461	28	822,357
Accumulated depreciation	162,395	17,520	297,290	0	477,205
Net carrying amount	**70,410**	**123,543**	**151,171**	**28**	**345,152**

The additions to industrial property rights and licenses mainly relate to licenses for IT software. Customer bases amounting to €8,716 thousand (previous year: €5,652 thousand) are included in the carrying amount as of the reporting date.

All goodwill underwent a regular impairment test in accordance with IAS 36, as in the previous year. Impairment testing is performed on the basis of value in use at the level of the smallest cash-generating unit (CGU) or group of cash-generating units. The cash flow projections underlying impairment tests are based on the approved financial forecasts within the forecast period. These forecasts are based in part on external sources of information. They also take into account price agreements based on past experience and expected efficiency gains as well as assumptions about revenue growth based on strategy.

The table below provides an overview of the tested goodwill and the assumptions used for the respective impairment tests, each of which was performed at the level of the smallest cash-generating unit (CGU):

CGU		Carrying amount of goodwill in € thousand	Forecast period in years	Annual revenue growth at end of forecast period	Discount rate before taxes
IPS	2019	34,408	3	1.0 %	6.2 %
SPRINKMAN	2019	3,107	3	2.0 %	10.9 %
	2018	7,411	5	2.0 %	10.4 %
MHT	2019	20,180	3	1.0 %	8.2 %
	2018	20,180	5	1.0 %	13.4 %
S.P.S	2019	4,307	3	1.0 %	9.0 %
	2018	9,298	6	1.0 %	10.5 %
JAVLYN	2019	4,589	3	1.5 %	12.9 %
	2018	4,498	5	1.5 %	10.4 %
TRANS-MARKET	2019	7,219	3	2.5 %	10.9 %
	2018	11,443	5	2.9 %	9.8 %
SYSTEM LOGISTICS	2019	30,906	3	1.0 %	8.3 %
	2018	30,906	3	1.0 %	9.4 %
HST	2019	4,258	3	1.0 %	8.3 %
	2018	4,258	3	1.0 %	9.2 %
TRIACOS	2019	4,631	3	1.0 %	8.3 %
	2018	4,631	3	1.0 %	8.8 %
Other[1]	2019	9,938	3 – 4	1.0 % – 2.0 %	7.2 % – 13.4 %
	2018	10,635	2 – 5	1.0 % – 3.0 %	7.9 % – 13.0 %

[1] Goodwill with a carrying amount of less than €4 million in each case

The pre-tax discount rates are based on risk-free interest rates, which are determined on the basis of long-term government bond yields. This discount rate is adjusted for a risk premium that reflects the general risk associated with equity investments and the specific risk of the CGU. Revenue growth at the end of the forecast period is the long-term average growth rate of the respective industrial sectors and countries in which the CGUs do business.

The impairment test resulted in the recognition of goodwill impairments in the amount of €17,545 thousand (previous year: €0 thousand). These mainly relate to reduced earnings prospects and are included in amortisation of intangible assets.

For the remaining CGUs that include goodwill, KRONES AG is of the opinion that no reasonably foreseeable change to any of the material basic assumptions used to determine the value in use of cash-generating units to which goodwill has been allocated could result in the carrying amount being higher than its recoverable amount.

The capitalised development expenditure relates to new machinery projects of KRONES AG. Development expenditure capitalised in the reporting period amounts to €32,516 thousand (previous year: €38,506 thousand).

As in the previous year, this includes borrowing costs in a non-material amount. Including capitalised development expenditure, a total of €194,502 thousand was spent on research and development in 2019 (previous year: €179,033 thousand). An impairment loss on capitalised development expenditure was recognised in amortisation in the reporting year in the amount of €20,587 thousand (previous year: €1,644 thousand). As in the previous year, the charge was incurred in the Machines and Lines for Product Filling and Decoration segment. The figure in the reporting period relates to direct printing technologies that are not being pursued further.

In the reporting period, business combinations resulted in €43,413 thousand in additions to net carrying amounts for intangible assets (previous year: €45,035 thousand), of which €37,289 thousand is goodwill (previous year: €39,782 thousand).

2 Property, plant and equipment

In 2019, as in the previous year, the depreciation figure for property, plant and equipment did not include any impairments in accordance with IAS 36. Additions to land and buildings and to construction in progress primarily related to the establishment of the production location in Hungary, expansion at the Neutraubling, Wackersdorf and Nittenau locations in Germany and investment in the USA. The €66,417 thousand in capital expenditure on technical equipment and machinery and on other equipment, furniture and fixtures and office equipment primarily relates to capacity expansion and modernisation at existing production locations.

In 2019, the carrying amounts for property, plant and equipment included government grants of €10,802 thousand (previous year: €2.658 thousand). Government grants in the amount of €145 thousand (previous year: €10 thousand) were reversed to profit or loss in 2019. As in the previous year, the depreciation figure in 2019 does not include any impairment reversals.

The reported property, plant and equipment is not subject to any restrictions of title or disposal.

In the reporting period, business combinations resulted in €2,242 thousand in additions to net carrying amounts for property, plant and equipment (previous year: €9.498 thousand).

Property, plant and equipment, including right-of-use assets, changed as follows:

€ thousand	Land and buildings	Technical equipment and machinery	Other equipment, furniture and fixtures and office equipment	Construction in progress	Advance payments made	Total
31 December 2017						
Cost	499,957	329,377	239,033	33,036	1,351	1,102,754
Accumulated depreciation	206,835	226,282	168,020	0	0	601,138
Net carrying amount	**293,122**	**103,094**	**71,012**	**33,036**	**1,351**	**501,616**
Changes in 2018						
Cost						
Consolidated additions	6,674	1,648	1,049	127	0	9,498
Additions	16,765	11,258	33,827	48,129	12,574	122,552
Disposals	2,432	6,441	15,698	0	167	24,738
Transfers	26,450	1,945	2,489	−29,840	−1,096	−52
Exchange differences	1,180	692	−619	19	−2	1,271
Depreciation						
Additions	13,882	19,975	26,388	0	0	60,245
Disposals	1,191	6,081	15,076	0	0	22,348
Transfers	22	−120	10	0	0	−88
Exchange differences	707	745	67	0	0	1,518
Net carrying amount at 31 Dec 2018	**328,339**	**97,677**	**80,672**	**51,472**	**12,660**	**570,820**
31 December 2018						
Cost	548,595	339,635	263,139	51,472	12,660	1,215,501
Accumulated depreciation	220,256	241,958	182,467	0	0	644,681
Net carrying amount	**328,339**	**97,677**	**80,672**	**51,472**	**12,660**	**570,820**

Table continued on next page

€ thousand	Land and buildings	Technical equipment and machinery	Other equipment, furniture and fixtures and office equipment	Construction in progress	Advance payments made	Total
Changes in 2019						
Cost						
Restatement due to IFRS 16*	63,814	573	24,094	0	0	88,481
At 1 January 2019, restated	**612,409**	**340,208**	**287,233**	**51,472**	**12,660**	**1,303,982**
Consolidated additions	1,264	0	978	0	0	2,242
Additions	56,314	28,363	38,054	15,542	223	138,496
Disposals	1,629	9,243	26,270	6,694	0	43,836
Transfers	37,120	4,624	3,012	−43,713	−1,030	13
Exchange differences	861	579	888	−320	−152	1,856
Depreciation						
Additions	35,644	21,150	41,632	0	0	98,426
Disposals	1,306	8,512	25,240	0	0	35,058
Transfers	0	−305	344	0	0	39
Exchange differences	357	333	790	0	0	1,480
Net carrying amount at 31 Dec 2019	**451,387**	**109,907**	**103,902**	**16,287**	**11,701**	**693,185**
31 December 2019						
Cost	706,339	364,531	303,895	16,287	11,701	1,402,753
Accumulated depreciation	254,951	254,624	199,993	0	0	709,568
Net carrying amount	**451,387**	**109,907**	**103,902**	**16,287**	**11,701**	**693,185**

* See accounting standards applied for the first time, page 180.

The table below shows the recognised right-of-use assets for leased assets accounted for in property, plant and equipment:

€ thousand	Land and buildings	Technical equipment and machinery	Other equipment, furniture and fixtures and office equipment	Total
31 Dec 2019				
Net carrying amount	61,409	2,900	23,324	87,633
Additions	17,520	3,097	12,106	32,723
Depreciation	19,919	772	12,923	33,614

Information on the corresponding lease liabilities is provided on page 169.

Interest expenses include €3,297 thousand in interest expense on leases. Other operating expenses include €3,698 thousand in expenses from short-term leases, €689 thousand in expenses from leases of low-value assets and €716 thousand in expenses for variable lease payments. Total cash outflows for leases amount to €37,173 thousand.

In the previous year, property, plant and equipment included leased assets in the amount of to €68 thousand, beneficial ownership of which was attributed to the group company concerned in accordance with IAS 17 (finance leases).

3 Non-current financial assets

The non-current financial assets consist primarily of lendings to and investments in non-consolidated companies.

4 Investments accounted for using the equity method

One associated company was accounted for using the equity method as of the reporting date (previous year: two companies).

The table below lists the associates accounted for using the equity method:

Name	Place of business	Ownership interest
		%
Associates		
TECHNOLOGISCHES INSTITUT FÜR ANGEWANDTE KÜNSTLICHE INTELLIGENZ GMBH	Weiden, Germany	44

The table below summarises the aggregated earnings data an aggregated carrying amounts of associates accounted for using the equity method (excluding the investment in INTEGRATED PACKAGING SYSTEMS (IPS) FZCO, Dubai):

€ thousand	2019	2018
Profit or loss for the period	–809	–165
Other comprehensive income	0	0
Total comprehensive income	–809	–165
Share of profit or loss	–356	–73
Carrying amount at 31 Dec	3,369	3,529

On 1 April 2019, KRONES acquired the remaining 60% ownership interest in INTEGRATED PACKAGING SYSTEMS (IPS) FZCO, Dubai. From that date onwards, the company has been fully consolidated. Until 31 March 2019, the investment was included in the consolidated financial statements as an associate accounted for using the equity method.

In financial year 2019, the share in profit or loss of INTEGRATED PACKAGING SYSTEMS (IPS) FZCO, Dubai, was –€330 thousand (previous year: €894 thousand). The carrying amount as of the reporting date was €0 thousand (previous year: €25,132 thousand).

5 Inventories

The inventories of the KRONES Group are composed as follows:

€ thousand	31 Dec 2019	31 Dec 2018
Raw materials, consumables and supplies	242,033	208,019
Work in progress	64,452	46,559
Finished goods	44,164	35,946
Goods purchased for sale	26,572	25,606
Other	5,302	4,604
Total	**382,523**	**320,734**

Inventories are recognised at the lower of cost and fair value less selling expenses.

Write-downs of €1,585 thousand on inventories were recognised as expense in 2019 (previous year: €7,267 thousand) and are substantially based on customary net realisable values and obsolescence allowances. The amount of reversals of write-downs recognised in profit or loss due to improved market conditions was not material.

6 Receivables and other assets

€ thousand	31 Dec 2019	31 Dec 2018
Trade receivables	961,789	987,970
Contract assets	571,261	647,089
Other assets	165,419	166,128

The group measures expected credit losses using the simplified approach under IFRS 9; accordingly, all trade receivables and contract assets are accounted for with lifetime expected credit losses.

The loss allowance for expected credit losses on trade receivables and contract assets changed as follows:

Trade receivables and contract assets		
€ thousand	2019	2018
At 1 Jan	35,572	27,444
Change due to first-time application as of 1 Jan 2018	0	13,652
Change due to currency effects	131	–198
Additions	5,671	104
Reversals	–805	–5,430
At 31 Dec	**40,569**	**35,572**

The loss allowances include €5,964 thousand (previous year: €5,195 thousand) in allowances of contract assets. Other assets mainly comprise advance payments made (€19,006 thousand; previous year: €19,959 thousand), current tax assets (€78,334 thousand; previous year: €69,076 thousand), prepaid expenses (€13,887 thousand; previous year: €9,519 thousand) and other financial assets (€41,706 thousand; previous year: €29,940 thousand).

The derivative financial instruments measured at fair value that were entered into for future payment receipts and meet the conditions for hedge accounting or that were entered into as stand-alone hedge transactions totalled €903 thousand at the reporting date (previous year: €860 thousand).

7 Cash and cash equivalents

Apart from cash on hand totalling €2,030 thousand (previous year: €150 thousand), the cash and cash equivalents of €110,382 thousand (previous year: €218,802 thousand) consist primarily of demand deposits.

Changes in cash and cash equivalents in accordance with IAS 7 Statement of Cash Flows are presented in the statement of cash flows on page 134.

8 Income tax

Income tax receivables and liabilities relate exclusively to income tax in accordance with IAS 12.

The income tax breaks down as follows:

€ thousand	31 Dec 2019	31 Dec 2018
Deferred tax expense/income (–)	–17,614	693
Current tax	50,115	52,957
Total	**32,501**	**53,650**

Deferred taxes are measured on the basis of the tax rates that, based on the current legal situation, apply or are expected to apply in the various countries at the time of realisation. In Germany, the tax rates that apply are a corporate income tax rate of 15.0% plus a solidarity surcharge of 5.5% and a local trade tax multiplier (Gewerbesteuerhebesatz) for KRONES AG averaging 336%. The total income tax rate for the companies in Germany is consequently 27.6%. Tax rates abroad range between 9% and 35%.

The deferred tax assets and liabilities at 31 December 2019 break down by items on the statement of financial position as follows:

€ thousand	Deferred tax assets		Deferred tax liabilities	
	31 Dec 2019	31 Dec 2018	31 Dec 2019	31 Dec 2018
Intangible assets	1,102	54	45,718	45,476
Property, plant and equipment	0	144	12,564	10,005
Non-current financial assets	187	14,486	175	39
Other non-current assets	1,616	1,319	118	67
Inventories	14,450	13,071	1,033	1,657
Other current assets	3,228	2,798	32,967	27,303
Tax loss carryforwards	29,155	11,116	0	0
Provisions, non-current	12,479	9,964	264	10,292
Other non-current liabilities	2,134	2,057	62	366
Provisions, current	13,483	19,134	6,121	92
Other current liabilities	15,502	1,540	374	167
Deferred tax items recognised in other comprehensive income	44,003	31,191	0	2,304
Subtotal	**137,339**	**106,874**	**99,396**	**97,768**
Offsetting (–)	**–95,722**	**–74,424**	**–95,722**	**–74,424**
Total	**41,617**	**32,450**	**3,674**	**23,344**

The deferred tax assets and liabilities recognised in other comprehensive income amounted to €44,003 thousand at the reporting date (previous year: €28,887 thousand). This figure includes €43,400 thousand (previous year: €32,821 thousand) for actuarial gains and losses recognised in other comprehensive income in accordance with IAS 19. An amount of €603 thousand (previous year: €380 thousand) related to hedging activities.

Deferred taxes on tax loss carryforwards in the amount of €46,992 thousand (previous year: €14,056 thousand) and deferred taxes on deductible temporary differences in the amount of €14 thousand (previous year: €46 thousand) were not recognised because it is not sufficiently certain that the tax assets will be realised in the foreseeable future. These loss carryforwards can essentially be carried forward indefinitely.

Entities that made losses in the year under review and whose deferred tax assets are not covered by deferred tax liabilities have recognised deferred tax assets in the amount of €7,217 thousand. There is convincing evidence that these tax assets will be realised on the basis of management assumptions and judgements about the development of the business deriving from past experience and taking into account one-off effects in the financial year under review.

The temporary differences relating to equity interests in subsidiaries (outside basis differences) came to €300,876 thousand at the reporting date (previous year: €293,875 thousand) and are excepted from recognition of deferred tax liabilities.

The tax expense of €32,501 thousand reported in 2019 is €20,980 thousand higher than the expected tax expense that would theoretically result from application of the domestic tax rate of 27.6% at the group level. The difference can be attributed to the following:

€ thousand	2019	2018
Earnings before taxes	41,743	204,250
Tax rate for the parent company KRONES AG	27.60%	27.30%
Expected (theoretical) tax expense	11,521	55,760
Adjustment due to difference between local tax rate and tax rate of KRONES AG	−656	−1,428
Reductions in tax due to tax-exempt income	−15,573	−14,724
Current tax losses for which no deferred taxes recognised	7,581	28
Increases in tax expense due to non-deductible expenses	29,691	23,134
Tax effect of as-yet unrealised deferred taxes on loss carryforwards	−247	−1,070
Tax income (–) / tax expense (+) for previous years	−2,814	−1,491
Tax effect of as-yet unrealised deductible temporary differences	662	−4,672
Other	2,336	−1,887
Taxes on income	**32,501**	**53,650**

9 Equity

KRONES AG's share capital amounted to €40,000,000.00 at 31 December 2019, as in the previous year. It is divided into 31,593,072 ordinary bearer shares, each with a theoretical par value of €1.27 per share. 31,593,072 shares were in circulation at the reporting date (previous year: 31,593,072). At 31 December 2019, as in the previous year, the company held no treasury shares.

The company is authorised in accordance with Section 71 (1) No. 8 of the German Stock Corporation Act (AktG) to buy treasury shares totalling up to 10% of the current share capital in compliance with the provisions of the law and of the authorising resolution.

The authorisation can be exercised by the company, by its consolidated companies or by a third party acting on its or their behalf, either in whole or in part, once or multiple times, in pursuit of one or multiple purposes.

The authorisation became effective upon resolution by the annual general meeting on 13 June 2018 and applies until midnight on 12 June 2023.

By resolution of the annual general meeting on 15 June 2016, the Executive Board is authorised to increase the company's share capital, with the approval of the Supervisory Board, by up to €10 million (authorised capital) through the issuance on one or more occasions of new ordinary bearer shares against cash contributions up to and including 15 June 2021. Shareholders must be granted subscription rights to these shares. The Executive Board is authorised to exclude the subscription rights of shareholders, with the approval of the Supervisory Board, for any fractional amounts that may arise. Moreover, the Executive Board is authorised to determine the further details of the capital increase and its implementation, in both cases with the approval of the Supervisory Board. The Supervisory Board is authorised to amend the articles of association in accordance with any utilisation of the authorised capital and upon expiration of the term of the authorisation.

The changes in equity that are recognised in other comprehensive income (excluding dividends) totalled –€19.285 thousand in the reporting period (previous year: –€263 thousand) and consist of changes in currency differences and cash flow hedges as well as the recognition of actuarial gains and losses on pensions under other reserves. In addition, the allocation of profit or loss to non-controlling interests resulted in a change in equity of –€249 thousand (previous year: –€483 thousand). The sum of changes in equity that are recognised in other comprehensive income and those that are recognised in profit or loss was –€10,043 thousand (previous year: €150,337 thousand).

A dividend of €1.70 per share was approved for the 2018 financial year and paid out by KRONES AG in 2019 (previous year: €1.70 per share). The total dividend payout came to €53,708 thousand (previous year: €53,708 thousand).

Disclosures about capital management

A strong equity position is an important prerequisite for ensuring KRONES' long-term survival. To achieve this, KRONES regularly monitors and manages its capital on the basis of the equity ratio. In order to share the company's success with shareholders, KRONES' policy is to pay out 25% to 30% of consolidated profit in the form of dividends.

10 Capital reserves

The capital reserves total €141,724 thousand (previous year: €141,724 thousand). The capital reserves include amounts transferred under Section 272 (2) No. 4 of the German Commercial Code (HGB) and amounts transferred under Section 272 (2) No. 1 HGB totalling €37,848 thousand.

11 Profit reserves

The legal reserve remains unchanged from the previous year at €51 thousand.

The other profit reserves include deductions for negative goodwill from acquisition accounting for subsidiaries consolidated before 1 January 2004 and adjustments made directly in equity at 1 January 2004 on the first-time application of IFRS. They also include the adjustments made directly in equity on the first-time application of IFRS 9 and IFRS 15 as of 1 January 2018.

Currency differences recognised under profit reserves contain the currency translations of financial statements of foreign subsidiaries that are recognised in other comprehensive income. Changes in profit reserves are shown in the consolidated statement of changes in equity.

12 Other reserves

Other reserves changed as follows in financial year 2019:

€ thousand	Reserve for post-employment benefits	Reserve for cash flow hedges	Other	Total
At 31 Dec 2017	**–91,505**	**1,133**	**–804**	**–91,176**
Measurement change	5,948	–3,070	0	2,878
Tax on items taken directly to or transferred from equity	–1,552	690	0	–862
At 31 Dec 2018	**–87,109**	**–1,247**	**–804**	**–89,160**
Measurement change	–37,149	–805	0	–37,954
Tax on items taken directly to or transferred from equity	10,581	220	0	10,801
At 31 Dec 2019	**–113,677**	**–1,832**	**–804**	**–116,313**

The measurement changes for cash flow hedges include additions of €1,832 thousand and amounts reclassified to profit or loss totalling –€1,247 thousand after taxes.

13 Non-controlling interests

In the 2019 financial year, non-controlling interests totalled –€629 thousand (previous year: –€72 thousand).

A detailed overview of the composition of and changes to the individual equity components for the KRONES Group in 2019 and the previous year is presented in the statement of changes in equity on page 135.

14 Provisions for pensions

Provisions for pensions are recognised for obligations relating to vested benefits and current benefit payments for eligible active and former employees of KRONES Group companies and their surviving dependants. Various forms of retirement provision exist depending on the legal, economic and tax circumstances of the relevant country and are generally based on employees' remuneration and years of service.

Company pension plans are generally either defined contribution plans or defined benefit plans.

In defined contribution plans, the company does not assume any obligations beyond establishing contribution payments to special-purpose funds. Contributions are recognised as personnel expense in the year in which they are paid.

In defined benefit plans, the company undertakes an obligation to render the benefits promised to active and former employees, where a distinction is made between systems financed by provisions and systems financed through pension funds. The amount of the pension obligations (the defined benefit obligation) was computed in accordance with actuarial methods. Apart from the assumptions regarding life expectancy based on the 2018G Heubeck actuarial tables, the following average values for the group were also taken into account in the actuarial calculations:

The basis for calculating provisions for pensions in Germany is the company's pension scheme from 31 December 1982, which is closed to new entrants. The scheme entitles all covered employees to post-employment, permanent disability and widow(er)'s pensions. The age limits are 63 for men and 60 for women. The post-employment pension amounts to 1% (0.5% beginning 1 January 1983) of the eligible earned income for each eligible year of employment, not to exceed 25%. It should also be noted that a safeguard for workers' benefits was put into place at the time the new scheme was established on 31 December 2014.

The basis for measurement of the permanent disability and widow(er)'s pensions (50% of post-employment pension) is the post-employment pension that can be earned by the time the employee reaches the age limit, although for the permanent disability benefit only that portion is granted which corresponds to the years of service actually reached. The measurement date for eligible years of service is 31 December 1982. A fixed table applies to new entries after this date. The individual provisions are based on individual contractual agreements.

There are further non-material pension plans in Germany and other countries. These therefore do not need to be described in detail.

Both the defined benefit obligations and plan assets are subject to fluctuations over time. This can have a positive or negative effect on funding status. Fluctuations in the defined benefit obligation within the KRONES Group result primarily from changes in financial assumptions such as discount rates and increases in the cost of living as well as changes in demographic assumptions such as changed life expectancy.

%	Average for the group	
	2019	2018
Discount rate	1.2	2.0
Projected increases in wages and salaries	0.0	0.0
Projected increases in state pensions	2.0	2.0

The rates recommended for measuring pension liabilities at the end of the business year as published by Heubeck AG, Mercer Deutschland GmbH, TowersWatson and AON Hewitt are used to determine the relevant discount rates. These values, which in turn are determined on the basis of market yields on senior fixed-coupon corporate bonds, are used to obtain an interest rate that reflects the anticipated benefit payments.

The following amounts are expected to be contributed to the defined benefit obligation in the coming years.

€ thousand	2019
Within the next 12 months	6,454
Between 2 and 5 years	27,907
Between 5 and 10 years	41,254

The average weighted residual term of post-employment benefit obligations is 20 years (previous year: 18 years).

The projected increases in wages and salaries comprise expected future pay increases, which are estimated each year on the basis of inflation and employees' years of service with the company. Since the pension commitments at our companies in Germany are independent of future pay increases, the projected increase in wages and salaries was not taken into account when determining the corresponding pension provisions.

Increases or decreases in either the net present value of defined benefit obligations or the fair value of fund assets can result in actuarial gains or losses due to factors such as changes in parameters, changes in estimates relating to the risks associated with the pension commitments and differences between the actual and expected return on plan assets. The net value of the pension provisions breaks down as follows:

€ thousand	31 Dec 2019	31 Dec 2018	31 Dec 2017
Present value of benefit commitments financed by provisions	234,644	199,099	199,129
Present value of benefit commitments financed through pension funds	53,134	49,534	50,722
Present value of benefit commitments (gross)	287,778	248,633	249,851
Fair value of plan assets	−27,584	−28,083	−29,622
Carrying amount at 31 December (net defined benefit obligation)	**260,194**	**220,550**	**220,229**

The pension provisions, which amounted to €248,672 thousand at the reporting date (previous year: €212,086 thousand), are primarily attributable to KRONES AG. The actuarial gains or losses resulting from changes in financial assumptions totalled €37,802 thousand (previous year: €9.140 thousand). Experience adjustments total –€653 thousand (previous year: –€17 thousand); adjustments due to changes in demographic assumptions total €0 thousand (previous year: –€3,311 thousand).

The costs arising from pension obligations amounted to €5,889 thousand (previous year: €5,272 thousand) and break down as follows:

€ thousand	31 Dec 2019	31 Dec 2018	31 Dec 2017
Current service cost	1,213	727	618
Interest expense	5,010	4,562	4,492
Expected return on plan assets	−553	−508	−545
Past service cost and plan curtailments	218	491	156
Costs arising from pension obligations	**5,889**	**5,272**	**4,721**

The present value of defined benefit obligations, which amounted to €287,778 thousand (previous year: €248,633 thousand), the fair value of the plan assets, which amounted to €27,584 thousand (previous year: €28,083 thousand), and the net amount of the two items reconcile as follows:

€ thousand	Present value of benefit commitments	Fair value of plan assets	Total
At 1 January 2018	**249,851**	**−29,622**	**220,229**
Consolidated additions	3,742	0	3,742
Current service cost	727	0	727
Interest expense (+)/interest income (–)	4,562	−508	4,054
Actuarial gains/losses	−6,448	500	−5,948
Employer contributions	0	−1,222	−1,222
Benefits paid	−4,765	2,752	−2,013
Recognised past service cost	491	0	491
Exchange differences	473	17	490
At 31 December 2018	**248,633**	**−28,083**	**220,550**

€ thousand	Present value of benefit commitments	Fair value of plan assets	Total
At 1 January 2019	**248,633**	**−28,083**	**220,550**
Consolidated additions	0	0	0
Current service cost	1,213	0	1,213
Interest expense (+)/interest income (–)	5,010	−553	4,457
Actuarial gains/losses	38,819	−1,670	37,149
Employer contributions	0	−477	−477
Benefits paid	−6,518	3,205	−3,313
Recognised past service cost	929	0	0
Exchange differences	−308	−7	−315
At 31 December 2019	**287,778**	**−27,584**	**260,194**

The actuarial gains or losses mainly relate to changes in financial assumptions. KRONES Unterstützungs-Fonds e.V., an occupational pension scheme, is responsible for administrating and managing a portion of the plan assets. KRONES AG is the scheme's sponsoring company. Allianz Global Investor is responsible for administrating and managing another portion of the plan assets as pension liability insurer.

The fair value of plan assets was €27.6 million as of 31 December 2019 (previous year: €28.1 million). Of that, €23.5 million consist of pension liability insurance policies (previous year: €23.6 million). The rest of the plan assets are attributable to KRONES Unterstützungs-Fonds e.V., headquartered in Neutraubling. The fund assets are invested in a special-purpose fund that is administered and actively managed by Allianz GI (AGI). The eligible instruments are specified in the investment guidelines.

A defensive investment strategy is used. At 31 December 2019, the AGI fund consisted of 39.6% government bonds, 6.7% Pfandbriefe (covered bonds governed by the German Pfandbrief Act), and 17.0% investment-grade corporate bonds. The amount held as cash in hand came to 0.6%. The remainder was primarily equity funds. Interest rate risk is actively managed using interest rate futures. The duration of the investment volume is 2.31 years. Management of currency risk: No direct currency investments are made. The overall rating of the fund assets is A+. KRONES AG's plan assets are secured as follows: 84% through the pension liability insurance policies from Allianz and 16% through KRONES Unterstützungs-Fonds e.V.

The expected contributions to plan assets in 2020 are €456 thousand. The expected pension benefit payments to be paid out of plan assets in 2020 amount to €2,849 thousand.

In 2019, a total of €56,742 thousand (previous year: €55,404 thousand) was spent on the employer contribution to defined contribution plans (contributions to pension insurance).

The sensitivity of the total pension commitments to changes in the weighted assumptions is as follows:

		Effect on the obligation	
	Change in assumption	Assumption increases	Assumption decreases
Discount rate	0.50%	9.1% decrease	10.5% increase
Change in state pensions	0.50%	7.5% decrease	6.7% increase
Life expectancy	1 year	4.0% increase	3.5% decrease

The above sensitivity analysis is based on a change in one assumption, with all other factors held constant. It is unlikely that this would be the case in reality and changes in several assumptions may be correlated. The same method was used to calculate the sensitivity of the defined benefit obligation to actuarial assumptions as was used to calculate the provisions for pensions in the statement of financial position.

15 Other provisions

€ thousand	1 Jan 2019	Consolidated additions	Utilisation	Reversal	Unwinding of discount/ change in discount rate	Additions	Exchange differences	31 Dec 2019	Due within 1 year
Personnel obligations	48,453	5,020	9,991	993	964	39,023	−21	82,455	30,371
Provisions for anticipated losses	31,648	0	17,559	8,252	0	13,011	47	18,895	18,663
Provisions for warranties	55,648	0	5,798	3,510	60	12,124	56	58,580	44,913
Other remaining provisions	35,139	310	10,297	8,508	46	39,678	−58	56,310	47,101
Total	**170,888**	**5,330**	**43,645**	**21,263**	**1,070**	**103,836**	**24**	**216,240**	**141,048**

The provisions for personnel obligations primarily comprise, alongside provisions for severance payments, provisions for non-current obligations relating to partial retirement. The provisions for severance payments were recognised in the amount of €26,528 thousand in connection with restructuring and relate to a planned reduction in the workforce by 300 employees in Germany. The personnel obligations include €964 thousand for the effects of the time value of money (previous year: €309 thousand).

Provisions for anticipated losses relate to anticipate losses arising from customer contracts. As soon as an anticipated loss is identified, a provision is immediately recognised for it at the expected amount.

The provisions for warranties relate to project business and represent the expected costs from customer orders. The estimates for liabilities relating to project business are based on experience in recent years and mostly have a contractual term of between one and two years from acceptance. KRONES therefore expects that the majority of provisions for warranties will be settled within the next two years.

The other remaining provisions primarily include provisions for damages and legal fees. The non-current provisions have been discounted using rates between 0.6% and 1.0%.

16 Liabilities

€ thousand	Residual term of up to 1 year	Residual term of 1 to 5 years	Residual term of over 5 years	Total at 31 Dec 2019
Liabilities to banks	72,178	64	0	72,242
Contract liabilities	442,884	0	0	442,884
Trade payables	463,722	14	0	463,736
Other financial obligations	5,085	45,666	0	50,751
Liabilities from leases	29,802	56,034	3,212	89,048
Other liabilities*	325,818	2,600	0	328,418
Total	**1,339,489**	**104,378**	**3,212**	**1,447,079**

* The other liabilities include €98,654 thousand in financial liabilities.

€ thousand	Residual term of up to 1 year	Residual term of 1 to 5 years	Residual term of over 5 years	Total at 31 Dec 2018
Liabilities to banks	555	3,169	0	3,724
Contract liabilities	547,222	0	0	547,222
Trade payables	491,585	1	0	491,586
Other financial obligations	106,552	41,125	0	147,677
Liabilities from leases	118	177	0	295
Other liabilities*	261,655	2,298	0	263,953
Total	**1,407,687**	**46,770**	**0**	**1,454,457**

* The other liabilities include €72,176 thousand in financial liabilities.

Liabilities to banks carried interest at an average rate of 0.15% in the financial year.

Reconciliation of movements in liabilities to cash flow from financing activities

The table below shows changes in liabilities to banks and lease liabilities as a result of cash and non-cash changes.

€ thousand	31 Dec 2018	Non-cash change due to first-time application of IFRS 16	Other changes	Cash changes	Non-cash change due to acquisitions	31 Dec 2019
Liabilities to banks	3,724			68,518	0	72,242
Liabilities from leases	295	88,186	31,537	−32,156	1,186	89,048
Total	**4,019**	**88,186**	**31,537**	**36,362**	**1,186**	**161,290**

€ thousand	31 Dec 2017	Non-cash change due to first-time application of IFRS 16	Other changes	Cash changes	Non-cash change due to acquisitions	31 Dec 2018
Liabilities to banks	24,620		0	−24,065	3,169	3,724
Liabilities from leases	102		291	−98	0	295
Total	**24,722**		**291**	**−24,163**	**3,169**	**4,019**

The other changes mainly comprise additions from new leases.

The other financial obligations are obligations on bills, put/call options and earn-out obligations. Under IFRS 9, the obligations on bills represent possible liabilities from bills sold and are also recognised as trade receivables amounting to €0 thousand (previous year: €106,670 thousand).

The other liabilities break down as follows:

€ thousand	Residual term of up to 1 year	Residual term of 1 to 5 years	Residual term of over 5 years	Total at 31 Dec 2019
Tax liabilities	36,382	74	0	36,456
Social security liabilities	8,959	0	0	8,959
Payroll liabilities	23,802	928	0	24,730
Accruals	221,998	0	0	221,998
Other	34,677	1,598	0	36,275
Total	**325,818**	**2,600**	**0**	**328,418**

Accruals, which amounted to €221,998 thousand (previous year: €158,605 thousand), have greater certainty with respect to their amount and timing than is the case with provisions. The primary items they include are outstanding supplier invoices, obligations relating to flexible working hours, accrued vacation, and performance bonuses.

€ thousand	Residual term of up to 1 year	Residual term of 1 to 5 years	Residual term of over 5 years	Total at 31 Dec 2019
Tax liabilities	32,999	0	0	32,999
Social security liabilities	9,887	0	0	9,887
Payroll liabilities	27,653	1,354	0	29,007
Accruals	158,605	0	0	158,605
Other	32,511	944	0	33,455
Total	**261,655**	**2,298**	**0**	**263,953**

17 Contingent liabilities

There were no contingent liabilities in the reporting period or in the previous year.

18 Other disclosures relating to financial instruments

The derivative financial instruments of the KRONES Group substantially cover the currency risks relating to the US dollar, the Canadian dollar, the Norwegian krone, the Japanese yen and the euro.

The nominal and fair values of the derivative financial instruments are as follows at the reporting date:

€ thousand	31 Dec 2019	31 Dec 2018	31 Dec 2019	31 Dec 2018
	Nominal value	Nominal value	Fair value	Fair value
Financial assets				
Currency hedging				
Forward exchange contracts	85,689	55,041	903	860
of which hedge accounting	76,953	28,875	872	450
Financial liabilities				
Currency hedging				
Forward exchange contracts	197,511	73,431	3,392	1,981
of which hedge accounting	97,853	61,338	2,479	1,781

The fair value includes the difference between the forward rate received from the relevant commercial bank and the rate at the reporting date together with appropriate premiums or discounts under accepted appraisal methodologies. These financial instruments are generally accounted for at the trade date.

Default risk relating to derivative financial instruments in the event of counterparty default is limited to the balance of the positive fair values. The cash flow hedges presented are judged to be effective. The net loss from derivatives was –€5.037 thousand in the reporting period (previous year: net loss of €386 thousand).

The German master agreements and ISDA agreements do not meet the criteria to require offsetting in the consolidated statement of financial position. That is because the company currently does not have a legally enforceable right to offset the recognised amounts. The right to offset these amounts is only enforceable if future events occur such as insolvency of a party to the contract. Hedging transactions entered into directly by subsidiaries of the KRONES Group also cannot be offset.

The table below presents the carrying amounts of the financial assets and liabilities underlying these agreements:

€ thousand	31 Dec 2019	31 Dec 2018
Financial assets		
Gross amounts of recognised financial assets	1,688,445	1,887,606
Amounts that are netted in accordance with IAS 32.42	0	0
Net amounts of recognised financial assets	1,688,445	1,887,606
Amounts subject to master netting agreement		
Derivates	−3,392	−1,981
Net amount of financial assets	1,685,053	1,885,625
Financial liabilities		
Gross amounts of recognised financial liabilities	774,431	715,458
Amounts that are netted in accordance with IAS 32.42	0	0
Net amounts of recognised financial liabilities	774,431	715,458
Amounts subject to master netting agreement	0	0
Derivates	−903	−860
Net amount of financial liabilities	773,528	714,598

The following table presents the financial instruments by their measurement categories and classes and also shows how the financial instruments that are measured at fair value fit within the fair value hierarchy.

31 Dec 2019			Measurement under IFRS 9				Measurement hierarchy		
€ thousand	Carrying amount at 31 Dec 2019	Of which subject to IFRS 7	At amortised cost (AC)	At fair value through profit or loss (FVTPL)	At fair value through other comprehensive income (FVOCI)	Measurement under IFRS 16	Level 1	Level 2	Level 3
Assets									
Non-current financial assets	28,127	3,307	3,307						
Trade receivables	961,789	961,789	961,789						
Contract assets	571,261	571,261	571,261						
Other assets	165,419	41,706	40,803	31	872			903	
of which derivatives	903	903		31	872			903	
Cash and cash equivalents	110,382	110,382	110,382						
Liabilities									
Liabilities to banks	72,242	72,242	72,242						
Trade payables	463,736	463,736	463,736						
Other financial liabilities and lease liabilities	139,799	139,799		50,751		89,048			50,751
Other liabilities and provisions	328,418	98,654	95,262	913	2,479			3,392	
of which derivatives	3,392	3,392		913	2,479			3,392	

31 Dec 2018			Measurement under IFRS 9				Measurement hierarchy		
€ thousand	Carrying amount at 31 Dec 2018	Of which subject to IFRS 7	At amortised cost (AC)	At fair value through profit or loss (FVTPL)	At fair value through other comprehensive income (FVOCI)	Measurement under IAS 17	Level 1	Level 2	Level 3
Assets									
Non-current financial assets	8,770	3,805	3,805						
Trade receivables	987,970	987,970	987,970						
Contract assets	647,089	647,089	647,089						
Other assets	166,128	29,940	29,080	410	450			860	
of which derivatives	860	860		410	450			860	
Cash and cash equivalents	218,802	218,802	218,802						
Liabilities									
Liabilities to banks	3,724	3,724	3,724						
Trade payables	491,586	491,586	491,586						
Other financial liabilities	147,972	147,972	106,889	41,083					41,083
Other liabilities and provisions	263,953	72,176	69,899	199	1,781	295		1,982	
of which derivatives	1,982	1,982		199	1,781			1,982	

Financial instruments categorised as Level 3 inputs and measured at fair value developed as follows:

€ thousand	2019	2018
Net carrying amount at 1 January	41,083	26,974
Additions resulting from acquisitions	0	2,582
Changes	9,668	11,527
(of which currency effects)	172	234
Net carrying amount at 31 December	50,751	41,083

There were no other changes. The financial liabilities, which are based on individual measurement parameters and recognised at fair value, comprise contingent consideration and combined put/call options relating to acquisitions. These items are recognised under other financial liabilities and have been measured on the basis of recognised accounting models, taking into account contractual agreements as well as market and company data available at the reporting date.

The fair value of the put/call option for SYSTEM LOGISTICS was measured using the discounted cash flow method. The main input factors are medium-term planning and the discount rate. The estimated range of the undiscounted exercise prices is between €18,070 thousand and €55,104 thousand at the reporting date. On this basis, the fair value at the reporting date was €36,133 thousand. The fair value of the put option for IPS PLASTICS was measured using the discounted cash flow method. The main input factors are medium-term planning and the discount rate. On this basis, the fair value at the reporting date was €1,277 thousand.

There were no transfers between levels of the hierarchy.

The age structure of trade receivables and other receivables is as follows at 31 December 2019:

€ thousand		Carrying amount	Of which not overdue at the reporting date	Of which overdue by the following number of days at the reporting date			
				Up to 90 days	Between 90 and 180 days	Between 180 and 360 days	More than 360 days
31 Dec 2019	Trade receivables and contract assets	1,533,050	1,368,344	115,204	21,677	19,501	8,324
31 Dec 2018	Trade receivables and contract assets	1,635,059	1,460,726	116,017	21,212	24,337	12,767

The default risk to which the Group is exposed in trade receivables and contract assets primarily depends on customer creditworthiness.

KRONES' management has implemented a process in which each customer is assessed in terms of creditworthiness on the basis of external data such as ratings or internal data such as payment history and past-due status of receivables.

The final assessment is made on the basis of customer groups and a classification of customers into one of five risk categories, A to E, according to past-due status.

An expected credit loss rate is computed for each risk category on the basis of meaningful data.

The table below shows the gross carrying amounts and expected credit losses on trade receivables and contract assets:

Rating-based at 31 Dec 2019	Gross carrying amount in € thousand	Average loss rate	Loss allowance in € thousand
Key accounts	536,860	0.11%	501
Major customers	706,849	1.81%	7,224
Total	**1,243,709**		**12,179**

Rating-based at 31 Dec 2018	Gross carrying amount in € thousand	Average loss rate	Loss allowance in € thousand
Key accounts	471,345	0.45%	1,984
Major customers	821,086	0.99%	7,330
Total	**1,292,431**		**9,314**

Indicators that trade receivables and contract assets may be impaired include significant financial difficulties on the part of the customer.

	Category					
31 Dec 2019	A	B	C	D	E	**Total**
Average loss rate (%)	0.56 %	0.50 %	1.45 %	4.20 %	11.21 %	
Gross carrying amount in € thousand	252,763	42,674	15,182	7,001	12,291	**329,911**
Loss allowance in € thousand	1,417	212	220	294	1,378	**3,521**

	Category					
31 Dec 2018	A	B	C	D	E	**Total**
Average loss rate (%)	0.23 %	0.18 %	1.70 %	5.33 %	39.62 %	
Gross carrying amount in € thousand	279,308	49,426	9,342	9,998	8,225	**356,299**
Loss allowance in € thousand	608	81	147	495	3,026	**4,357**

In addition, specific valuation allowances were recognised in the amount of €24,874 thousand (previous year: €21,901 thousand) for uncollectible receivables.

The following overview of maturities shows how the undiscounted cash flows relating to liabilities as of 31 December 2019 influence the company's liquidity situation.

€ thousand	Carrying amount at 31 Dec 2019	Cash flow 2020		Cash flow 2021–2024		Cash flow beyond 2024	
		Interest	Repayment	Interest	Repayment	Interest	Repayment
Derivative financial instruments	3,392	0	2,828	0	564	0	0
Liabilities to banks	72,242	0	72,178	3	64	0	0
Trade payables	463,736	0	463,722	0	14	0	0
Liabilities from leases	89,048	2,082	29,802	5,125	56,034	611	3,212
Other financial liabilities	146,013	0	100,347	0	47,216	0	0
	774,431	**2,082**	**668,877**	**5,128**	**103,892**	**611**	**3,212**

€ thousand	Carrying amount at 31 Dec 2018	Cash flow 2019		Cash flow 2020–2023		Cash flow beyond 2023	
		Interest	Repayment	Interest	Repayment	Interest	Repayment
Derivative financial instruments	1,982	0	1,980	0	2	0	0
Liabilities to banks	3,724	0	555	680	3,169	0	0
Trade payables	491,586	0	491,585	0	1	0	0
Liabilities from leases	295	6	118	15	177	0	0
Discounted trade bills	106,670	0	106,670	0	0	0	0
Other financial liabilities	111,201	0	69,899	44	41,302	0	0
	715,458	**6**	**670,807**	**739**	**44,651**	**0**	**0**

Material items denominated in foreign currencies in accordance with IFRS 7 classes:

31 Dec 2019 € thousand	Currency USD	Currency NOK	Currency CAD	Currency CNY	Currency JPY
Cash and cash equivalents	310	0	450	0	0
Trade receivables	0	1.920	0	0	0
Other financial receivables	0	0	0	0	0
Derivatives at positive market values	395	0	0	1	474
Total assets	**705**	**1.920**	**450**	**1**	**474**
Liabilities					
Trade payables	2,044	18	8,117	317	−3,129
Liabilities to banks	0	0	0	0	0
Other liabilities	0	0	0	0	0
Derivatives at negative market values	1,611	24	1,198	545	−8
Total liabilities	**3,655**	**42**	**9,315**	**862**	**−3,137**
Balance of assets and liabilities	**−2,950**	**1,878**	**−8,865**	**−861**	**−2,663**
Net exposure at 31 Dec 2019	**−2,950**	**1,878**	**−8,865**	**−861**	**−2,663**

A change in the reporting date exchange rate by +10% in relation to the foreign currency against the euro (indirect quotation) would have the following effect on consolidated net income and other equity components:

€ thousand	Currency USD	Currency NOK	Currency CAD	Currency CNY	Currency JPY
Consolidated statement of profit and loss	−2,958	−12	536	−2,512	206
Consolidated equity	5,590	0	1,654	1,953	1,478

31 Dec 2018 € thousand	Currency USD	Currency NOK	Currency CAD	Currency CNY	Currency GBP
Cash and cash equivalents	395	0	132	56	0
Trade receivables	907	0	5.238	0	0
Other financial receivables	0	635	34	0	0
Derivatives at positive market values	194	284	269	0	45
Total assets	**1,496**	**919**	**5,673**	**56**	**45**
Liabilities					
Trade payables	−2,114	0	0	−1,082	−39
Liabilities to banks	0	0	0	0	0
Other liabilities	−856	−14,217	−2,543	0	−4,007
Derivatives at negative market values	−1,100	−11	−7	−589	0
Total liabilities	**−4,070**	**−14,228**	**−2,550**	**−1,671**	**−4,046**
Balance of assets and liabilities	**−2,574**	**−13,309**	**3,123**	**−1,615**	**−4,001**
Net exposure at 31 Dec 2018	**−2,574**	**−13,309**	**3,123**	**−1,615**	**−4,001**

A change in reporting date closing rate by +10% in relation to the foreign currency against the euro (indirect quotation) would have the following effect on consolidated net income and other equity components:

€ thousand	Currency USD	Currency NOK	Currency CAD	Currency CNY	Currency GBP
Consolidated statement of profit and loss	–116	1,254	–87	68	567
Consolidated equity	3,022	1,254	553	214	671

Notes to the **consolidated statement of profit and loss**

19 Revenue

The KRONES Group's revenue of €3,958,875 thousand (previous year: €3,853,980 thousand) is recognised revenue from contracts with customers. Revenue from contracts with customers breaks down by segment and invoice recipients in geographical regions as follows.

€ thousand	2019		2018	
	Machines and Lines for Product Filling and Decoration	Machines and Lines for Beverage Production/Process Technology	Machines and Lines for Product Filling and Decoration	Machines and Lines for Beverage Production/Process Technology
Germany	394,327	74,027	273,431	88,913
Central Europe (excluding Germany)	187,141	13,832	205,006	19,587
Western Europe	448,784	171,362	543,892	177,751
Middle East/Africa	385,806	65,640	424,271	76,371
Eastern Europe	201,245	44,152	164,971	22,458
Russia, Central Asia (CIS)	69,992	6,365	62,014	17,842
Asia-Pacific	449,856	71,182	402,170	43,556
China	361,781	10,039	277,993	12,778
North and Central America	536,520	146,939	420,611	112,452
South America/Mexico	229,965	89,920	403,491	104,422
Total	**3,265,417**	**693,458**	**3,177,850**	**676,130**

The group's contract assets and contract liabilities changed as follows in the financial year:

€ thousand	31 Dec 2019	31 Dec 2018
Contract assets	571,261	647,089
Contract liabilities	442,884	547,222

The amount of revenue recognised in 2019 that was included in the contract liability balance at the beginning of the reporting period was €547,222 thousand (previous year: €392,986 thousand).

The reduction in contract assets is mainly due to a lower volume of work in progress. The reduction in contract liabilities is mainly due to lower prepayments from customers.

The amount of the transaction price allocated to performance obligations unsatisfied (or partially unsatisfied) at the end of the reporting period was €32,057 thousand (previous year: €25,072 thousand). KRONES will recognise most of this as revenue in the next 36 months. No disclosures under IFRS 15.120 are made for performance obligations with an original expected duration of one year or less.

Most revenue in the Machines and Lines for Product Filling and Decoration segment and almost all revenue in the Machines and Lines for Beverage Production/Process Technology segment is recognised over time.

20 Other own work capitalised

Other own work capitalised consists primarily of capitalised development expenditure and capitalised cost of self-constructed property, plant and equipment at the Hungary and Neutraubling production locations.

With respect to development expenditure capitalised in accordance with IAS 38, please refer to the notes on intangible assets.

21 Other operating income

Apart from prior-period income from reversal of provisions and accruals (€16,062 thousand; previous year: €13,727 thousand), gains from disposals of non-current assets (€846 thousand; previous year: €479 thousand) and the reversal of loss allowances (€2,032 thousand; previous year: €7,910 thousand), the other operating income, which amounts to €99,826 thousand (previous year: €114,492 thousand), consists substantially of currency translation gains of €35,505 thousand (previous year: €36,548 thousand). This compares with additions to loss allowances of €14,598 thousand (previous year: €3,148 thousand) and currency translation losses of €45,888 thousand (previous year: €45,201 thousand) under other operating expenses.

22 Goods and services purchased

The expenses for goods and services purchased comprises expenses for materials and supplies and for goods purchased amounting to €1,525,551 thousand (previous year: €1,523,504 thousand) and expenses for services purchased amounting to €516,237 thousand (previous year: €508,521 thousand).

23 Personnel expenses

Within the KRONES Group, 16,589 people (previous year: 15,330) including trainees (591; previous year: 546) were employed on average over the year. The workforce of the KRONES Group is composed as follows (average for the year):

	2019	2018
White-collar employees exempt from collective agreements	2,907	2,766
Employees covered by collective agreements	13,682	12,564
Total	**16,589**	**15,330**

24 Other operating expenses

Apart from the €630 thousand in prior-period losses from disposals of non-current assets (previous year: €453 thousand), the other operating expenses include additions to loss allowances (€14,598 thousand; previous year: €3,148 thousand), other taxes (€6,152 thousand; previous year: €5,664 thousand), freight costs (€121,034 thousand; previous year: €124,272 thousand), travel costs (€115,479 thousand; previous year: €110,677), currency translation losses (€45,888; previous year: €45,201 thousand), rent and cleaning costs (€6,719 thousand; previous year: €40,873 thousand) and maintenance costs (€38,985 thousand; previous year: €36,191 thousand).

25 Financial income/expense

The financial income/expense of –€2,206 thousand (previous year: €1,099 thousand) breaks down as follows:

€ thousand	2019	2018
Income from other securities and long-term loans	0	2
Interest and similar income	7,520	6,121
Interest and similar expenses	–14,628	–14,592
Interest income/expense	–7,108	–8,471
Investment income	5,588	8,747
Profit or loss shares attributable to associates that are accounted for using the equity method	–686	821
Net financial income/expense	**–2,206**	**1,099**

Besides interest and similar income of €7,520 thousand (previous year: €6,121 thousand) and interest and similar expenses of €14,628 thousand (previous year: €14,592 thousand), financial income/expense also included investment income of €5,588 thousand (previous year: €8,747 thousand) relating to non-consolidated companies. The interest and similar income includes €1.231 thousand (previous year: €563 thousand) for reductions in put options and earn-out obligations. The interest and similar expenses include €3,297 thousand (previous year: €4 thousand) in interest on lease liabilities, €4,729 thousand for impairment of the equity-accounted shares in INTEGRATED PACKAGING SYSTEMS (IPS) FZCO, Dubai and €3,615 thousand (previous year: €10,749 thousand) for an increase in put options and earn-out obligations. Further information on investments accounted for using the equity method is provided in Note 4.

26 Income tax

Income tax amounted to –€32,501 thousand in 2019 (previous year: –€53,650 thousand). *Further information is presented under Note 8, "Income tax" (pages 161 to 162).*

27 Earnings per share

Under IAS 33 "Earnings per share", basic earnings per share are calculated by dividing consolidated net income – less profit or loss shares of non-controlling interests – by the weighted average number of ordinary shares in circulation, as follows:

As in the previous year, diluted earnings per share are equal to basic earnings per share.

	2019	2018
Consolidated net income less profit or loss shares of non-controlling interests (€ thousand)	9,491	151,083
Weighted average number of ordinary shares in circulation (shares)	31,593,072	31,593,072
Earnings per share (€)	**0.30**	**4.78**

Accounting standards applied for the first time

First-time application of the new financial reporting standard IFRS 16 Leases from Contracts with Customers results in changes to the group's accounting policies as described in the following. Other financial reporting standards and interpretations to be applied for the first time have no effect on the consolidated financial statements.

IFRS 16 Leases

IFRS 16 replaces the existing rules on leases, including IAS 17 Leases, IFRIC 4 Determining Whether an Arrangement Contains a Lease, SIC 15 Operating Leases and SIC 27 Evaluating the Substance of Transactions in the Legal Form of a Lease. The standard was applied for the first time as of 1 January 2019.

The group elected to use the practical expedient for transition. It is therefore not required to reassess whether a contract is, or contains, a lease at 1 January 2019. Instead, the group has only applied the standard to contracts that were identified at the initial application date as leases applying IAS 17 Leases and IFRIC 4 Determining whether an Arrangement contains a Lease.

KRONES applies the modified retrospective method, according to which the cumulative effects of first-time application are shown as an adjustment to the opening balance of profit reserves. On first-time application, right-of-use assets were recognised in the amount of the present value of the lease liabilities totalling €88.481 thousand with no resulting change in profit reserves. The prior-year figures were not restated.

With regard to the elections provided for in the standard, KRONES makes use of the practical expedients for leases of low-value assets, short-term leases and leases of intangible assets. In addition, any service components included in lease payments were included in calculation of the present value of the lease payments.

Operating lease liabilities as of 31 December 2018 are reconciled to the opening balance of lease liabilities as of 1 January 2019 as follows:

€ thousand	1 Jan 2019
Operating lease liabilities at 31 December 2018*	72,524
Minimum lease payments (nominal amount) on finance lease liabilities at 31 December 2018	307
Practical expedient for leases of low-value assets	–1,702
Extension and termination options that are reasonably certain to be exercised	27,063
Gross lease liabilities at 1 January 2019	**98,191**
Discounting	9,710
Lease liabilities at 1 January 2019	**88,481**
Present value of finance lease liabilities at 31 December 2018	–295
Additional lease liabilities resulting from initial application of IFRS 16 at 1 January 2019	**88,186**

*Corrected amount

The lease liabilities were discounted as of January 1, 2019 using the incremental borrowing rate. The weighted average incremental borrowing rates was 3.6%. For the purpose of determining the incremental borrowing rate, benchmark interest rates for the lease terms of committed leases were derived from yields on similar corporate bonds in a similar economic environment and with similar security. The benchmark interest rates were supplemented by a lease risk premium.

Information on right-of-use assets and lease liabilities, together with further explanations, are provided under the respective items of the statement of financial position.

Other disclosures

Audit and consulting fees

The total fee invoiced by the auditor of the financial statements was as follows:

€ thousand	2019
Audit services	471
Other assurance services	59
Other services	30

Disclosures in accordance with the EU Audit Regulation

Other assurance services include statutory audits of corporate governance and supervision systems and functions (non-audit services required by national law) and non-statutory assurance services relating to non-financial information (non-audit services).

The other services are a benchmark analysis (non-audit service).

Events after the reporting period

The outbreak and rapid spread of the coronavirus (COVID-19) since the beginning of 2020 has affected business and economic activity not only in China, but also worldwide. The financial effect of this event on Krones could not be estimated at the time of publication of the annual report because it was not possible to estimate the extent of the spread and the consequences for KRONES' business.

Related party disclosures

Within the meaning of IAS 24 Related Party Disclosures, the members of the Supervisory Board and of the Executive Board of KRONES AG and the companies of the KRONES Group, including unconsolidated subsidiaries, are deemed related parties.

The ultimate controlling party of KRONES AG is Familie Kronseder Konsortium GbR. Purchases and sales between the related companies are transacted at prices customary on the market ("at arm's length"). Sales to subsidiaries that are not consolidated amounted to €31,534 thousand in 2019 (previous year: €27,738 thousand). Commissions received from such subsidiaries amounted to €5,262 thousand in 2019 (previous year: €8,885 thousand). Trade and other payment transactions resulted in assets of €11,972 thousand (previous year: assets of €10,008 thousand). Repayment is normally within twelve months. Loss allowances were recognised on receivables in the amount of €2,959 thousand in the financial year (previous year: €0 thousand). Also included is income from long-term equity investments in non-consolidated entities in the amount of €5,588 thousand (previous year: €8,747 thousand).

There are no contingent liabilities relating to guarantees (previous year: €2,697 thousand). Trade and other payment transactions with associates totalled €6,946 thousand in 2019 (previous year: €22,532 thousand). This did not result in any liabilities (previous year: liabilities of €1,616 thousand).

Executive Board remuneration and benefits paid to former members of the Executive Board

Total Executive Board remuneration, plus expenses for the long-term incentive provision and benefit expense for the termination agreement with Mr. Michael Andersen, amounted to €6,897 thousand for the 2019 financial year (previous year: €5,745 thousand).

This includes short-term benefits in the amount of €2,258 thousand (previous year: €4,084 thousand), other long-term benefits in the amount of €686 thousand (previous year: €489 thousand) and early termination benefits in the amount of €2,781 thousand (previous year: €0 thousand). The short-term benefit expense is reduced by the Executive Board waiving payment of remuneration components or by contractual arrangements on leaving. In addition, €1,172 thousand (previous year: €1,172 thousand) was paid into the contribution-based post-employment benefits plan in 2019. Information on the individual remuneration of members of the Executive Board is provided in the remuneration report.

Benefits granted to former members of the Executive Board and their surviving dependants amounted to €1,842 thousand (previous year: €1,688 thousand). This mainly consists of pension benefits. Pension provisions were recognised in the amount of €12,069 thousand (previous year: €8,761 thousand). The increase relates to changes in the actuarial discount rate.

Supervisory Board remuneration

The total remuneration paid to members of the Supervisory Board for the 2019 financial year amounted to €812 thousand (previous year: €712 thousand). Information on the individual remuneration of members of the Supervisory Board is provided in the remuneration report.

Corporate Governance

Shareholders can view the declaration of the Executive Board and the Supervisory Board of 22 January 2020 pursuant to Section 161 of the German Stock Corporation Act [AktG] concerning the Corporate Governance Code as amended on 7 February 2017 at KRONES AG's website. The exceptions are also listed there.

Risk report

The risk report is part of the management report and is on pages 92 to 102.

Standards/interpretations

The accounting policies used in these consolidated financial statements are the standards and interpretations whose application is mandatory as of 31 December 2019. The following new or amended standards and interpretations applied for the 2019 financial year.

Standard or interpretation		Endorsement	Application mandatory for annual periods beginning
IAS 19	Amendments to: Plan Amendment, Curtailment or Settlement	completed	1 Jan 2019
IAS 28	Amendments to: Long-term Interests in Associates and Joint Ventures	completed	1 Jan 2019
IFRS 9	Amendments to: Prepayment Features with Negative Compensation	completed	1 Jan 2019
IFRS 16	Leases	completed	1 Jan 2019
IFRIC 23	Uncertainty over Income Tax Treatments	completed	1 Jan 2019
	Annual Improvements to IFRS – 2015–2017 Cycle	completed	1 Jan 2019

Various new or amended standards entered into force in the reporting period. First-time application of the new standard IFRS 16 Leases resulted in changes to the group's accounting policies. The effects of first-time application of this standard are described on page 176. The remaining new or amended standards and interpretations listed above have no material relevance for KRONES AG.

The following standards and interpretations have been issued by the IASB but their application is not mandatory until after 31 December 2019.

Standard or interpretation		Endorsement	Application mandatory for annual periods beginning
Conceptual Framework	Amendments to: Conceptual Framework for Financial Reporting and Amendments to References to the Conceptual Framework in IFRS Standards	completed	1 Jan 2020
IAS 1	Amendments to: Classification of Liabilities as Current or Non-Current	open	1 Jan 2022
IFRS 3	Amendments to: Definition of a Business	open	1 Jan 2020
IFRS 17	Insurance Contracts	open	1 Jan 2021
IAS 1 und 8	Amendments to: Definition of Material	completed	1 Jan 2020
IFRS 9, IAS 29 and IFRS 7	Amendments to: Interest Rate Benchmark Reform	completed	1 Jan 2020

These standards and interpretations are not expected to have a material impact on the consolidated financial statements of KRONES AG in the reporting period to which they are applied for the first time.

Shareholdings

Name and location of the company	Share in capital held by KRONES AG (%*)
DEKRON GMBH, Kelkheim	100.00
ECOMAC GEBRAUCHTMASCHINEN GMBH, Neutraubling	100.00
EVOGUARD GMBH, Nittenau	100.00
GERNEP GMBH ETIKETTIERTECHNIK	100.00
HST MASCHINENBAU GMBH, Dassow	100.00
KIC KRONES INTERNATIONALE COOPERATIONS-GESELLSCHAFT MBH, Neutraubling	100.00
KRONES BETEILIGUNGSGESELLSCHAFT MBH, Neutraubling	100.00
KRONES SERVICE EUROPE GMBH (former MAINTEC SERVICE GMBH), Collenberg/Main	100.00
MHT HOLDING AG, Hochheim am Main	100.00
MHT MOLD & HOTRUNNER TECHNOLOGY AG, Hochheim am Main	100.00
MILKRON GMBH, Laatzen	100.00
PMR GMBH, Wackersdorf	100.00
SYSKRON GMBH, Wackersdorf	100.00
SYSKRON HOLDING GMBH, Wackersdorf	100.00
SYSKRON X GMBH, Wackersdorf	100.00
SYSTEM LOGISTICS GMBH, Wackersdorf (former NEUSPED NEUTRAUBLINGER SPEDITIONS-GMBH, Neutraubling)	100.00
TECHNOLOGISCHES INSTITUT FÜR ANGEWANDTE KÜNSTLICHE INTELLIGENZ GMBH, Weiden i. d. Opf.	44.00
TRIACOS CONSULTING & ENGINEERING GMBH, Altenstadt an der Waldnaab	100.00
KOSME FBA SA (former S.P.S. – SOLUTIONS FOR PACKAGING SERVICES S.A.), Charleroi, Belgium	100.00
S.A. KRONES N.V., Louvain-la-Neuve, Belgium	100.00
KRONES SERVICE EUROPE EOOD (former MAINTEC SERVICE EOOD), Sofia, Bulgaria	100.00
KRONES NORDIC APS, Holte, Denmark	100.00
KRONES S.A.R.L., Viviers-du-Lac, France	100.00

*Direct and indirect shareholdings

Name and location of the company	Share in capital held by KRONES AG (%*)
KOSME FBA SAS (former SPS S.A.S. – SOLUTIONS FOR PACKAGING SERVICES S.A.S.), Lyon, France	100.00
KRONES UK LTD., Bolton, U.K.	100.00
SYSTEM LTD., London, U.K.	60.00
KOSME S.R.L., Roverbella (MN), Italy	100.00
KRONES S.R.L., Garda (VR), Italy	100.00
SYSTEM LOGISTICS S.P.A., Fiorano Modenese (MD), Italy	60.00
KRONES KAZAKHSTAN TOO, Almaty, Kazakhstan	100.00
IPS INTEGRATED PACKAGING SYSTEMS MALTA LTD., Naxxar, Malta	100.00
KRONES NEDERLAND B.V., Bodegraven, Netherlands	100.00
KOSME GESELLSCHAFT MBH, Sollenau, Austria	100.00
KRONES SPÓLKA Z.O.O., Warschau, Poland	100.00
KRONES PORTUGAL EQUIPAMENTOS INDUSTRIAIS LDA., Barcarena, Portugal	100.00
KRONES ROMANIA PROD. S.R.L., Bukarest, Romania	100.00
KRONES SERVICE EUROPE SRL (former MAINTEC SERVICE SRL), Bukarest, Romania	100.00
KRONES O.O.O., Moscow, Russia	100.00
SYSTEM NORTHERN EUROPE AB, Malmö, Sweden	60.00
INTEGRATED PLASTICS SYSTEMS AG, Baar, Switzerland	70.00
KRONES AG, Buttwil, Switzerland	100.00
KRONES IBERICA, S.A.U., Barcelona, Spain	100.00
SYSTEM LOGISTICS SPAIN SL, Castellon, Spain	60.00
KRONES S.R.O., Prague, Czech Republic	100.00
KONPLAN S.R.O., Pilsen, Czech Republic	100.00
KRONES MAKINA SANAYI VE TIKARET LTD. SIRKETI, Istanbul, Turkey	100.00
KRONES UKRAINE LLC, Kiev, Ukraine	100.00
KRONES HUNGARY KFT., Debrecen, Hungary	100.00
KRONES SERVICE EUROPE KFT. (former MAINTEC SERVICE KFT.), Budapest, Hungary	100.00
INTEGRATED PACKAGING SYSTEMS – IPS, Cairo, Egypt	100.00
KRONES ANGOLA – REPRESENTACOES, COMERCIO E INDUSTRIA, LDA., Luanda, Angola	100.00

*Direct and indirect shareholdings

Name and location of the company	Share in capital held by KRONES AG (%*)
KRONES SURLATINA S.A., Buenos Aires, Argentina	100.00
KRONES PACIFIC PTY LIMITED, Sydney, Australia	100.00
KRONES BANGLADESH LIMITED, Dhaka, Bangladesh	100.00
KRONES DO BRAZIL LTDA., São Paulo, Brazil	100.00
KRONES S.A., São Paulo, Brazil	100.00
KRONES CHILE SPA., Santiago de Chile, Chile	100.00
KRONES ASIA LTD., Hong Kong, China	100.00
KRONES MACHINERY (TAICANG) CO. LTD., Taicang, China	100.00
KRONES TRADING (TAICANG) CO. LTD., Taicang, China	100.00
KRONES PROCESSING (SHANGHAI) CO. LTD., Shanghai, China	100.00
KRONES SALES (BEIJING) CO. LTD., Beijing, China	100.00
AUTOMATA S.A., Guatemala-City, Guatemala	100.00
KRONES INDIA PVT. LTD., Bangalore, India	100.00
UNICORN INDUSTRIES LTD., Secunderabad, India	60.00
PT. KRONES MACHINERY INDONESIA, Jakarta, Indonesia	100.00
IPS JAPAN CO. LTD., Tokyo, Japan	100.00
KRONES JAPAN CO. LTD., Tokyo, Japan	100.00
KRONES (CAMBODIA) CO. LTD., Phnom Penh, Cambodia	100.00
INTEGRATED PACKAGING SYSTEMS INC., Montréal, Québec, Canada	100.00
KRONES MACHINERY CO. LTD., Mississauga, Ontario, Canada	100.00
KRONES LCS CENTER EAST AFRICA LIMITED, Nairobi, Kenya	100.00
KRONES ANDINA LTDA., Bogotá, Colombia	100.00
KRONES KOREA LTD., Seoul, Korea	100.00
KRONES MACHINERY MALAYSIA SDN. BHD., Kuala Lumpur, Malaysia	100.00
KRONES MEX S.A. DE C.V., Mexico-City, Mexico	100.00
SYSTEMLOG DE MEXICO S.A. DE C.V., Santa Caterina, Nuevo Leon, Mexico	60.00
KRONES MYANMAR LTD., Sanchaung Township, Republik der Union Myanmar	100.00
KRONES NEW ZEALAND LIMITED, Auckland, New Zealand	100.00
KRONES LCS CENTER WEST AFRICA LIMITED, Lagos, Nigeria	100.00

*Direct and indirect shareholdings

Name and location of the company	Share in capital held by KRONES AG (%*)
KRONES PAKISTAN (PRIVATE) LIMITED, Lahore, Pakistan	100.00
KRONES FILIPINAS INC., Taguig City, Philippines	100.00
KRONES-IZUMI PROCESSING PTE LTD., Singapore, Singapore	73.00
KRONES SINGAPORE LTD., Singapore, Singapore	100.00
INTEGRATED PACKAGING SYSTEMS SOUTH AFRICA (PTY) LIMITED, Cape Town, South Africa	100.00
KRONES SOUTHERN AFRICA (PROP.) LTD., Johannesburg, South Africa	100.00
KRONES (THAILAND) CO. LTD., Bangkok, Thailand	100.00
SYSTEM LOGISTICS ASIA CO. LTD., Bangkok, Thailand	60.00
INTEGRATED PACKAGING SYSTEMS – IPS TUNISIA, Tunis, Tunesia	100.00
KRONES INC., Franklin, Wisconsin, USA	100.00
SYSTEM LOGISTICS CORPORATION, Arden, North Carolina, USA	60.00
TRANS-MARKET LLC, Tampa, Florida, USA	100.00
JAVLYN PROCESS SYSTEMS LLC, Rochester, New York, USA	100.00
MHT USA LLC., Peachtree City, Georgia, USA	100.00
PROCESS AND DATA AUTOMATION LLC, Erie, Pennsylvania, USA	100.00
W.M. SPRINKMAN LLC, Waukesha, Wisconsin, USA	100.00
MAQUINARIAS KRONES DE VENEZUELA S.A., Caracas, Venezuela	100.00
INTEGRATED PACKAGING SYSTEMS (IPS) FZCO, Dubai, United Arab Emirates	100.00
KRONES MIDDLE EAST AFRICA FZCO, Dubai, United Arab Emirates	100.00
KRONES VIETNAM CO. LTD., Ho-Chi-Minh-City, Vietnam	100.00

*Direct and indirect shareholdings

Use of exemptions

The following fully consolidated German group companies made use of the exemption in Section 264 (3) HGB in the 2019 financial year.

Name and location of the company
KRONES BETEILIGUNGSGESELLSCHAFT MBH, Neutraubling
DEKRON GMBH, Kelkheim
ECOMAC GEBRAUCHTMASCHINEN GMBH, Neutraubling
EVOGUARD GMBH, Nittenau
GERNEP GMBH ETIKETTIERTECHNIK, Barbing
HST MASCHINENBAU GMBH, Dassow
KIC KRONES INTERNATIONALE COOPERATIONS-GESELLSCHAFT MBH, Neutraubling
MILKRON GMBH, Laatzen
SYSTEMS LOGISTICS GMBH, Wackersdorf

The companies are directly and/or indirectly affiliated with KRONES AG by a profit transfer agreement.

Members of the **Supervisory Board** and the **Executive Board**

Pursuant to Section 8 (1) of the articles of association, eight members of the Supervisory Board are elected by the shareholders in accordance with the German Stock Corporation Act (Sections 96 (1) and 101). Eight members are elected by the employees pursuant to Section 1 (1) and Section 7 (1) Sentence 1 Number 1 of the Codetermination Act.

Supervisory Board

Volker Kronseder
Chairman of the Supervisory Board
* UNIVERSITÄTSKLINIKUM REGENSBURG
* WIRTSCHAFTSBEIRAT BAYERISCHE LANDESBANK

Werner Schrödl**
Deputy Chairman of the Supervisory Board
Chairman of the Group Empoyees' Council
Chairman of the Composite Empoyees' Council
* Verwaltungsrat der BAYERISCHEN BETRIEBSKRANKENKASSEN

Dr. Verena Di Pasquale**
Deputy Chairperson of DGB BAYERN (the German Trade Union Confederation in Bavaria)

Robert Friedmann
Spokesman for the central managing board of the WÜRTH GROUP
* ZF FRIEDRICHSHAFEN AG

Klaus Gerlach**
Head of Central International Operations and Services

Oliver Grober**
Chairman of the Employees' Council, Rosenheim

Thomas Hiltl**
Chairman of the Employees' Council, Nittenau

Norman Kronseder
Farmer and forester
* BAYERISCHE FUTTERSAATBAU GMBH

Professor Dr. jur. Susanne Nonnast
Professor at Ostbayerische Technische Hochschule (OTH) Regensburg

Beate Eva Maria Pöpperl**
Independent Member of the Employees' Council

Norbert Samhammer
Chief executive of SAMHAMMER HOLDING GMBH
*SAMHAMMER AG

Petra Schadeberg-Herrmann
Managing partner
KROMBACHER BRAUEREI BERNHARD SCHADEBERG GMBH & CO. KG, KROMBACHER FINANCE GMBH, SCHAWEI GMBH, DIVERSUM HOLDING GMBH & CO. KG

Jürgen Scholz**
First authorised representative IG METALL administrative office, Regensburg
* INFINEON TECHNOLOGIES AG

Hans-Jürgen Thaus
* MASCHINENFABRIK REINHAUSEN GMBH
* HAWE HYDRAULIK SE, ASCHHEIM/MÜNCHEN (bis 27.06.2019)

Josef Weitzer**
Deputy Group Employees' Council Chairman
Deputy Composite Employees' Council Chairman
Chairman of the Employees', Neutraubling
* SPARKASSE REGENSBURG

Matthias Winkler
Managing partner at WW+ KN STEUERBERATUNGS-GESELLSCHAFT MBH

Executive Board

Christoph Klenk
CEO
Intralogistics
Process Technology

Michael Andersen
until 24 July 2019
CFO
Process Technology

Norbert Broger
since 1 January 2020
CFO

Thomas Ricker
CSO

Markus Tischer
International Operations and Services
Digitalisation

Ralf Goldbrunner
Bottling and Packaging Equipment
Compact Class

* Other Supervisory Board seats held, pursuant to Section 125 (1) Sentence 5 of the German Stock Corporation Act
** Elected by the employees
In addition, each of the group companies is the responsibility of two members of the Executive Board.

Proposal for the appropriation of **KRONES AG's earnings available for distribution**

KRONES AG had earnings available for distribution as of 31 December 2019 of € 258,681,143.94.

We propose to the annual general meeting on 18 May 2020 that this amount be used as follows:

Proposal for the appropriation of earnings available for distribution	€
Dividend of €0.75 per share (for 31,593,072 shares)	23,694,804
Amount brought forward to new account	234,986,339.94

Neutraubling, 12. March 2020
KRONES AG

The Executive Board

Christoph Klenk
CEO

Norbert Broger

Thomas Ricker

Markus Tischer

Ralf Goldbrunner

6

OTHER INFORMATION

Independent auditor's report

To KRONES Aktiengesellschaft

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

Opinions

We have audited the consolidated financial statements of KRONES Aktiengesellschaft, Neutraubling and its subsidiaries (the Group), which comprise the consolidated statement of profit and loss and the consolidated statement of comprehensive income for the fiscal year from 1 January 2019 to 31 December 2019, the consolidated statement of financial position as of 31 December 2019, the consolidated statement of changes in equity and the consolidated statement of cash flows for the fiscal year from 1 January 2019 to 31 December 2019, and notes to the consolidated financial statements, including a summary of significant accounting policies. In addition, we have audited the group management report of KRONES Aktiengesellschaft for the fiscal year from 1 January 2019 to 31 December 2019. In accordance with the German legal requirements, we have not audited the content of the responsibility statement included in section "Responsibility statement" of the group management report. In accordance with the German legal requirements, we have not audited the content of the group statement on corporate governance, which was published on the Company's website and referred to in the "Dependency report" section of the group management report. We have not audited the following information not typical of management reports, which is part of other information:

- Section "Fundamental information about the group", sub-section "State-of-the-art production: The new KRONES control cabinet production facility"
- Section "Fundamental information about the group", sub-section "A selection of our innovations"

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

- the accompanying consolidated financial statements comply, in all material respects, with the IFRSs as adopted by the EU, and the additional requirements of German commercial law pursuant to Sec. 315e (1) HGB ["Handelsgesetzbuch": German Commercial Code] and, in compliance with these requirements, give a true and fair view of the assets, liabilities and financial position of the Group as at 31 December 2019 and of its financial performance for the fiscal year from 1 January 2019 to 31 December 2019, and
- the accompanying group management report as a whole provides an appropriate view of the Group's position. In all material respects, this group management report is consistent with the consolidated financial statements, complies with German legal requirements and appropriately presents the opportunities and risks of future development. Our opinion on the group management report does not cover the content of the aforementioned responsibility statement and the group statement on corporate governance as well as the information not typical of management reports referred to above.

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

Basis for the opinions

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

Key audit matters in the audit of the consolidated financial statements

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

Below, we describe what we consider to be the key audit matters:

1. Revenue recognition for customer-specific construction contracts

Reasons why the matter was determined to be a key audit matter

The major part of group revenue is generated from customer projects involving machinery and lines for product filling and beverage production. The performance comprising the design and manufacture of machinery and its installation and commissioning on site is considered as a single performance obligation. As contracts for this machinery and lines are customer-specific, the Group's performance creates an asset that does not have an alternative use to the Group. The Group has a legal right to payment for the performance completed to date, including an appropriate margin. In accordance with IFRS 15, revenue is therefore recognized over time on the basis of the percentage of completion method. The percentage of completion is calculated on the basis of the costs incurred as of the reporting date in relation to the expected total costs of the respective project. There is a particular risk of error when estimating total costs. The significance of revenue for the consolidated financial statements, the judgment involved in estimating total costs and the fact that revenue is one of the financial performance indicators for the group in terms of corporate management and forecasts meant that the recognition of revenue as of the reporting date was a key audit matter.

Auditor's response

During the reporting period, we performed tests to assess the design and operating effectiveness of the significant controls implemented by the executive directors in the area of reporting of costs accrued and the estimate of total contract costs. In this context, we tested both transaction-level controls and entity-level controls, such as regular review meetings.

For a sample of projects, we obtained an overview of the content of the contracts and the status of the respective fulfillment of contracts and analyzed the actual costs incurred and the total costs over the period of the project's progress. We also reviewed the analysis of planning variance of total costs of projects over time performed by the Executive Board in terms of mathematical accuracy and obtained explanations for deviations on a sample basis. Furthermore, we compared the transaction prices used with their applicable contractual bases.

Our audit procedures did not lead to any reservations relating to the recognition of revenue allocated to the period.

Reference to related disclosures

The disclosures on the principles of revenue recognition are contained in section "General disclosures/Revenue" of the notes to the consolidated financial statements.

2. Impairment testing of goodwill

Reasons why the matter was determined to be a key audit matter

The Group performs an impairment test to test impairment of goodwill at least once each year. A complex calculation model is used for the test, which particularly involves a number of assumptions subject to judgment and values derived therefrom. This also includes the expected development of business and earnings, the assumed long-term growth rates and the discount rates applied.

Against the background of the underlying complexity of impairment tests as well as the judgment exercised during valuation and the associated high risk for accounting misstatement, impairment testing of goodwill, which is a significant item of the statement of financial position in the consolidated financial statements, was a key audit matter.

Auditor's response

During the audit of the impairment testing of goodwill, we used a substantive audit approach.

We involved internal valuation specialists to verify the DCF models applied in terms of clerical accuracy and methods used and investigated whether these were calculated using the relevant financial reporting standards in accordance with IAS 36. We assessed the derivation of the weighted average cost of capital (WACC) by evaluating the beta factor used for the benchmark companies involved and comparing the interest rates for equity and liabilities with available market data.

We also analyzed the corporate planning applied for impairment testing of goodwill by comparing the actual earnings recorded in the past with current developments in the business figures. For the appraisal of the underlying corporate planning, we also obtained explanations related to the estimates and assumptions on growth and business development.

Our audit procedures did not lead to any reservations regarding the measurement of goodwill.

Reference to related disclosures

For more information on the impairment tests performed and underlying assumptions, please refer to the disclosures in section "Notes to the consolidated statement of financial position/1 Intangible assets" of the notes to the consolidated financial statements.

Other information

The Supervisory Board is responsible for the Report of the Supervisory Board. The executive directors and the Supervisory Board are responsible for the Corporate Governance Report and the Group Corporate Governance Declaration. In all other respects, the executive directors are responsible for the other information.

Other information comprises the abovementioned responsibility statement as well as the group statement on corporate governance, the information not typical of management reports in the group management report, the combined, separate group non-financial report published in the internet and also other components designated for the annual report, of which we received a version prior to issuing this auditor's report, particularly

- Section "Highlights 2019"
- Chapter 1 "To our shareholders"
- Chapter 3 "Corporate governance"
- Chapter 6 "Other information"

but not the consolidated financial statements, not the disclosures in the group management report included in the audit of content and not our auditor's report.

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

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

- is materially inconsistent with the consolidated financial statements, with the group management report or our knowledge obtained in the audit, or
- otherwise appears to be materially misstated.

If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

Responsibilities of the executive directors and the Supervisory Board for the consolidated financial statements and the group management report

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

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

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

The Supervisory Board is responsible for overseeing the Group's financial reporting process for the preparation of the consolidated financial statements and of the group management report.

Auditor's responsibilities for the audit of the consolidated financial statements and of the group management report

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

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

We exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated financial statements and of the group management report, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinions. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control;
- Obtain an understanding of internal control relevant to the audit of the consolidated financial statements and of arrangements and measures (systems) relevant to the audit of the group management report in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of these systems;
- Evaluate the appropriateness of accounting policies used by the executive directors and the reasonableness of estimates made by the executive directors and related disclosures;

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

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

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

- Evaluate the consistency of the group management report with the consolidated financial statements, its conformity with [German] law, and the view of the Group's position it provides;

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

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

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

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

Other legal and regulatory requirements

Further information pursuant to Art. 10 of the EU Audit Regulation

We were elected as group auditor by the annual general meeting on 5 June 2019. We were engaged by the Supervisory Board on 5 June 2019. We have been the group auditor of KRONES Aktiengesellschaft since fiscal year 2019.

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

German Public Auditor responsible for the engagement

The German Public Auditor responsible for the engagement is Udo Schuberth.

Nuremberg, 12 March 2020

Ernst & Young GmbH
Wirtschaftsprüfungsgesellschaft

Schuberth	Timphaus-Möller
Wirtschaftsprüfer	Wirtschaftsprüferin
[German Public Auditor]	[German Public Auditor]

Commercial glossary

Cash flow	All inflows and outflows of cash and cash equivalents during a period.
Corporate governance	Framework for responsible corporate management and supervision that is oriented toward sustainability.
Depreciation and amortisation	Non-cash expenses that represent the cost of current and non-current assets being used over time.
EBIT	Earnings before interest and taxes.
EBITDA	Earnings before interest, taxes, depreciation and amortisation.
EBITDA margin	Ratio of earnings before interest, taxes, depreciation and amortisation to revenue
EBT	Earnings before taxes.
EBT margin	Ratio of earnings before taxes to revenue.
Equity	Funds made available to the company by the owners by way of contribution and/or investment, plus retained earnings.
Free cash flow	Measure of financial performance calculated as the cash flow from operating activities minus cash flow from investing activities. It is the cash available to pay dividends, reduce debt, or to be retained.
IFRS	International Financial Reporting Standards. Accounting standards issued by the International Accounting Standards Board (IASB) that are harmonised and applied internationally.
Net cash and equivalents	Cash and highly liquid securities under current assets less liabilities to banks.
Return on equity before taxes	Ratio of earnings before taxes to average equity.
ROCE	Ratio of EBIT to average capital employed (total assets less interest-free liabilities and interest-free other provisions).
Total debt	Combined term for the provisions, liabilities, and deferred income stated on the liabilities side of the balance sheet.
Working capital	Working capital is calculated as follows: (inventories + trade receivables + contract assets) – (trade payables + contract liabilities).
Working capital to revenue	The ratio of working capital to revenue indicates how much capital is needed to finance revenue generation.

Technical glossary

Aseptic beverage filling	Germ-free filling of beverages at ambient temperature.
Craft brewer/craft beer	Small brewery, independent of any large corporation, producing artisan (craft) beer.
Brewhouse	In the brewhouse, the raw materials malt, hops, and water are processed in several stages to produce beer.
Digital printing	Printing process in which data are transferred directly from a computer onto an object, without a print template first being generated. Digital printing is far more flexible and significantly more cost-effective on smaller print runs (batches) than conventional printing and labelling processes.
Energy drink	A beverage that acts as a stimulant. The main ingredients are sugar and caffeine.
enviro	KRONES' sustainability programme. enviro was certified by TÜV SÜD in 2009. This independent certification enables KRONES to award the enviro seal for efficient use of energy and media and environmental friendliness for its machines and lines. All new developments at KRONES are aligned with the criteria of our enviro sustainability programme.
Intralogistics	The internal flow of materials and goods within a company, including warehouse, order-picking, and conveyance systems.
PET	Polyethylene terephthalate, a thermoplastic material from the polyester family used for producing beverage bottles.
Recyclate	Product obtained in a recycling process.
Soft drinks	Non-alcoholic beverages, usually carbonated.
Stretch blow-moulding	Process for the manufacture of hollow plastic products such as PET bottles.

Key figures for the KRONES Group 2015 – 2019

		2019	2018	2017	2016	2015
Revenue						
Revenue	€ million	3,959	3,854	3,691	3,391	3,174
Germany	€ million	468	362	388	354	382
Outside Germany	€ million	3,491	3,492	3,303	3,037	2,792
Export share	%	88	91	89	90	88
Earnings						
Earnings before taxes (EBT)	€ million	42	204	259	238	223
Consolidated net income	€ million	9	151	187	169	156
Earnings per share	€	0.30	4.78	5.97	5.40	4.98
Assets and capital structure						
Non-current assets	€ million	1,154	1,010	882	799	697
of which fixed assets	€ million	1,070	936	797	725	646
Current assets	€ million	2,165	2,312	2,158	2,272	2,010
of which cash and equivalents	€ million	110	219	182	369	365
Equity	€ million	1,370	1,433	1,330	1,226	1,111
Total debt	€ million	1,949	1,888	1,710	1,845	1,596
Non-current liabilities	€ million	452	359	314	308	278
Current liabilities	€ million	1,497	1,529	1,396	1,537	1,318
Total assets	€ million	3,319	3,321	3,040	3,071	2,707
Cash flow/capital expenditure						
Free cash flow	€ million	−94	121	−151	49	71
Capital expenditure for PP&E and intangible assets	€ million	169	179	134	111	103
Depreciation, amortisation and impairments	€ million	183	103	95	93	88
Net cash position (cash and cash equivalents less debt)	€ million	38	215	157	369	365
Profitability ratios						
EBT margin	%	1.1	5.3	7.0	7.0	7.0
EBITDA margin	%	5.7	7.9	9.2	9.5	9.6
Working capital to revenue*	%	26.9	27.3	27.3	26.7	24.6
ROCE	%	2.7	12.8	16.6	17.0	17.7
Employees (at 31 December)		17,353	16,545	15,299	14,443	13,346
Germany		10,733	10,887	10,366	10,061	9,767
Outside Germany		6,620	5,658	4,933	4,382	3,579
Dividend						
Dividend per share	€	0.75**	1.70	1.70	1.55	1.45

* Average over 4 quarters ** As per proposal for appropriation of earnings available for distribution

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This English language report is a translation of the original German KRONES Konzern Geschäftsbericht 2019. In case of discrepancies the German text shall prevail.

We would be happy to mail you a copy of the original German version of this Annual Report on request. You can also find it in the Investor Relations section at krones.com.

Financial calendar

29 April 2020	Quarterly statement for the period ended 31 March 2020
18 May 2020	Annual general meeting
30 July 2020	Interim report for the period ended 30 June 2020
29 October 2020	Quarterly statement for the period ended 30 September 2020

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