KUKA

Annual Report 2024

beyond automation

Contents

KUKA at a glance

KUKA is a global automation corporation with sales of around 3.7 billion euro and roughly 15,000 employees. As one of the world's leading producers of intelligent automation solutions, KUKA offers customers everything they need from a single source: from the component, such as robots or Autonomous Mobile Robots (AMR), to manufacturing cells and even fully automated systems and their networking in markets such as automotive, plastics, metal, general industry, consumer goods, e-commerce/retail and healthcare. Today, KUKA plays a central role worldwide in the implementation and design of intelligent automation, the digital networking of production, and modular and flexible manufacturing concepts.

2024 key figures

Revenues	Orders received	Employees
€3.7 billion	€4.1 billion	14,783

Key figures

in € millions	2023	2024	Change in %
Orders received	**4,026.2**	**4,078.0**	**1.3**
Sales revenues	**4,053.7**	**3,732.4**	**-7.9**
Order backlog (Dec. 31)	**2,766.5**	**3,209.1**	**16.0**
EBIT	**158.2**	**76.5**	**-51.6**
EBIT in % of sales	**3.9**	**2.0**	**-190 Bp**
Earnings after taxes and after loss from discontinued operations	**85.6**	**-43.5**	**>-100**
Financial position			
Free cash flow	180.0	223.7	
Capital expenditure	127.1	97.3	-23.5
Employees (Dec. 31) [1]	14,726	14,783	0.4
Net assets and financial position			
Balance sheet total	3,971.7	3,998.1	0.7
Equity	1,516.4	1,552.6	2.4
in % of balance sheet total	38.2	38.8	60 Bp

Bp: Basis point (= 1/100 percentage point)

[1] Figures for employees in the management report are based on the full-time equivalent (FTE).

Foreword

Alexander Tan
Chief Financial Officer and Controlling

Peter Mohnen
Chief Executive Officer

Ladies and Gentlemen,
Dear Readers

Once again, we can all look back on a year full of challenges and changes. The current global situation is characterized by geopolitical tension and economic uncertainty. The economy is weak, both in Germany and in globally important markets, such as China. All these factors have created a climate of uncertainty for companies and consumers, placing a strain on our economy and society.

This has an impact on the investment climate – and thus on KUKA – which is reflected in our net income for 2024. Both revenues and EBIT failed to meet the targets. Nevertheless, in difficult times with a tense market situation and tough competition, the company managed to achieve a slight improvement in orders received and thus steer the book-to-bill ratio well above 1 again. Our outlook for 2025 is also somewhat cautious.

However, despite all the adverse circumstances, the market is dynamic and growing strongly. Automation is the future. According to the latest figures available from the robotics association IFR, almost 4.3 million robots were in use in factories worldwide in 2023, representing a 10% increase. Annual installations exceeded half a million robots for the third time running.

In more and more sectors, such as logistics, automation is a megatrend and increasingly a necessity. Flexibility in warehousing is becoming ever more important for companies, particularly in the highly competitive and extremely dynamic fields of e-commerce and retail. The requirements meanwhile go far beyond traditional high-bay pallet warehouses. Innovative intralogistics solutions with agile software increase quality, flexibility and efficiency in material flow, which as a result, can multiply storage density and can adapt quickly to new market requirements.

Despite cyclical market fluctuations and a dip in growth, robotics and automation are therefore absolute topics for the future, which KUKA Group is helping to shape worldwide with a global presence ranging from robotics and intelligent intralogistics to the construction of ultra-modern, fully automated systems.

However, the strong robotics and automation market is also becoming increasingly competitive, with more and more players challenging us with aggressive prices in both established markets and new ones.

KUKA has performed well here and recorded more orders in 2024 than in the previous year. Free cash flow also reached a record level of just under EUR 224 million in 2024. This shows that KUKA is in a stable position even in challenging times and can invest in new innovations in the dynamic automation market – a crucial factor in this fast-moving environment.

To remain competitive, you need flexibility, convincing products, a strong network of reliable partners and the willingness to develop and change continuously. The automation industry, which is characterized by intense change and disruption in any case, is facing a transformation. Data economy, simulation and artificial intelligence are playing an increasingly important role. Each company must define its own path here.

For us, this means bundling our hardware and software expertise and taking full advantage of our global sales and service network. In view of the increasingly competitive markets, we have made it our motto to offer competitive products and solutions and to position ourselves as competitive as possible. In times characterized by dynamic and far-reaching changes, we as a company must also act dynamically and not shy away from change.

Our aim is to support customers on their journey to an automated future. That is why KUKA is taking advantage of its global presence and driving international cooperation within the company, from products and solutions to global plant engineering.

KUKA also founded a new division in 2024. We are expanding our software and digital business with KUKA Digital. The goal: the end-to-end digitalization of a wide range of machines and systems in production, from initial 3D simulation, networking and data analysis to the use of artificial intelligence.

New technologies and an open approach to transformation open up enormous opportunities, especially in challenging times. And it is precisely now that we must not hesitate to seize such opportunities. This is of vital importance for the future of our economy and for companies to be successful in international competition. Together with our partners and customers, we want to shape the future of automation and make our contribution to an innovative and sustainable economy.

Peter Mohnen

Sincerely, Peter Mohnen

Supervisory Board report

Dear Sir/Madam,

We are looking back on a challenging fiscal year 2024. Already towards the end of 2023, it became apparent that the economic environment would become more difficult. After the record year of 2023, we must note that KUKA was unable to achieve the ambitious goals set for the fiscal year 2024. While the Group's order intake was roughly at the planned level, revenue and EBIT fell short of expectations. The reasons for this are manifold. On the one hand, we see an unstable geopolitical environment and, on the other hand, a weakening economy, especially in regions and industries that are important for KUKA. Here, customers have responded to the economic upheavals with project delays and significant restraint in their investment decisions. In addition, the result was also negatively impacted by a project in the Swisslog segment.

The economic challenges have already led to organizational adjustments in the fiscal year 2024, which will continue in the fiscal year 2025. KUKA will have to examine its competitiveness in all aspects of the business setup and adapt in a highly competitive market environment to be successful in the international competition. The Management Board and the Supervisory Board are working together on this.

KUKA is strategically well-positioned with the products and solutions offered in the areas of automation and robotics as well as intralogistics. We are convinced that we will continue to grow globally with our offerings in the future.

To strengthen the area of digitalization and software, the KUKA Digital segment was introduced in fiscal year 2024. In this segment, KUKA's software activities are now bundled. With the KUKA Digital segment, new customer groups can be addressed. We want to keep KUKA on course even in headwinds.

In the year under review, the Supervisory Board performed the duties incumbent upon it by law, the Articles of Association and the Rules of Procedure in full. The Supervisory Board and its committees monitored and advised the Management Board in its management of the company based on regular and detailed reporting by the Management Board. Furthermore, there was an intensive exchange between the Chairman of the Supervisory Board and the Chairman of the Management Board as well as a regular exchange between the Chairs of the Audit Committee and the Strategy and Technology Committee and the members of the Management Board. In this way, the Supervisory Board was always informed about the business policy, corporate planning, corporate risks and situation of the company and the Group as a whole. Cooperation between the Supervisory Board and the Management Board was constructive.

The Supervisory Board performed its duties in plenary sessions, committee meetings and video conferences.

The Supervisory Board has formed a total of five committees. These are (1) the Personnel Committee, (2) the Audit Committee, (3) the Strategy and Technology Committee, (4) the Nomination Committee and the (5) Mediation Committee. The committees perform the essential specialized tasks and prepare decisions for the Supervisory Board. This contributes to the efficient work of the Supervisory Board.

The term of office of all members of the Supervisory Board ends at the 2028 Annual General Meeting.

In the fiscal year 2024, the following persons (in alphabetical order) left the Supervisory Board: Peter Kippes and Helmut Zodl. Ferdije Rrecaj joined the Supervisory Board in fiscal year 2024. With effect from January 30, 2025, Ms. Zheng (Lucy) Zhong was appointed by the court as a member of the Supervisory Board. She succeeds Helmut Zodl, who resigned from his position as a member of the Supervisory Board with effect from December 31, 2024.

We would like to take this opportunity to thank all departing members of the Supervisory Board for their work and commitment to KUKA as well as their collegial cooperation.

At the time this report was submitted, the Supervisory Board therefore comprised the following members:

Shareholder representatives:	Dr. Yanmin (Andy) Gu (Chairman) Dr. Chang Wei Dr. Myriam Meyer Christoph Schell Wenxin (Marianna) Zhao Zheng (Lucy) Zhong
Employee representatives:	Armin Kolb (Deputy Chairman) Larissa Brandis Wilfried Eberhardt Carola Leitmeir Ferdije Rrecaj Carina Veit

At the end of the year under review, the proportion of women on the Supervisory Board was 58.33 percent.

Work with the auditors

The annual financial statements of KUKA Aktiengesellschaft as at December 31, 2024 and the consolidated financial statements as at December 31, 2024, as well as the consolidated management report for KUKA Aktiengesellschaft and KUKA Group, including the bookkeeping, were audited by auditors PricewaterhouseCoopers GmbH Wirtschaftsprüfungsgesellschaft, Frankfurt am Main (“PricewaterhouseCoopers”), which issued an unqualified audit opinion in each case on March 12, 2025.

The consolidated financial statements of KUKA Aktiengesellschaft were prepared in accordance with Section 315e of the German Commercial Code (HGB) on the basis of the International Financial Reporting Standards (IFRS).

The Supervisory Board’s Audit Committee appointed the external auditors, PricewaterhouseCoopers, as per the resolution at the Annual General Meeting of June 13, 2024. During the course of appointing the auditors of the financial statements of the company and the Group, the chair of the Audit Committee and the Chairman of the Supervisory Board conducted a review with the auditors regarding key audit issues, scope and fees. The auditors agreed to immediately inform the chair of the Audit Committee about any disqualification or bias issues encountered during the audit, provided such disqualification or bias issues could not immediately be resolved. The auditors also agreed to report on an ongoing basis during the audit all material findings and developments arising during the audit that were within the scope of the Supervisory Board’s responsibilities.

Finally, the Audit Committee monitored the auditors’ independence.

As in previous years, focal points were agreed for the audit of the annual financial statements and consolidated financial statements in fiscal 2024.

In a joint meeting with the auditors on March 20, 2025, the Audit Committee reviewed the annual financial statements of KUKA Aktiengesellschaft and the consolidated financial statements for fiscal 2024, taking into consideration the auditors’ reports. The Management Board and the auditors presented the highlights of the financial reports to the committee. The Audit Committee members reviewed, discussed and checked in detail the documentation relating to the financial statements and discussed the audit report in depth with the auditors. The auditors answered the questions posed by the Audit Committee members. The Audit Committee reported to the Supervisory Board on the results of its discussions during the Board’s meeting on March 20, 2025 and recommended that the Board adopt KUKA Aktiengesellschaft’s annual financial statements and approve KUKA Group’s consolidated annual financial statements for 2024.

The full Supervisory Board reviewed the draft annual financial statements and the Management Board's recommendation on appropriation of net income on March 26, 2025. The auditors, PricewaterhouseCoopers, attended the Supervisory Board meeting in order to report on material findings in the audit and to provide additional information. All members of the Supervisory Board were in possession of the audit reports provided by the auditors.

PricewaterhouseCoopers explained in detail the net assets and financial position as well as the income situation of the company and the Group. The Board and the auditors jointly reviewed and discussed the financial statements and PricewaterhouseCoopers answered all questions posed by the Audit Committee. The audits of the KUKA Aktiengesellschaft and KUKA Group annual financial statements for 2024 were thus fully comprehensible.

Dependency report 2024

On March 26, 2025, the Supervisory Board dealt with the report on relationships with affiliated companies (dependency report) prepared by the Management Board pursuant to section 312 of the German Stock Corporation Act (AktG) for fiscal 2024. This report was reviewed by PricewaterhouseCoopers in its role as auditor for fiscal 2024. Following preparatory discussion by the Audit Committee, the Supervisory Board conducted a further review. All reviews confirmed the Management Board's final declaration that, with regard to the business relationships of KUKA Group with Midea companies in the 2024 fiscal year, appropriate compensation was received, and KUKA companies did not suffer any disadvantages therefrom. The audit opinion on the dependency report for fiscal 2024 reads verbatim as follows:

Audit results and audit opinion

In accordance with our engagement, we have audited the report of the Executive Board pursuant to Section 312 AktG on relationships with affiliated companies pursuant to Section 313 AktG for the financial year 2024. Since the final results of our audit did not give rise to any objections, we issue the following audit opinion in accordance with Section 313 (3) sentence 1 AktG:

"Following our mandatory audit and assessment, we confirm that

1. The actual information in the report is correct,
2. the consideration paid by the company for the legal transaction listed in the report was not unreasonably high.

Munich, March 12, 2025
PricewaterhouseCoopers GmbH
auditing company"

Adoption of Annual Financial Statements 2024

In its meeting on March 26, 2025, the Supervisory Board, having considered the report of the Audit Committee as well as the audit reports of the external auditor and its explanations, raised no objections to the annual financial statements 2024 for KUKA Aktiengesellschaft and the KUKA Group, and concurred with the auditor's findings. The auditor's reports, in the Supervisory Board's opinion, comply with the legal requirements of §§ 317 and 321 HGB.

The Supervisory Board has verified the completeness of the combined management report for KUKA Aktiengesellschaft and the KUKA Group. The assessments made by the Executive Board in this management report are consistent with the reports to the Supervisory Board, and the statements in the combined management report align with the Supervisory Board's own assessment. Following its final review, the Supervisory Board also raised no objections to the combined management report. Additionally, the Supervisory Board reviewed the Group's sustainability report in its plenary session and raised no objections.

Therefore, in its balance sheet meeting on March 26, 2025, the Supervisory Board approved the annual financial statements of KUKA Aktiengesellschaft for the fiscal year 2024 as prepared by the Executive Board. Similarly, the Supervisory Board approved the consolidated financial statements of KUKA Aktiengesellschaft for the fiscal year 2024 as prepared by the Executive Board.

Thanks to the staff

The Supervisory Board would like to thank all KUKA employees for their great commitment and hard work. We achieved a lot in fiscal 2024 and can be proud of our collective success. This success should be an incentive and motivation for all of us not to let up and to continue to give our best with full commitment to KUKA.

The Supervisory Board once again extends its thanks to the members of the Management Board, the CEOs of the Group companies and the employee representatives.

Augsburg, March 26, 2025
The Supervisory Board

Dr. Yanmin (Andy) Gu
Chairman

Consolidated management report

Consolidated management report

Fundamental information about the Group

Group structure and business activities

KUKA is one of the world's leading automation specialists and supports its customers in the holistic optimization of their value creation by providing comprehensive automation and digitalization know-how.

The global technology corporation offers its customers a full range of products and services from a single source: from the core component (such as robots, Autonomous Mobile Robots (AMR) and other automation components) to production cells, turnkey systems and networked production with the aid of cloud-based IT tools. Through its advanced automation solutions KUKA contributes to increased efficiency and improved product quality for its customers.

Industrie 4.0 – the next stage of the Industrial Revolution – is bringing digital, networked production, flexible manufacturing concepts and logistics solutions, as well as new business models to the fore. With its decades of experience in automation, in-depth process know-how and cloud-based solutions, KUKA ensures its customers have an edge on the competition.

KUKA focuses on its customers and therefore divides its operating activities into the following six segments: Systems, Robotics, Swisslog, Swisslog Healthcare, China and KUKA Digital. The holding functions are pooled in the Corporate Functions segment, which mainly comprises KUKA AG.

Systems division

The Systems portfolio covers the entire value chain of a system: from individual system components, tools and fixtures to complete turnkey systems. From traditional body-in-white production in the automotive industry, through battery production plants in the electromobility sector to initial non-automotive projects in the non-automotive sector: the goal is the efficient design of production processes by means of adaptable, modular and automated manufacturing and logistics processes. Systems works together with its customers on flexible, scalable concepts and solutions for the factory of tomorrow. As an automation specialist for hardware and software solutions, Systems provides impetus for the digital factory.

Markets in Germany and elsewhere in Europe are served from the headquarters in Augsburg, while the Greater Detroit area in the USA is responsible for the North/South America region, and Shanghai in China manages the Asian market. In Toledo (USA), KUKA Toledo Production Operations (KTPO) manufactures the Jeep® Gladiator for Chrysler under the terms of a pay-on-production contract.

Robotics division

The core component for automating production processes is supplied by the Robotics division: industrial, collaborative and autonomous mobile robots (AMRs) – together with robot controllers, corresponding software and digital services for every phase of the “customer journey”. The broad product portfolio – ranging from traditional 6-axis robots to DELTA and SCARA robots – covers payload ranges from three to 1,300 kilograms. Robotics also offers a wide range of services. Customers can, for example, pursue technical training and continuing education from KUKA Colleges at more than 30 locations worldwide.

KUKA Robotics is continuously expanding its range of products and services in order to be able to offer customers suitable products and solutions from a wide variety of industries – particularly in markets such as automotive with a focus on e-mobility & battery, electronics, metal & plastic, consumer goods, retail and healthcare. KUKA also offers small and medium-sized companies simple and economical entry into automation. Research and development plays an important role here. The trend is towards robots that are simple to program, flexible to deploy, and easily integrated and networked. Supplemented by KUKA’s AMR range, robots become flexible and intelligent production assistants.

Swisslog division

With its Swisslog division, KUKA is tapping the growth markets of e-commerce/retail and consumer goods in the field of intralogistics. Based in Buchs, Aarau (Switzerland), Swisslog serves customers in over 50 countries worldwide. The division implements integrated automation solutions for forward-looking warehouses and distribution centers. As a general contractor, Swisslog offers complete turnkey solutions, from planning through to implementation and service, employing data-driven and robot-based automation in particular. Swisslog offers smart technologies, innovative software and adapted support services to improve the long-term competitiveness of its customers in the logistics sector. By combining Swisslog logistics solutions with the robotic automation solutions of the other divisions of the Group, KUKA offers new possibilities of flexible automation along the entire value chain.

Swisslog Healthcare division

The Swisslog Healthcare division (HCS) develops and implements automation solutions for modern hospitals. The aim is to boost efficiency and increase patient safety. By optimizing intralogistics processes in the field of medication management during and after in-patient treatment, hospital staff can free up more time for patient care. At the same time, the use of automation solutions can reduce the incidence of medication errors.

China division

The China segment comprises all business activities of the Chinese companies in the Systems, Robotics, Swisslog and Swisslog Healthcare divisions. In addition to KUKA industrial robots, automation solutions such as warehouse management systems and automated solutions for the healthcare sector are developed, offered and marketed in China. Industrial robots are manufactured at the Shunde location and sold on the Chinese market. Furthermore, new robot models, such as the SCARA and DELTA robots, have been developed in China.

KUKA Digital division

KUKA is expanding its software and digital business with KUKA Digital. KUKA considers the entire product life cycle – from design, engineering and start-up through to production. The increases in efficiency currently required can only be achieved with the networking and digitalization of these phases. The use of digital solutions is increasingly becoming a key differentiator. KUKA Digital not only enables the further automation of different machines, but also extends the automation of adjacent phases in the product life cycle of our customers. From initial 3D simulation, through connectivity and data analysis, to the use of artificial intelligence and the digital twin for fully digitalized and automated production.

Markets and trends

Megatrends drive automation in the medium and long term

Megatrends such as digitalization, the customization of products, demographic changes and greater regionalization due to global uncertainties necessitate increasingly flexible and more efficient solutions in production and intralogistics environments. These developments will continue to intensify, based on the experience of recent years.

This underscores the importance of new approaches and business models that enable customers to adapt their processes flexibly to the rapidly changing market requirements. The ability to respond to these megatrends will be of decisive importance to remaining competitive in the long term and maximizing efficiency in production.

Cyclical growth in a volatile world

The image of automation has undergone a fundamental transformation in recent years. Traditionally a complex task, ranging from programming to start-up, the focus has now shifted to lowering the barriers to entry. This is achieved by simplifying installation, deployment and operation as well as through improvements in software and safety functions. These developments are resulting in increased productivity and flexibility. Trends in technology, such as digitalization, machine learning and artificial intelligence, are further accelerating this transformation. The robot is the central component of the factory of the future, with humans continuing to play a decisive role.

China, as the world's largest robot market, is having an increasingly significant influence on the global automation market. Chinese companies are not only expanding their domestic market share, but are also penetrating premium segments by offering standard technology at competitive prices.

KUKA, has continuously expanded its presence in Europe, North America and China. In recent years, considerable investments have been made in the Chinese market in order to address the specific needs of local customers better and shorten the time to market.

The demand for robotics and automation solutions continues to rise in order to compensate for staff shortages, reduce personnel costs and improve efficiency and adaptability to changing market requirements. Additionally, the trend towards reshoring, which is intended to strengthen the resilience of supply chains, is expected to lead to a further increase in demand.

Corporate strategy

One of KUKA's core tasks is acting as a partner to support our customers on their journey towards automation and digitalization. In a rapidly changing environment characterized by global megatrends and ever fiercer competition, the key to future growth lies in understanding the specific requirements of our customers in the different industries and regions in order to create unique added value for them. We keep an eye on current developments and trends in our core industries at all times. We already offer answers to tomorrow's requirements today – from easy-to-use, flexible automation to mobile, data-driven and scalable solutions.

Our strategy is based on global trends with the clear aim of being the most competitive company in the field of robot-based automation:

1. **Smart automation:** development of a competitive portfolio with unique products and services along the entire value chain.
2. **More than 125 years of pioneering spirit:** using our many years of experience to tap new market segments as a technology trendsetter.
3. **Global knowledge:** strengthening the regions by utilizing our global knowledge of local market requirements and building flexible, stable supply chains.
4. **Employee development:** creation of an environment in which our employees can grow and develop in order to become the most attractive company in the industry.

Business expansion: new markets, software & services

KUKA is continuously expanding its business activities into high-growth and profitable areas

We focus on future markets in order to promote long-term growth and innovation. While we have benefited greatly in the past from our pioneering role in the automation of the automotive industry, we are increasingly seeing opportunities for growth outside the automotive sector in the future:

Robotics and automation: KUKA invests heavily in the further development of industrial robots and automation solutions in order to increase efficiency and productivity in various industries.

Artificial intelligence (AI) and machine learning: By integrating AI and machine learning into our products and services, we aim to create smarter and more adaptable systems that can perform complex tasks autonomously.

Medical and healthcare: KUKA develops robots that support surgeons in precise and minimally invasive procedures. These robots improve accuracy and reduce patient recovery time. We also offer solutions for the automation of hospital processes, such as the transportation of medicines and samples, in order to increase efficiency and safety.

Logistics and warehousing: With innovative solutions for the automation of warehouses and logistics processes, KUKA helps companies to make their supply chains more efficient. These solutions also include the optimization of supply chains through the use of robots and AI to increase productivity and reduce costs.

Sustainability and green technologies: KUKA is committed to developing environmentally friendly technologies and sustainable production processes in order to reduce its ecological footprint.

These markets offer KUKA numerous opportunities for further development of its technologies and the tapping of new business areas.

Financial management system

Corporate management is based on the Group's strategy. The Group is managed on the basis of the key financial performance indicators derived from this. KUKA Group's financial targets are also KPIs that track the enterprise value of the company.

The most significant KPIs for KUKA Group are orders received, sales revenues, EBIT margin and free cash flow. The development of the financial targets is presented in the "Business performance" section and under "Financial position and performance". Operating earnings before interest and taxes (EBIT) are compared to sales revenues to determine the return on sales. This results in the EBIT margin. Free cash flow represents the funds available to pay the claims of equity and debt capital providers.

These key performance indicators are part of KUKA Group's target and compensation system. This ensures that all employees share the same goals.

An important early indicator of business performance for mechanical and systems engineering companies is the volume of orders received. Order backlog for a certain period is determined by subtracting sales revenues from orders received during that time. Order backlog is an indicator of the expected utilization of operational capacities in the coming months.

All key indicators are continuously tracked and reviewed by KUKA Group's management companies and its corporate accounting and controlling departments. Management analyzes any deviations from plan and decides on the necessary corrective actions required to achieve the targets.

Key performance indicators for KUKA Group over 5-year period

in € millions	2020	2021	2022	2023	2024
Orders received	2,792.2	3,565.3	4,459.5	4,026.2	4,078.0
Revenues	2,573.5	3,286.2	3,897.0	4,053.7	3,732.4
EBIT margin	-4.4%	1.9%	3.0%	3.9%	2.0%
Free cash flow	37.0	100.4	-188.3	180.0	223.7

Achievement of targets

In March 2024, KUKA published its targets for the full year 2024. KUKA expected orders received to be slightly above the prior-year level, i. e. more than 3%. Sales were forecast to be above the prior-year level, i. e. more than 10%. Furthermore, the EBIT margin was expected to increase. The margin was expected to be in the single-digit range. Positive free cash flow was also expected for 2024; however, it was expected to be below the prior-year level. Despite the ongoing global uncertainties, KUKA expected demand for automation solutions to remain high.

Global uncertainty and geopolitical tensions continued to shape the global economy in 2024. Customers were more reluctant to invest than originally planned. Consequently, orders received rose only slightly in 2024 by 1.3% to €4,078.0 million (2023: €4,026.2 million). The planned increase of at least 3% was not achieved. The continuing weakness in demand due to the difficult macroeconomic conditions, which are described in detail in the economic report, is reflected in the decline in sales. At €3,732.4 million, sales were 7.9% below the prior-year level and did not reach the figure forecast in the previous year.

An increased EBIT margin was expected. The forecast was not achieved due to the reduced sales volume, lower investment subsidies and project deteriorations. The EBIT margin was 2.0% in 2024 (2023: 3.9%).

At the end of the 2024 financial year, free cash flow reached a new record level and rose to €223.7 million. This was significantly above the previous year's figure of €180.0 million. This development was due, on the one hand, to improved working capital management and, on the other, to investment decisions adapted to the challenging market environment. The forecast for free cash flow was significantly exceeded due to the positive development of working capital. KUKA AG's net income for the year in the separate financial statements in accordance with the German Commercial Code (HGB) was expected to improve significantly compared to the previous year's figure. At €37.8 million, earnings were well above the previous year's figure of -€61.7 million. The forecast was achieved.

2024 target values

in € millions	ACTUAL 2024	Target 2024 (March 2024 forecast)
Orders received	4,078.0	slightly above prior-year level[1]
Revenues	3,732.4	above prior-year level[1]
EBIT margin	2.0%	rising
Free cash flow	223.7	positive

[1] Definitions:
slightly above/below prior-year level: absolute change compared to prior year < ±10%
above/below prior-year level: absolute change compared to prior year ≧ ±10%
at prior-year level: absolute change compared to prior year ≦ ±3%

Research and development

The area of research and development (R&D) is of crucial importance for the sustainable and long-term success of KUKA. Research and development expenditure amounted to €202.3 million in 2024, higher than the value for the previous year (2023: €194.9 million).

KUKA's research and development activities are based on market needs, customer requirements and expected trends. KUKA's Corporate Research is active on a Group-wide scale and develops technologies for the Group companies. It collaborates closely with universities and institutes worldwide. Through its research and development activities, KUKA is able to open up new areas of application and further advance technological progress.

In the year under review, KUKA Group filed a total of 37 patent and utility model applications and 228 patents and utility models were granted. The focus was on innovations in the area of simple, AI-based programming and ergonomic use of low-cost robots, as well as on applications for current and future key technologies in industrial production, logistics, mobility and human-robot collaboration, as well as new products for focused growth markets such as Asia.

Procurement

A robust supply chain with efficient and reliable purchasing and procurement management is essential for the successful execution of customer orders. The utmost priority is given here to ensuring the required quality at optimum cost and to on-time implementation. The processes and responsibilities pertaining to supply chain management are clearly defined at KUKA. By structuring the overall business into individual business segments, each with its own responsible management, segment-specific requirements can be implemented within the associated functions.

There was no general easing on the commodities markets in the 2024 fiscal year. Important commodities such as aluminum and copper continued to rise compared to the previous year. There have also been significant increases in freight costs in particular. At the same time, key commodities are still characterized by a significantly higher price level compared to the pre-pandemic period.

In order to mitigate these cost disadvantages, the cross-segment networking of supplier and procurement management, among other things, is being driven forward as part of the company's global orientation. Due to its complex technological product portfolio, Robotics also focuses on strengthening strategic partnerships in order to meet professionally the high demands placed on products and services and to establish and expand stable and reliable customer-supplier relationships.

From support projects for process optimization , especially in the areas of quality, logistics and production, we expect sustainable progress in terms of delivery reliability and quality aspects.

In the project business, too, structural, system and process optimizations helped to put the business on a stable footing for the challenges ahead by enabling it to act even faster and more efficiently.

Economic report

Macroeconomic and industry conditions

Global economy is proving resilient in a persistently difficult environment

The global economy is still only recovering slowly from the many negative factors, such as the persistently high financing costs, increasing geopolitical conflicts and extreme weather events, which have hit emerging and developing countries particularly hard. According to the International Monetary Fund (IMF) in October 2024, global economic growth of 3.2% is expected for 2024. This almost matches the revised growth rate of 3.3% for the previous year – a clear sign of the resilience of the global economy in the year under review given the difficult environment.

There are clear differences in economic growth between the individual economies. For 2024, the IMF expects moderate growth of 1.8% for the advanced economies, which corresponds to an increase of 0.1 percentage points on the previous year. This more optimistic assessment compared to the July 2024 forecast is primarily due to the unexpectedly strong performance of the US economy, which is benefiting from high consumer spending thanks to robust real wage growth. As a result, the IMF has raised its growth forecast for US gross domestic product (GDP) by 0.2 percentage points to 2.8%. This means that the US economy is growing significantly faster than other advanced economies, while GDP in the eurozone is only expected to grow by 0.8% (2023: 0.4%). The weak growth in the eurozone is primarily due to the continuing weakness of the manufacturing sector, which is still only leading to a sluggish recovery and below-average growth rates, particularly in Germany. Following a decline of 0.3% in the previous year, the IMF experts therefore expect German GDP to merely stagnate in 2024.

According to the IMF, the strong economic growth in the Asian emerging markets will slow by 0.4 percentage points to 5.3% in the year under review, which is primarily due to the continuing slowdown in growth momentum in the two largest economies in this economic region. The Chinese economy is unable to match the high growth rates of the past. However, unexpectedly strong net exports are mitigating the negative effects of the ongoing problems in the real estate sector and low consumer confidence, with the result that a growth rate of 4.8% is forecast for China's GDP in 2024, corresponding to a decline of 0.4 percentage points on the previous year.

Automotive industry continues to face major challenges – transformation to electromobility is losing momentum

The industry environment for the global automotive market remained challenging in the year under review. According to estimates by the market research company Dataforce in July 2024, the shift towards electromobility is losing momentum – not least due to the withdrawal of government subsidies, rising financing costs and falling disposable incomes coupled with rising vehicle prices. According to the German Association of the Automotive Industry (VDA), a total of 9.8 million new cars were registered on the European automotive market in the first three quarters of 2024. This corresponds to slight growth of around 1% compared with the same period of the previous year. The pre-crisis level is therefore still a long way off. Compared to the new registration figures for 2019, this represents a decrease of 19%. The five largest European automotive markets developed very heterogeneously in the first three quarters of 2024. While sales increased in Spain (+5%), the UK (+4%) and Italy (+2%), slight declines were recorded in Germany (-1%) and France (-2%).

The US light vehicle market, which includes passenger cars and light trucks, grew slightly by 1% to 11.7 million vehicles in the first three quarters of 2024, but was still 8% below the pre-crisis level. In contrast to Europe and the USA, China significantly exceeded the pre-crisis level for the third time in a row. The approximately 15.6 million vehicles sold on the Chinese passenger car market in the first nine months of 2024 represent an increase of 2% compared to the same period of the previous year and a significant increase of 14% compared to the pre-crisis level of 2019.

According to the Federal Motor Transport Authority (KBA), 2.6 million new cars were registered in Germany by November 30, 2024, around 0.4% fewer than in the same period of the previous year. According to the VDA, demand for purely electrically powered vehicles (BEV) was significantly weaker. Here, new registrations fell by 26% to around 347,100 cars. By contrast, the plug-in hybrid (PHEV) segment developed positively in the same period, with an increase in new registrations of 9% to 172,800 vehicles. Overall, around 17% fewer new vehicles with alternative drive systems were registered than in the same period of the previous year.

Slow recovery in willingness to invest in mechanical and systems engineering

According to experts from the German Engineering Federation (VDMA), the investment environment in the mechanical and systems engineering sector remains under pressure due to ongoing geopolitical crises and high levels of uncertainty. Protectionist measures such as the drastic increase in import duties on selected product groups are also having a negative impact on the global economic climate. Accordingly, companies are acting cautiously, especially when it comes to new investments. Particularly in Germany, expectations were missed by a wide margin, with the result that machine sales did not stabilize as expected in the middle of the year. Overall, the VDMA experts anticipate a decline of 2% in price-adjusted global mechanical engineering sales, following zero growth in the previous year.

In the industrialized countries in particular, development in the first nine months of 2024 was extremely weak. Production shrank by 3% in the USA in this period, and by as much as 6% in Japan. The decline in the EU was even more pronounced at 7%. By contrast, real production in China rose by 2.8%. While China recorded an increase in production in the first nine months of 2024, the growth rate achieved remained considerably below the level of the pre-COVID years. Since 2021, there has been a divergence in China between stronger production growth and weaker sales growth. Accordingly, inventories of finished products are growing faster than revenue, which is causing producer prices in the mechanical engineering sector to fall.

Robotization as a driving force behind the digital and automated age

The figures published by the International Federation of Robotics (IFR) in September 2024 show that demand for innovative robots remained high in 2023 despite challenging macroeconomic conditions. With 541,302 robots installed worldwide, the 500,000 unit mark was exceeded for the third time running and the record level of 2022 was missed only narrowly by 2%. The largest customer for industrial robots was the automotive industry, with an unchanged share of 25% of installations worldwide in 2023, closely followed by the electrical industry. Here, the share fell by around five percentage points to 23%. By contrast, the share of the metal industry rose by two percentage points to 14%.

From a regional perspective, the most important markets remain China, Japan, the USA, Korea and Germany. These five countries accounted for around 78% of all installed robots in 2023. Three of the five largest markets for industrial robots are in Asia. Accordingly, Asia is the most important region with 382,073 installed units or 70% of all installations. The other markets follow at a considerable distance. The European market accounts for around 17% and North and South America for around 10%.

The robust market development and unbroken high demand for industrial robots reflect the dynamic transition of production processes into the digital and automated age. In 2023, robot density in Germany rose to 429. By comparison, the global average was 162. A total of 28,355 new robots were installed in Germany in 2023 (2022: 26,605). Furthermore, carbon footprint reduction is driving investment in modern technologies. Cloud computing, 5G networks and artificial intelligence in particular are opening up new application possibilities and improving quality and speed. They form the technological basis for fully digitalized production options. However, the robotics industry is not immune to global economic developments. The industry is therefore expected to move sideways in 2024. According to the IFR, the slight decline in installations in the year under review is only temporary.

Financial position and performance

Business performance

In 2024, global uncertainties continued to have an impact on growth. Fears of recession, the energy crisis, labor shortages, the war of aggression in Ukraine and the conflict in the Middle East had a negative impact on growth prospects and also affected the investment behavior of customers and the global economy. However, demand for automation solutions increased slightly in the year under review and remained at a high level.

Orders received amounted to €4,078.0 million, thus 1.3% higher than the prior-year level (2023: €4,026.2 million). Demand increased particularly in the China and Swisslog Healthcare segments. Sales revenues fell from a record level in the previous year to €3,732.4 million in the current year under review. The figure was therefore 7.9% below that of the previous year (2023: €4.053.7 million). At 1.09, the book-to-bill ratio was above the previous year's figure (2023: 0.99). The order backlog increased by 16.0% from €2,766.5 million as at December 31, 2023 to €3,209.1 million as at 31 December 2024 and represents solid capacity utilization for the coming years. EBIT fell to €76.5 million in the current fiscal year (2023: €158.2 million). A decline was recorded in the Swisslog and China segments in particular. The EBIT margin fell to 2.0% (2023: 3.9%).

Free cash flow increased to €223.7 million (2023: €180.0 million) and set a new record. This development was due to improved working capital management as well as investment decisions adapted to the challenging market environment.

Earnings

Sales revenues fell by -7.9% to €3,732.4 million compared with the record figure in the previous year (2023: €4.053.7 million). The increase in sales revenues in the China segment was unable to compensate for the reduction in sales revenues in all other segments.

The gross profit generated was €840.6 million, down 11.2% on the previous year (2023: €946.7 million). KUKA Group's gross margin fell from 23.4% to 22.5%. On the one hand, costs were adjusted to the reduced sales volume, while on the other, project deteriorations contributed to the deterioration in the margin.

Expenses for administration, sales, and research and development fell by €32.0 million to €761.0 million (2023: €793.0 million). The ratio of overhead costs to sales amounted to 20.4% in the year under review after 19.6% in 2023.

Selling expenses fell by €22.7 million, or 6.5%, from €349.0 million in fiscal 2023 to €326.3 million in the fiscal year 2024. In the previous year, the valuation adjustment due to the significantly increased default risk on the lease receivable at KTPO increased the selling expenses. Focus on customers is always our prioritization, however, and is continuously optimized and expanded. As at the balance sheet date 2024, KUKA had 1,683 sales employees worldwide (2023: 1,694 employees).

Administrative expenses decreased by €16.7 million from €249.1 million in fiscal 2023 year to €232.4 million in the year under review. A decline was recorded primarily in the area of personnel costs. The administrative expense ratio in 2024 was 6.2% and thus remained almost constant (2023: 6.1%).

in € millions	2020	2021	2022	2023	2024
Orders received	2,792.2	3,565.3	4,459.5	4,026.2	4,078.0
Order backlog	1,992.6	2,311.9	2,912.4	2,766.5	3,209.1
Sales revenues	2,573.5	3,286.2	3,897.0	4,053.7	3,732.4
EBIT	-113.2	61.8	118.4	158.2	76.5
in % of revenues	-4.4	1.9	3.0	3.9	2.0
EBITDA	33.2	202.0	251.2	294.0	228.3
in % of revenues	1.3	6.1	6.4	7.3	6.1
Employees (Dec. 31) [1]	13,700	14,128	15,064	14,726	14,783

[1] Figures for employees are based on the full-time equivalent throughout the annual report

Research and development costs increased by €7.4 million from €194.9 million in fiscal 2023 to €202.3 million in the reporting period. KUKA places high priority on research and development activities. As at December 31, 2024, 1,759 people were employed in research and development (December 31, 2023: 1,620 employees) – equivalent to 11.9% of the workforce in the year under review and 11.0% in the previous year.

The costs for new developments capitalized in the 2024 financial year, which will be reported as scheduled amortization in subsequent financial statements, amounted to €32.6 million (2023: €29.3 million). Amortization of R&D expenditure capitalized in prior years amounted to €33.0 million (2023: €26.0 million). There were no impairment losses in the area of research and development in the past year under review (2023: €5.2 million). Due to the increase in overall research and development costs and the costs for new developments, the capitalization ratio rose from 14.8% in 2023 to 16.2% in 2024.

Other operating income amounted to €13.8 million in the year under review (2023: €17.6 million). Income in the previous year included extraordinary income in connection with the newly founded associated company ME Industrial Simulation Software Corporation in Japan.

Other operating expenses fell from €13.5 million in fiscal 2023 to €10.0 million in fiscal 2024. These mainly comprised other taxes.

Earnings from companies valued at equity decreased from €0.4 million in the previous year to -€6.9 million, which is primarily attributable to expenses in connection with the change in the consolidation method of two companies. Two subsidiaries previously valued at equity have been fully consolidated since July 1, 2024.

Overall, earnings before interest and taxes (EBIT) amounted to €76.5 million after a record result in the previous year (2023: €158.2 million). The EBIT margin was 2.0% after 3.9% in the previous year.

The reduced sales volume, lower investment subsidies and project deteriorations in the mid double-digit million range were the main reasons for the reduction in the margin.

EBIT in KUKA Group

in € millions	2020	2021	2022	2023	2024
Group	-113.2	61.8	118.4	158.2	76.5
in % of sales revenues	-4.4	1.9	3.0	3.9	2.0

Depreciation and amortization increased by €16.0 million in fiscal 2024 to €151.8 million (2023: €135.8 million). Amortization of right-of-use assets in accordance with IFRS 16 increased slightly by €1.3 million to €41.8 million (2023: €40.5 million). Impairment losses were recognized on capitalized contract costs in the amount of €3.7 million (2023: €5.6 million).

Earnings before interest, taxes, depreciation and amortization (EBITDA) thus fell from €294.0 million in fiscal 2023 to €228.3 million in the year under review.

EBITDA in KUKA Group

in € millions	2020	2021	2022	2023	2024
Group	33.2	202.0	251.2	294.0	228.3
in % of sales revenues	1.3	6.1	6.4	7.3	6.1

Financial result

The current financial result deteriorated compared to the previous year from -€5.4 million to -€7.3 million in fiscal 2024.

Interest income remained almost at the prior-year level (2024: €17.4 million; 2023: €17.3 million). The increase in interest income on bank balances at a subsidiary in the China segment almost offset the decline in interest income from finance leases.

Interest expenses fell from €30.5 million in the previous year to €27.4 million in 2024. Interest expenses on existing financing instruments accounted for a significant proportion of this total (for further details, please refer to the notes). Interest expenses in connection with leases increased from €6.4 million in the previous year to €7.4 million in fiscal 2024. The net interest expense from pension provisions and other non-current liabilities to employees increased from €2.4 million in 2023 to €2.9 million in 2024. Expenditure for sureties and guarantees remained at the prior-year level (2024: €1.5 million; 2023: €1.5 million).

The balance of foreign currency gains of €65.0 million (2023: €81.2 million) and foreign currency losses of -€58.3 million (2023: -€73.5 million) resulted in income of €6.7 million in the year under review (2023: income: €7.7 million).

Net income from changes in the fair value of financial instruments fell from €0.1 million in the previous year to -€4.1 million in the year under review and resulted in particular from the sale of an at-equity investment.

One other investment experienced a negative change in value due to the financial difficulties (2024: -€2.2 million; 2023: €0.0 million). In addition, dividends were received from an investment in the USA (2024: €0.3 million; 2023: €1.5 million).

EBT (earnings before taxes) fell to €69.1 million, down considerably on the previous year (2023: €152.8 million). The tax expenditure of -€112.7 million (2023: -€41.6 million) corresponds to a tax ratio of 163.1% (2023: 27.2%). The change in the tax rate compared with the previous year was mainly due to the valuation of deferred tax assets on loss carryforwards in the mid-double-digit million range and the lower tax subsidies in North America and China.

Earnings after taxes amounted to -€43.5 million, down -€154.7 million on the previous year's figure (2023: €111.2 million).

At -€43.5 million, earnings after taxes and after losses from discontinued operations were -€129.1 million lower than in the previous year (2023: €85.6 million). The resulting earnings per share in 2024 amounted to -€1.23 (2023: €1.76).

Project deteriorations, economic and political uncertainty and the international price war had a negative impact on KUKA Group's business in the 2024 fiscal year.

Group income statement (condensed)

in € millions	2020	2021	2022	2023	2024
Sales revenues	2,573.5	3,286.2	3,897.0	4,053.7	3,732.4
EBIT	-113.2	61.8	118.4	158.2	76.5
EBITDA	33.2	202.0	251.2	294.0	228.3
Financial result	3.0	13.5	8.0	-5.4	-7.3
Taxes on income	15.6	-25.9	-25.0	-41.6	-112.7
Earnings after taxes	-94.6	49.4	101.4	111.2	-43.5
Earnings after taxes and after losses from discontinued operations	-94.6	49.4	101.4	85.6	-43.5

Financial position

For information on the financial management principles and objectives please refert to note 28.

Assessment by rating agencies

Since May 2022, KUKA has had an investment grade rating of BBB+ from Standard & Poor's. The rating was confirmed on June 7, 2024 and has had a "stable" outlook since this date.

Group free cash flow (condensed)

in € millions	2020	2021	2022	2023	2024
Cash earnings	40.9	223.3	255.6	322.1	242.3
Cash flow from operating activities	77.4	208.0	-198.2	331.5	272.9
Cash flow from investment activities	-40.4	-107.6	9.9	-151.5	-49.2
Free cash flow [1]	37.0	100.4	-188.3	180.0	223.7

[1] Comparative figures have been adjusted

The income situation was also reflected in the cash earnings. Cash earnings are an indicator derived from the earnings after taxes and after losses from discontinued operations, adjusted for income taxes (excluding deferred taxes), net interest and cash-neutral depreciation, together with other non-cash income and expenses (including deferred taxes). Cash earnings decreased from €322.1 million in the previous year to €242.3 million in fiscal 2024.

At €272.9 million, KUKA Group's cash flow from operating activities was also below the previous year's figure (2023: €331.5 million).

Trade working capital decreased by -€45.5 million from €671.5 million in fiscal 2023 to €626.0 million in the current year under review. While the assets side of trade working capital decreased only slightly, liabilities and contract liabilities increased.

At €533.5 million, inventories in 2024 were slightly lower than the previous year's figure of €539.0 million. Trade receivables and contract assets increased only marginally from €1,275.4 million in 2023 to €1,278.5 million in 2024. Finally, the increase in trade payables and contract liabilities from €1,142.9 million in 2023 to €1,186.0 million in the current year under review led to a reduction in trade working capital. Overall, trade working capital developed as follows:

Trade working capital

in € millions	2020	2021	2022	2023	2024
Inventories	307.9	445.6	719.8	539.0	533.5
Trade receivables and contract assets	756.3	1,072.1	1,219.6	1,275.4	1,278.5
Trade payables and contract liabilities	669.6	1,119.0	1,185.4	1,142.9	1,186.0
Trade working capital	**394.6**	**398.7**	**754.0**	**671.5**	**626.0**

The payments from grants received related to income (2024: €10.6 million; 2023: €25.0 million), which were previously reported under cash flow from financing activities, have been reported under cash flow from operating activities since this year. By contrast, payments from grants related to assets, which were previously reported under cash flow from operating activities, are now allocated to cash flow from investing activities. The previous year's figures have been adapted accordingly to allow comparison. This change in reporting was made in order to offer a better reflection of the nature of the grants related to income and and grants related to assets.

Capital expenditure in KUKA Group

The volume of investments in intangible and tangible assets totaled €97.3 million in fiscal 2024 (2023: €127.1 million).

Investments in intangible assets and property, plant and equipment

in € millions	2020	2021	2022	2023	2024
Group	80.7	101.4	129.5	127.1	97.3

Investments in intangible assets amounted to €39.2 million in the 2024 fiscal year (2023: €44.6 million). Investments for licenses and other rights amounted to €4.0 million (2023: €13.4 million), investments for internally generated software and development costs amounted to €35.0 million (2023: €29.3 million) and investments for advance payments made amounted to €0.2 million (2023: €1.9 million).

The carrying amount of the company's own development work and internally generated intangible assets totaled €125.7 million (2023: €124.9 million).

At €58.1 million, investments in property, plant and equipment were down considerably on the prior-year level (2023: €82.5 million). Investments in land, leasehold rights and construction (including buildings on third-party land), fell to €4.3 million (2023: €6.8 million). Investments amounted to €14.2 million in technical equipment and machinery (2023: €19.6 million), €19.2 million in other equipment/operating and office equipment (2023: €24.2 million) and €20.4 million in advance payments and assets under construction (2023: €31.5 million). Investments in property, plant and equipment were mainly related to site expansions and modernizations, particularly at locations in Germany, Hungary, the USA and China.

Proceeds from investments in financial investments and at-equity investments were as follows:

in € millions	2023	2024
Otsaw Swisslog Healthcare Robotics Pte. Ltd., Singapore, Singapore	0.5	1.1
Synergies-Tech Sarl, Saint-Priest, France	0.3	–
Pharmony SA, Luxembourg, Luxembourg	0.5	–
Yawei Reis Robot Manufacturing (Jiangsu) Co. Ltd., Yangzhou City, China	–	2.3
Total cash inflows	**1.3**	**3.4**

Proceeds from the disposal of tangible assets amounted to €3.2 million in the year under review after €3.0 million in the previous year. This includes a cash inflow of €1.7 million from a sale and leaseback transaction in Germany.

In addition, the cash flow from investment activities included proceeds amounting to €10.1 million due to financial assets related to short-term financial management (2023: payments amounting to -€42.5 million) as well as interest received amounting to €16.9 million (2023: €17.0 million).

Positive free cash flow – a new record figure

Cash flow from operating activities (2024: €272.9 million; 2023: €331.5 million) and cash flow from investment activities (2024: -€49.2 million; 2023: -€151.5 million) together resulted in a positive free cash flow of €223.7 million (2023: €180.0 million). The reduction in trade working capital, lower investment volume and effective cash management contributed to the positive development of KUKA Group's financial position.

Negative cash flow from financing activities

The cash flow from financing activities decreased to -€167.9 million in 2024 after -€102.5 million in 2023. This includes the raising of current financial liabilities as part of the syndicated loan, the repayment of the inter-company loans as well as other changes in current liabilities to banks (2024: -€98.4 million; 2023: -€33.3 million). Furthermore, the cash flow from financing activities included both the repayment portion of the lease payments (2024: -€42.6 million; 2023: -€40.8 million) and interest payments including the interest portion from leases (2024: -€26.9 million; 2023: -€28.4 million).

The cash and cash equivalents of the companies fully consolidated for the first time in the year under review amounting to €27.1 million contributed to the positive change in cash and cash equivalents (2023: €0.0 million).

Group net liquidity

in € millions	2023	2024
Cash and cash equivalents	531.4	656.0
Current financial liabilities incl. accounts payable to affiliated companies	-344.1	-445.9
Non-current financial liabilities incl. accounts payable to affiliated companies	-198.4	-0.1
Group net liquidity/debt	**-11.1**	**210.0**
Cash and guarantee facilities from syndicated senior facilities agreement	520.0	700.0
Guarantee facility from banks and surety companies	213.0	316.6

Net debt also improved significantly from -€11.1 million in the previous year to €210.0 million in the current year under review. Cash and cash equivalents increased from €531.4 million in 2023 to €656.0 million in 2024.

In December 2019, KUKA AG had concluded an inter-company loan agreement covering a loan volume of €150.0 million with Midea International Corporation Company Limited, Hong Kong, a wholly-owned subsidiary of Midea Group. The inter-company loan was increased by a further €50.0 million to the current level of €200.0 million in May 2022. It is due on June 20 and April 25, 2025. The two tranches bear interest at an average rate of 0.8875% p. a. The carrying amount at December 31, 2024, taking into account the interest payments thereon, was €199.5 million (December 31, 2023: €198.0 million). For this inter-company loan, Midea International Corporation Company Limited declared in a subordination agreement with KUKA AG that its receivables arising from this loan agreement are deeply subordinated.

Furthermore, in September 2022, KUKA AG borrowed further €100.0 million with a term of 12 months from Midea Group. Of this amount, €10.0 million was repaid on schedule and €90.0 million was extended until September 15, 2024 which was also repaid on schedule.

Syndicated loan for KUKA Aktiengesellschaft

KUKA AG refinanced its syndicated loan agreement concluded on February 1, 2018 and originally due in February 2025 ahead of schedule in November 2024. The credit volume of the new syndicated loan was increased to €700 million. It was thus adjusted to the significant increase in KUKA Group's business volume since the last refinancing in 2018. Like its predecessor, the syndicated loan consists in equal parts (€350 million each) of a guarantee facility and a cash credit line, which can also be used for guarantees.

The initial term is 5 years; in addition, two extension options of one year each have been agreed (5+1+1). Conditions were maintained at the same level despite the tougher market conditions.

KUKA has taken the refinancing as an opportunity to adapt the German-language contract documentation, the basic structure of which dates back to 2007, to international requirements. The new documentation is in English and follows the LMA (Loan Market Association) standard for investment grade companies. The syndicated loan agreement was concluded on an unsecured basis. The only covenants agreed are the customary equal treatment clauses and negative pledges. It no longer contains any financial covenants (thresholds for certain financial KPIs). In the 2024 fiscal year, the covenant in the old syndicated loan agreement was met at each review date.

Guarantee facility lines from banks and surety companies

The guarantee facilities promised by banks and surety companies outside the syndicated loan agreement amount to €316.6 million as at December 31, 2024 (2023: €213.0 million) and can be utilized up to a total volume of €150.0 million in accordance with the provisions of the new syndicated loan agreement also.

Net assets and financial position

Non-current assets decreased by €69.3 million from €1,377.3 million as at December 31, 2023 to €1,308.0 million as at December 31, 2024. Deferred tax assets fell by €17.5 million to €187.5 million (2023: €205.0 million); this was mainly due to the offsetting effects of the impairment of deferred tax assets on loss carryforwards and the expenses for research and development to be capitalized in the USA. Furthermore, intangible assets decreased, in particular due to scheduled amortization (December 31, 2024: €545.7 million; December 31, 2023: €565.5 million). The goodwill reported under intangible assets changed from €351.2 million in 2023 to €350.1 million in 2024 due to foreign exchange effects.

Investments accounted for using the equity method decreased from €28.9 million as at December 31, 2023 to €0.7 million as at December 31, 2024, mainly due to the change in the consolidation method of two companies in China. Furthermore, the shares in Otsaw Swisslog Healthcare Robotics Pte. Ltd, Singapore, Singapore were sold.

Non-current finance lease receivables decreased as planned by €11.7 million to €7.8 million as at December 31, 2024 (December 31, 2023: €19.5 million).

Financial investments decreased to €1.4 million (December 31, 2023: 3.6 million), as one other investment experienced a negative change in value.

By contrast, right-of-use assets from leases increased by €7.3 million to €135.2 million as at December 31, 2024 (December 31, 2023: €127.9 million). Other non-current receivables also increased from €6.4 million as at December 31, 2023 to €7.7 million as at December 31, 2024.

Investment property with a carrying amount of €8.3 million as at December 31, 2024 is held to generate rental income in the China segment (December 31, 2023: €8.4 million).

At €2,690.1 million, current assets in the current year under review were €95.7 million higher than in the previous year (December 31, 2023: €2,594.4 million).

As explained under “Financial position”, there was a slight decline in active trade working capital. Inventories decreased by €5.5 million (2024: €533.5 million; 2023: €539.0 million). Trade receivables remained virtually at the prior-year level (2024: €843.1 million; 2023: €843.5 million). By contrast, contract assets increased from €431.9 million as at December 31, 2023 to €435.4 million as at December 31, 2024.

The decrease in other current receivables and other assets from €184.9 million as at December 31, 2023 to €166.1 million as at December 31, 2024 resulted primarily from the sale of current securities.

The current portion of the finance lease receivables fell to €20.6 million as at December 31, 2024, compared with €38.4 million as at December 31, 2023. Income tax receivables increased from €25.3 million as at December 31, 2023 to €35.4 million as at December 31, 2024.

Due to the positive cash flow, cash and cash equivalents were up from €531.4 million as at December 31, 2023 to €656.0 million as at December 31, 2024.

Group net assets

in € millions	2020	2021	2022	2023	2024
Balance sheet total	3,116.5	3,709.1	3,955.9	3,971.7	3,998.1
Equity	1,203.7	1,354.6	1,500.4	1,516.4	1,552.6
in % of balance sheet total	38.6	36.5	37.9	38.2	38.8
Net liquidity/debt	30.0	148.1	-77.4	-11.1	210.0

Overall, the balance sheet total of KUKA Group increased by €26.4 million from €3,971.7 million as at December 31, 2023 to €3,998.1 million as at December 31, 2024.

Equity ratio of 38.8%

The equity ratio increased from 38.2% to 38.8%. As at the 2024 balance sheet date, equity had increased by €36.2 million to €1,552.6 million (December 31, 2023: €1,516.4 million). The subscribed capital of €103.4 million and the capital reserve of €306.6 million remained unchanged in the year under review as in the previous year.

The negative result of -€43.5 million and the actuarial losses from pension valuation (including the related deferred taxes) of -€8.1 million were offset by the positive development of currency effects. The largest positive currency effect was attributable to the US dollar and Chinese renminbi.

Additionally, the equity attributable to minority interests was increased by €22.4 million, due primarily to the change in the consolidation method of two companies already explained, so that the total equity attributable to minority interests increased from €327.4 million as at December 31, 2023 to €367.6 million as at December 31, 2024.

The current portion of financial liabilities decreased from €253.9 million as at December 31, 2023 to €246.4 million as at December 31, 2024 and included the drawings on the syndicated loan and the repayment of the Midea Group's short-term credit line in the amount of €90 million.

Due to their remaining term, liabilities to affiliated companies were allocated in full to current liabilities in the year under review, while an amount of €198.0 million was reported as non-current in the previous year. Current liabilities therefore increased from €90.3 million as at December 31, 2023 to €199.5 million as at December 31, 2024. Further details can be found in the section on KUKA Group's net liquidity.

Lease liabilities increased to €148.8 million as at the reporting date December 31, 2024 (December 31, 2023: €139.0 million). Of this amount, €44.7 million (December 31, 2023: €41.4 million) was accounted for by current lease liabilities and €104.1 million (December 31, 2023: €97.6 million) by non-current lease liabilities.

There was also an increase in provisions for pensions and similar obligations from €66.9 million as at December 31, 2023 to €72.4 millionas at December 31, 2024.

Other provisions increased in both the non-current (December 31, 2024: €18.0 million; December 31, 2023: €0.0 million) and current areas (December 31, 2024: €152.0 million; December 31, 2023: €130.7 million). In particular, provisions for warranty commitments and risks from pending transactions increased, mainly due to project deteriorations.

Overall, non-current liabilities totaled €237.2 million as at the 2024 balance sheet date (December 31, 2023: €405.5 million).

Current liabilities amounted to €2,208.3 million as at December 31, 2024 (December 31, 2023: €2,049.8 million). Trade payables increased by €30.2 million to €625.1 million (December 31, 2023: €594.9 million). Contract liabilities increased by €12.9 million from €548.0 million as at December 31, 2023 to €560.9 million as at December 31, 2024.

By contrast, other current liabilities fell from €345.9 million as at December 31, 2023 to €344.3 million as at December 31, 2024.

The reduction of €9.4 million in income tax provisions by from €44.7 million as at December 31, 2023 to €35.3 million as at December 31, 2024 results from a revaluation of tax risks, which suggests a lower utilization.

Group assets and financial structure

in € millions	2023	2024
Current assets	2,594.4	2,690.1
Non-current assets	1,377.3	1,308.0
Assets	**3,971.7**	**3,998.1**
Current liabilities incl. liabilities directly associated with assets classified as held for sale	2,049.8	2,208.3
Non-current liabilities	405.5	237.2
Equity	1,516.4	1,552.6
Liabilities	**3,971.7**	**3,998.1**

Development of working capital

Working capital decreased from €307.1 million in the previous year to €178.9 million in fiscal 2024. The decline was particularly evident in the Systems, Swisslog and China segments.

Events after the balance sheet date

On January 15, 2025, Visual Components Japan K.K., Tokyo, Japan, was founded as a wholly owned subsidiary of Visual Components Oy, Espoo, Finland.

The latest developments in US economic policy have far-reaching consequences for the global economy and require careful planning and strategy adaptations. The introduction of increased tariffs on imports has not only led to transatlantic trade disputes, but also to higher costs, supply chain disruptions and reduced competitiveness. KUKA is closely monitoring the latest events in order to be able to implement the necessary measures early, such as short-term cost reductions, adjustments to the value chains, etc.

For further events after the balance sheet date, please refer to the notes to the financial statements of KUKA Aktiengesellschaft.

Notes to the annual financial statements of KUKA Aktiengesellschaft

KUKA Aktiengesellschaft acts as the management holding company within the Group with central management responsibilities such as accounting and controlling, finance, human resources, legal, IT and financial communications. The financial position is determined primarily by the activities of its subsidiaries. This is reflected in the direct allocation of the main companies of the Robotics, Systems, Swisslog, Swisslog Healthcare, China and KUKA Digital divisions. In the consolidated financial statements, KUKA Aktiengesellschaft is allocated to the Corporate Functions segment.

The annual financial statements of KUKA Aktiengesellschaft are prepared in accordance with the provisions of the German Commercial Code (HGB) and the German Stock Corporation Act (AktG). The financial statements of KUKA Aktiengesellschaft are published in the company register.

Income statement of KUKA Aktiengesellschaft (HGB)

in € millions	**2023**	**2024**
Sales revenues	117.3	121.5
Other company-produced and capitalized assets	0.1	0.1
Other operating income	85.2	59.3
Cost of materials	-68.7	-69.8
Personnel expenses	-63.1	-57.7
Depreciation and amortization of tangible and intangible assets	-5.7	-5.3
Other operating expenses	-129.6	-160.4
Income from investments	26.3	164.1
Income from other securities	0.1	0.6
Other interest and similar income	30.2	28.4
Depreciation of financial assets	-17.4	0.0
Interest and similar expenses	-32.6	-40.8
Taxes on income	-3.8	-2.2
Net profit/net loss for the year	**-61.7**	**37.8**
Withdrawal from retained earnings	61.7	0.0
Transfer to retained earnings	0.0	-18.9
Balance sheet profit	**0.0**	**18.9**

Balance sheet of KUKA Aktiengesellschaft (HGB)

Assets in € millions	**Dec. 31, 2023**	**Dec. 31, 2024**
Fixed assets		
Intangible assets	9.8	8.0
Property, plant and equipment	7.3	6.3
Financial assets	818.6	881.5
	835.7	**895.8**
Current assets		
Inventories	0.0	3.3
Receivables from affiliated companies	543.5	553.7
Other receivables and assets	6.0	1.4
Securities	42.1	29.8
	591.6	**588.2**
Cash and cash equivalents	**18.4**	**10.6**
	610.0	**598.8**
Prepaid expenses	**6.8**	**6.7**
	1,452.5	**1,501.3**

Liabilities in € millions	**Dec. 31, 2023**	**Dec. 31, 2024**
Subscribed capital	**103.4**	**103.4**
Capital reserve	305.8	305.8
Other revenue reserves	34.1	53.1
Balance sheet profit	0.0	18.9
	443.3	**481.2**
Provisions		
Pension provisions	11.2	10.6
Provisions for taxes	15.3	10.4
Other provisions	45.3	30.6
	71.8	**51.6**
Liabilities		
Liabilities due to banks	253.9	246.1
Trade payables	7.4	3.4
Accounts payable to affiliated companies	672.0	714.7
Liabilities to provident funds	2.6	2.7
Other liabilities	1.0	1.6
	936.9	**968.5**
Prepaid expenses	**0.5**	**0.0**
	1,452.5	**1,501.3**

Results of operations of KUKA Aktiengesellschaft

The income situation of KUKA Aktiengesellschaft significantly depends on the results of the (direct) subsidiaries, the financing activities and the expenditure and income relating to the holding function.

Sales revenues increased from €117.3 million in 2023 to €121.5 million in 2024. KUKA Aktiengesellschaft mainly generates its sales revenues from cost allocations and cost transfers to subsidiaries. These increased in the past fiscal year, primarily as a result of higher cost transfers from information technology.

The expenses associated with sales revenues are reported as cost of materials. These amounted to €69.8 million during the fiscal year (2023: €68.7 million).

Other operating income of €59.3 million (2023: €85.2 million) mainly includes foreign exchange gains primarily from the US dollar, Swiss franc, Norwegian krone and Swedish krona.

Other operating expenses increased from €129.6 million to €160.4 million. The increase is mainly due to higher value adjustments made on receivables from affiliated companies compared to 2023.

Personnel expenditure decreased by 9% year on year to €57.7 million (2023: €63.1 million). Reduced provisions for management had the effect of reducing costs. The average number of employees increased from 549 in the previous year to 563 in fiscal 2024.

Income from investments totaled €164.1 million (2023: €26.3 million) and was thus considerably up on the figure for the previous year. This includes dividend income from foreign subsidiaries, earnings contributions of the German companies that have a profit and loss transfer agreement with KUKA Aktiengesellschaft and expenses from a loss compensation obligation.

There were no write-downs on financial assets in fiscal 2024 (2023: €17.4 million).

The change is due to -€12.4 million (2023: -€2.4 million). The increase is due, in part, to lower net interest income from affiliated companies and higher expenses for bank loans and interest expenses to banks. Interest expenses to the parent company Midea decreased slightly.

The reported taxes on income and earnings amounting to €2.2 million (2023: €3.8 million) mainly include tax expenses due to foreign withholding taxes and taxes from previous years.

KUKA Aktiengesellschaft’s net loss for fiscal 2024 was €37.8 million (2023: -€61.7 million) and was considerably above the prior-year level due to higher earnings contributions from subsidiaries. Taking into account the withdrawal from retained earnings of €18.9 million, the balance sheet profit amounts to €18.9 million.

Financial position of KUKA Aktiengesellschaft

One task of KUKA Aktiengesellschaft is to provide funds and guarantees for its subsidiaries’ current operations. The resources used for finance, such as the modified syndicated loan agreement and the loan from Midea Group, are described in detail in the section on the financial position of KUKA Group.

KUKA Aktiengesellschaft’s financing role is reflected in its receivables from and liabilities to affiliated companies, which are predominantly the result of cash pooling accounts with subsidiaries and loans provided. Additionally, a loan of €200.0 million (2023: €200.0 million) was drawn from Midea International Corporation Company Limited, Hong Kong. The drawn credit line was repaid in 2024 (2023: €90.00 million). Payables to and receivables from affiliated companies are higher than in the previous year. The balance of these receivables and liabilities was an increased liabilities figure of €161.0 million (2023: €128.5 million).

The liquid assets of KUKA Aktiengesellschaft fell from €18.4 million to €10.6 million. Financial liabilities decreased year on year by €7.8 million to €246.1 million (2023: €253.9 million). This includes liabilities from the drawdown of the working capital facility under the syndicated loan agreement.

Net assets of KUKA Aktiengesellschaft

The net assets of KUKA Aktiengesellschaft are impacted by the management of its equity investments as well as the way in which it executes its management function for the companies in KUKA Group. The receivables from affiliated companies rose from €543.5 million in the previous year to €553.7 million. For further details of the receivables from and liabilities to affiliated companies and financial items, please refer to the information on KUKA Aktiengesellschaft's financial position.

Depreciation and amortization of intangible and tangible fixed assets decreased from €5.7 million in 2023 to €5.3 million in 2024. Investments totaling €70.0 million (2023: €55.0 million) were made in fiscal 2024. The investments in intangible assets relate primarily to IT infrastructure. KUKA Aktiengesellschaft's direct equity investments in its subsidiaries are reported under financial assets. The increase to €881.5 million (2023: €818.6 million) is primarily due to investments in the Swisslog Group and a Group-internal acquisition of foreign companies.

Inventories in an external warehouse were acquired during the 2024 fiscal year.

Other assets decreased to €1.4 million in 2024 (2023: €6.0 million) due to decreased other receivables from third parties. In 2024, short-term securities amounted to €29.8 million (2023: €42.1 million).

Equity rose by €37.8 million on the previous year and thus reflects the positive result for the fiscal year. The equity ratio of KUKA Aktiengesellschaft amounts to 32.0% as at the balance sheet date December 31, 2024 (2023: 30.5%).

As at December 31, 2024, other provisions totaled €30.6 million (2023: €45.3 million) and were thus down on the corresponding figure for the previous year. In addition to significantly lower provisions for impending losses on foreign currency derivatives, this was due to lower personnel-related liabilities and provisions for outstanding invoices.

Other liabilities increased from €1.0 million to €1.6 million due to higher tax liabilities.

The net impact on the balance sheet total of KUKA Aktiengesellschaft resulting from the effects described was an increase of €48.8 million to €1,501.3 million (December 31, 2023: €1,452.5 million).

Dependency report

Since there is no control agreement between KUKA Aktiengesellschaft and the majority shareholder, the Management Board prepares a report on the company's relationships with affiliated companies during the reporting period pursuant to section 312 of the German Stock Corporation Act (AktG). The report was concluded with the following declaration:

"We declare that for each legal transaction in relation to the legal transactions listed in the report on relationships with affiliated companies, the company received appropriate compensation according to the circumstances known to us at the time the legal transaction was performed. No measures have been taken or omitted."

Sustainability at KUKA

Ecological responsibility

At KUKA, sustainability is embedded in the corporate culture and stands for responsible business practices aimed at protecting the environment, our employees, customers, investors and our social environment. The responsible use of natural resources for the sake of an intact environment and the continuous improvement of measures to achieve this are important prerequisites for economic success. As an industrial company, KUKA makes a measurable contribution to the reduction of environmental pollution. The aim here is to reduce the consumption of energy and other resources and to cut emissions and waste.

Resource-saving production and environmental protection
KUKA products and systems stand for innovation and quality. KUKA is committed to efficient production processes that protect the environment and reduce pollutants. Environmental issues are therefore continuously taken into account and evaluated by the environmental management team together with the employees responsible. Most of KUKA's production locations work according to internationally recognized management system standards in the areas of environment (ISO 14001), energy (ISO 50001), quality (ISO 9001) and other industry-specific regulations. With our Guidelines for Quality, Health, Safety and Environmental and Energy Management we have established specific procedural instructions relating to all management standards. For many years, KUKA has had a cross-location environmental management system lying within the responsibility of the Group's Management Board.

Employees

Employees in KUKA Group
KUKA shapes many different sectors with its technologies. The employees are the pillars of KUKA's success in doing so. In order to further improve its attractiveness as an employer, KUKA offers, for example, an ambitious training and further education program, measures to help employees reconcile work and family life, and promotes diversity and equal opportunities.

As at December 31, 2024, KUKA Group employed 14,783 people. The number of employees was thus 0.4% higher than in the previous year (2023: 14,726).

High standard of training and further education
When it comes to the professional training of young people, KUKA has for decades been offering apprentices not only specialist know-how, but also an opportunity to learn in an intercultural setting and to think and act globally on a Group-wide scale. The company trains in line with requirements and maintains a high standard in the quality of apprentice training and the level of performance. Vocational education is offered at the German sites in Augsburg and Bremen. The Group offers apprenticeships ranging from technical professions – such as industrial mechanic, lathe / milling machine operator, mechatronics technician, electronics technician for automation technology, warehouse logistics specialist and vehicle paint technician – to the commercial sector, with occupations such as industrial clerk, specialist for forwarding and logistics services, and IT specialist.

In addition to the traditional apprenticeships, KUKA offers a dual, training-integrated degree course at the Augsburg University of Applied Sciences with the aim of attaining a Bachelor's degree. In addition to the dual integrated study course for mechanical engineering, mechatronics and electrical engineering, the disciplines of business administration, information technology, technical information systems and business information systems are also available to choose from.

As part of our continuing education programs at KUKA Academy, we accompany and support our employees in their personal and professional development. At KUKA Academy, we offer all our employees an extensive and varied range of technical / methodical and personal further education courses. These include standard courses such as IT training and language courses, as well as specialist training for a wide range of business areas. Seminars to promote personal and social skills, in particular communication and intercultural training, as well as global leadership circles complement our continuing education measures which we offer internationally, taking decentralized requirements into account.

Forecast, opportunity and risk report

Opportunity and risk report

Basic principles

KUKA Group is a global enterprise with international operations. Any entrepreneurial activity provides new business opportunities, but also involves many potential risks. The Management Board of KUKA Aktiengesellschaft aims to systematically and sustainably improve the value of the company for all stakeholders by seizing potential opportunities and minimizing said risks.

To achieve this objective, the Management Board has implemented a comprehensive corporate risk management system to systematically and consistently identify, evaluate, manage, monitor and report the internal and external risks to which its business segments and subsidiaries are exposed. The risk management system meets the criteria described in the internationally recognized ISO 31000 standard.

Group management regularly assesses the likelihood that identified risks will occur and their potential impact on expected earnings (EBIT). Worst, medium and best case scenarios are considered and serve as the basis for determining a weighted expected risk value. Accruals and write-downs associated with these risks are recognized in the annual financial statements in accordance with applicable accounting principles. The unsecured residual risks, in other words risks subsequent to risk mitigation measures (net assessment), are therefore depicted as risks.

The risk management system is subject to a monthly reporting process (risk inventory) which involves identifying new risks and carrying out a follow-up assessment of existing risks. These risks are reported if they exceed the threshold defined in the Group's risk management policy. Risks that remain below the threshold are left at segment level and evaluated at "0" in the Group, as the sum of these risks is immaterial for the Group even on a cumulative basis. The information collected in this way is summarized in a risk report that is also prepared each month and addressed to the Management Board of KUKA Group. This report contains a top 10 risk assessment and a risk exposure assessment (overall risk situation) for the business segments, KUKA Aktiengesellschaft as the holding company and KUKA Group. The top 10 risks are also a fixed part of the internal monthly management report and are discussed at monthly results discussions between the Management Board of KUKA Group and the management of the business segments and KUKA AG. The identified risks are additionally presented and explained in more detail to the Management Board by the Risk Management Committee. The committee also determines whether any measures already implemented to minimize risk are adequate or whether further steps need to be initiated. The risk report is also reviewed during Management Board and Supervisory Board meetings, especially by the Audit Committee.

Direct responsibility for the early identification, control and communication of risks lies with the management of the business segments and the individual subsidiaries, as well as with those responsible for the respective holding functions. Risk managers in the central and decentralized business units ensure that the reporting process is uniform with clearly defined reporting channels and reporting thresholds that are adapted to the business segments and KUKA AG. Internal ad hoc announcements are mandatory whenever risks exceed the Group's defined reporting thresholds. Standard procedures applied throughout the Group ensure that risk management is efficient and effective. Corporate Risk Management coordinates the risk management system. Here, the individual risks identified are compiled into the aforementioned top 10 risk overviews or risk exposure overviews, communicated and monitored. This role is based within KUKA Aktiengesellschaft's Corporate Controlling department, which reports directly to the CFO of KUKA Aktiengesellschaft. This ensures that risk management is an integral component of KUKA Group's overall planning, control and reporting process.

In principle, the Group's risk management system enables the Management Board to identify material risks at an early stage, initiate appropriate steps to counter these risks and monitor implementation of the steps. The internal audit department regularly monitors compliance with the risk management policy of KUKA Group and therefore whether existing procedures and tools are effective. It also audits those responsible for the risks if this is relevant. The internal audit department also regularly audits the risk management process to ensure efficiency and continuous improvement.

In addition to the risk management system, KUKA Group has an internal controlling system above and beyond the risk management system, which it uses to continuously monitor the appropriateness of the corporation's business and accounting processes and identify potential improvements.

Risks and opportunities in KUKA Group

KUKA Group's opportunity and risk-related controlling process ensures that the company's managers take both opportunities and risks into consideration. The Group's risk exposure, based upon evaluating operating risks according to the procedure outlined in the "Basic principles" section, is described below. The report includes the aggregated expected risk value, which is calculated on the basis of the various weighted scenarios and their respective likelihood of occurrence. The aggregated expected risk values of all risks managed and quantified in the Group are reported. The presented opportunities and risks of KUKA Group also apply, due to their effect on future profit transfers and distributions by subsidiaries, to KUKA AG as a single entity. The following is an aggregated quantification of the risks managed at Group level and in the divisions.

No aggregation is carried out for the opportunities at Group level.

Group risk exposure as at 31 Dec.

in € millions	2023	2024
Legal risks	15.6	18.3
Economic risks	60.6	89.0
Financial risks	16.7	10.6
Political risks	0.0	17.4
Other risks	47.5	35.2
Total for the Group	**140.4**	**170.4**

Top risks in the Group

Risk category	Name	Probability of occurrence	Effect	Explanations	Development of risk expectation value compared with previous year
Economic risks	Market risks	Likely	Very high	Risk of a slump in orders and sales due to geopolitical and economic uncertainties	↗
	Project risks	Possible	High	Settlement risk in the project portfolio	↘
	Cyber risks	Possible	High	Risk of operational disruptions due to cyber attacks	↗
Political risks	Political risks	Likely	Very high	Risk of additional costs and operational disruptions due to global crises (Russia, Middle East) and trade conflicts (USA, China, EU)	↗
Other risks	Location risks	Rare	Very high	Risk of location restrictions due to fire, natural hazards and disruptions in media supply	↘
Legal risks	Global tax risks	Possible	High	Risk of changes in global tax law	↗
Financial and economic risks	Global currency fluctuations	Rare	High	Risk of unhedged currency fluctuations	↘

Detailed explanations of the risk categories listed can be found in the following sections.

Explanation		
Probability of occurrence	Highly likely	> 50%
	Likely	25% – 50%
	Possible	10% – 25%
	Rare	1% – 10%

Explanation		
Effect	Very high	> 10 million
	High	5 – 10 million
	Medium	1 – 5 million
	Low	< 1 million

Operating risks and opportunities of the business segments and KUKA AG

KUKA is exposed to the cyclic investment behavior of its customers in the various market subsectors. A major portion of the divisions' business volume is in the automotive sector where oligopolistic structures and constant price pressure are ongoing concerns. Fluctuations in the industry's capital spending plans are also considered in the respective strategic and operational plans by analyzing public announcements and disclosures. The company continuously strives to be as flexible as possible with its own capacities and cost structure to address the cyclic nature of the business.

In fiscal 2024, KUKA Group was significantly affected by the global weakness in demand. In particular, the decline in demand for electric vehicles has slowed down our customers' willingness to invest, and projects that had already been agreed have had to be postponed. Challenges posed by complex systems engineering projects and weak demand in the second half of the year created additional risks that could still have an impact in 2025.

The economic uncertainties caused by the ongoing geopolitical crises mean that market risks have increased considerably. Furthermore, the political situation could also lead to an increase in cyberattacks, which could cause disruption to production and supply chains. The geopolitical risk situation is dealt with explicitly under political risks. And even new competitors have increased the pressure in this already tense market environment. In the course of the risk management process, these risks have been investigated, evaluated and corresponding mitigation measures provided. Regulatory changes such as the German Supply Chain Due Diligence Act were also anchored in the risk management process.

The trend towards automation is generally remaining intact, offering opportunities especially in logistics/e-commerce, healthcare, alternative drive systems, but also in non-industrial sectors. KUKA has further improved its supply chain risk management, and works with suppliers that focus on quality, innovative strength, continuous improvement and reliability so that it can supply its own customers with products of the highest possible quality and ensure timely delivery. In general, KUKA purchases product components from multiple suppliers in order to minimize the risk of supply disruptions and price increases for important components and raw materials. In a few exceptional cases, however, there is still a lack of supply alternatives due to individual, dominant suppliers that come from a single source. Continuous monitoring of supplier risks is conducted as part of the risk management process.

Opportunities arise from technological improvements in products, particularly control systems and software, as well as autonomous mobile robotics. In the project business, expertise in the areas of electromobility, battery production and automated house construction continues to be in demand. Improving efficiency in administration and production offers opportunities to compensate for cost disadvantages and remain competitive.

Economic risks

The majority of operating risks in the risk exposure are economic risks. The greatest risk is considered to be market risks, which could lead to continued weak sales and revenues due to global economic uncertainty. This effect is further intensified by trade conflicts. Increased tariffs, additional sanctions and technological market barriers may contribute to further uncertainty among customers, who may either not invest at all, invest to a lesser extent or invest at a later date. The resulting shrinking market is creating further competition and pressure on margins, which is also being intensified by new competitors. Additionally, risks from the project portfolios, such as delays in project progress due to disruptions in the supply chain, technical problems or the threat of contractual penalties in the event of late project handover, must be taken into account. Product risks, such as possible quality defects or delayed delivery, are also mainly due to risks in the supply chain. The risk of an increase in cyberattacks, which is also influenced by the geopolitical situation, affects both the project and product business and is a significant item in the risk exposure of economic risks.

Individual mitigation measures are defined for each operating risk, such as increased diversification in the supply chain or price adjustment clauses as well as cost reduction programs and capacity adjustments.

As significant economic risks, the risk management process places a special focus on IT risks due to the importance of IT for business processes. The risk potential is increased, in particular, by the frequency of virus attacks or hacking and the damage they could potentially cause. These risks, also referred to as cyber risks, are included and assessed in the current risk inventory. The existing IT security and business continuity management systems as well as policies and organizational structures are regularly optimized and reviewed in an effort to predict and minimize possible IT-related risks such as failure of computer centers or other IT systems. One way this is addressed is by continuously upgrading hardware and software. Furthermore, KUKA has launched several transformation projects which are currently running with the objective of harmonizing processes and the supporting IT application system architecture throughout the Group. This will generate long-term cost reduction potential and lead to continuous quality improvements. By systematically monitoring the processes concerned, the company reduces the risks associated with external threats as well as dependence on the ever-expanding digitalization of business processes. The geopolitical situation also has a significant impact on the assessed cyber risk. Global data flows could also be affected by sanctions or attacks.

As information security requirements are increasing, risks in the areas of information security and data protection are analyzed and evaluated very intensively, as they can also result in considerable risks for the Group due to changes in the legal framework.

Political risks

Risks resulting from the global political situation have become a significant business risk for KUKA AG. As a company with an international division of labor, trade sanctions such as increased customs duties or technological restrictions lead directly to additional costs, limited availability, declining competitiveness and reduced demand. The unpredictable economic policy of the USA, for example, is causing further uncertainty among customers, increasing costs and project postponements. The risk of increased US tariffs has been categorized as a risk and quantified. Cost reductions are planned as countermeasures in the short term, while changes in the value chain are being examined for the long term. KUKA is already able to adapt its supply chain dynamically and can serve individual markets such as China or the USA for individual products and services by means of defined localization of the value chain without being affected by trade restrictions.

Legal risks

Since KUKA conducts business around the world, it is obliged to comply with many international and country-specific laws and regulations issued, for example, by tax authorities. The company employs specialists familiar with the respective countries' laws on a case-by-case basis. Opportunities and risks arise as a result of changes to legal frameworks. For example, tax audits discovering non-compliance issues could negatively impact the Group in the form of payment of interest charges, penalties and back taxes. These changes and the resultant risks are continuously monitored; at the present time, however, there are no foreseeable tax or legal issues that could have a significant negative impact on KUKA Group. Appropriate provisions have been recognized for tax risks based on experience.

Standard general contracts are used whenever possible to cap risks from contractual relationships. The Group's legal department supports the operating companies to help limit risks associated with expiring contracts, warranty obligations and guarantees as well as country-specific risks such as a lack of patent and brand protection. KUKA has developed an independent strategy to safeguard its intellectual property, which is primarily secured by patents and trademark rights. In addition, product compliance processes have been established and are closely monitored.

In the context of insurance/risk management, sufficient property insurance, loss-of-profits insurance, public, product and environmental liability insurance and insurance for transportation risks are maintained centrally for the Group. D&O insurance (directors and officers liability insurance) is also in place. Existing insurance policies are reviewed regularly in order to ensure sufficient cover and to weigh the relationship between the insurance protection and deductibles against the risk premium.

Compliance violations can have far-reaching consequences, resulting in long-term damage to the company and restricting its economic success. In addition to high fines and compensation payments, exclusion from tenders, disgorgement of profits and criminal law repercussions are possible. KUKA's image as a business partner of integrity could also be tarnished. This can have a negative effect not only on customer relationships, but also on business relationships of all kinds. Consequently, strategic projects, transactions and capital market measures could suffer as a result.

In order to counter these risks in a transparent and appropriate manner, the Group-wide Corporate Compliance Program was set up in 2008. Details can be found in the Corporate Compliance Report.

The Compliance Committee established through this program holds regular ordinary meetings as well as extraordinary meetings as required. The members have a wide-ranging and in-depth wealth of experience in both the company and the industry. This enables them to assess risks carefully and adequately.

The committee is chaired by the Chief Compliance Officer, who reports to KUKA Aktiengesellschaft's CEO, who in turn reports to the Supervisory Board's Audit Committee.

The CEO is ultimately responsible for the Corporate Compliance Program, which is updated as required and subject to strict internal controls. The Corporate Compliance Program is integrated into daily work by means of the comprehensive processes and measures of the Compliance Management System.

No substantial compliance risks were identified in 2024 due to the active countermeasures taken by KUKA to mitigate risk at an early stage and to eliminate risk sources, for example, by realigning processes and adapting training to specific target groups.

Financial risks

KUKA Group is under the financial control of KUKA AG. The primary objective of financial management is to safeguard the liquidity and creditworthiness of the Group, thereby ensuring its financial capacity to act at all times. Effective management of foreign exchange, interest rate and default risk also serves to reduce earnings volatility.

The liquidity situation is continuously monitored and is recorded and managed by means of Group-wide planning of financial requirements and the procurement of funds. For this, a Group-wide standard treasury management and reporting system is employed. KUKA AG normally procures finance centrally and distributes the funds among the Group companies. In addition, liquidity risk is reduced for KUKA Group by closely monitoring the Group's companies and their management of payment flows.

KUKA pursues a conservative financing policy with a balanced funding portfolio. This is mainly based on shareholder loans with Midea and the syndicated loan refinanced in November 2024 with a term until 2029, which provides both cash credit lines and guarantee lines. Beyond these financing agreements, additional financing options are available to KUKA within the terms of factoring framework agreements. Comprehensive details of the financing instruments and the extent to which the agreed credit lines have been utilized can be found in the notes to the annual financial statements, in the Group notes on “Financial liabilities/Financing”.

KUKA hedges the interest rate and exchange rate risks from operations and financial transactions with financial derivatives. Transactions in financial derivatives are exclusively entered into for hedging purposes, in other words always with reference to and for hedging underlying transactions. Whenever possible, KUKA AG is the central hedging partner of the Group companies, and it in turn hedges the Group’s risks by concluding appropriate hedging transactions with banks. Internal policies govern the use of derivatives, which are subject to continuous internal risk monitoring. For a more precise description of our risk management objectives and the methods employed please refer to the notes on financial risk management and financial derivatives.

Currency translation risks, i. e. measurement risks associated with balance sheet and income statement items in foreign currencies, are not hedged, but are continuously monitored. The risk associated with the volatility of leading currencies and the resulting economic exchange risk (competitive risk) is mitigated by having production facilities in several countries (natural hedging).

Other risks

KUKA Group continuously monitors other risks and mitigates these to the greatest extent possible. Possible risks to the environment due to operational activities are predominantly attributable to the use of hazardous substances. Waters and soils can also be adversely affected by the legal disposal of waste, or even by unforeseeable accidents. Such events cannot be completely ruled out despite all precautionary measures taken. KUKA therefore takes wide-ranging preventive measures to ensure continual minimization of the potential environmental impact. Most of our production locations work according to internationally recognized management system standards in the areas of environment (ISO 14001), energy (ISO 50001), quality (ISO 9001) and other industry-specific regulations, for example, VDA 6 Part 4. For many years, KUKA has had a cross-location environmental management system. Risks resulting from climate change are also analyzed and assessed on an ongoing basis, such as extreme weather events like storms, hail or floods. In addition, we regularly monitor changes in the legal framework for environmental and climate protection in order to identify potential risks at an early stage. The development of production capacity at the location in Shunde, China, was included in the risk assessment of the aforementioned location risks, in particular exposure to fire and natural hazards. The Group owns some of the buildings and properties that it uses for its business operations. As a result, the company is exposed to risks associated with any residual pollution, soil contamination or other damaging substances that may be discovered on its properties. There is currently no evidence of any situations that would have a negative impact on the measurement of balance sheet items. However, it cannot be ruled out that any such situations, which could, for example, require costly clean-up operations to be undertaken, will occur in the future. At the locations, risks relating to fire protection, water and media supply, static and construction defects are regularly investigated. These are assessed by experts and measures are taken to minimize the risk.

Strategic risks

KUKA’s business segments aim to be among the market and technology leaders in their target markets. The key to achieving this is to consistently enhance their core technologies on the basis of coordinated innovation programs. One important task is to identify opportunities and risks associated with innovations early and to evaluate the innovations’ manufacturability. The company mitigates the impact of faulty market assessments by conducting regular market and competitor analyses, some of which are decentralized. Application-related developments, system partnerships and cooperative ventures reduce the risk of development work not conforming to market requirements.

Strategic risks and opportunities are not quantified. Strategic risks are not included in the quantified overall risk position (Group risk exposure).

Personnel risks

The success of KUKA Group, a high-tech enterprise, depends to a great degree on having qualified technical and management staff. Personnel risks arise mainly from employee turnover in key positions within the Group. Due to the current general conditions, there is a risk of higher fluctuation, which could lead to shifts in competencies. KUKA is countering this risk, not least by means of in-house continuing education programs such as those offered by KUKA Academy and through modern, flexible working conditions, in order to boost the satisfaction, motivation and qualification of the workforce. This also opens up opportunities for the recruiting of new employees. Personnel risks are classified as abstract risks, are therefore not quantified and are not included in the quantified overall risk position (Group risk exposure).

Summary

In the overall assessment of risks, KUKA Group is primarily exposed to performance-related risks from the divisions and to legal and financial risks controlled at Group level. Despite the continued high risk potential, such as market and geopolitical risks, which have been identified and evaluated in the risk management system, the Management Board is not aware of any individual or aggregated risks that could threaten the company's existence. Strategically and financially, the company is positioned to be able to take advantage of business opportunities.

Forecast

General economic environment

The global economy has proven remarkably resilient in recent years despite the pandemic and the energy crisis. According to the IMF, the central banks' fight against high inflation is having an increasing effect, even if price pressure persists in some countries. Although increasing conflicts have led to uncertainty, the global economy remains extremely robust. Falling inflation rates combined with wage increases have led to growth in real household income and consumer spending, particularly in the advanced economies. However, consumer confidence in many countries has not yet reached pre-crisis levels. Against this backdrop, the IMF again expects global GDP to grow by 3.2% in 2025.

Low inflation, a less restrictive monetary policy and continued employment growth will have a positive impact on the development of the global economy in the coming year. The IMF experts point out, however, that structural reforms are necessary in many advanced economies in order to initiate positive impetus for production growth in the medium term. Structural challenges such as an aging population, weak investment and historically low productivity growth are significantly slowing economic momentum. The development within the national economies of the individual economic areas is very heterogeneous. It can be assumed that these differences will continue in the medium term, but will diminish over time. The fall in inflation is likely to continue in 2025, although the IMF also expects a greater divergence between the individual economies. Initial indicators and calculations suggest that average annual inflation will be within the target corridor in more than three quarters of economies in 2025.

For the USA, economists are forecasting a slight decline in the pace of growth to 2.2% in 2025. Private consumption is likely to develop moderately due to the slowdown in the increase in the working population. Growth in the eurozone should accelerate to 1.2% in 2025 due to stronger domestic demand. Lower key interest rates as a result of a further easing of monetary policy should strengthen the willingness to invest. Rising real wages should also have a positive impact on private consumer spending and provide a noticeable boost. However, the continuing weakness of the manufacturing sector is weighing on growth in countries such as Germany and Italy. In China, the weakness of the real estate market is expected to persist in 2025, which will also have a negative impact on consumer confidence. Accordingly, the IMF is forecasting a slight slowdown in Chinese GDP to 4.5%. The Japanese economy could regain momentum in 2025 and achieve GDP growth of 1.1%, driven by real wage increases and strong private consumption.

However, the outlook is still subject to considerable downside risks. Geopolitical tensions represent a significant short-term risk. Uncertainty about trade policy has increased significantly in recent months, not least due to the outcome of the US election, and has heightened concerns about increasing import restrictions. Furthermore, an intensification of the conflicts in the Middle East could have a significant impact on global inflation. An unexpectedly sharp rise in oil prices would have a particularly negative impact on growth in oil-importing countries.

Automation & digitalization

The difficult macroeconomic conditions described above will have an impact on the market for industrial robots, but the IFR believes that, in contrast to other branches of industry, they can provide positive impetus for the sector. This impetus can come from three areas in particular: regionalization of supply chains, sustainable production processes and demographic change.

In order to reduce the risk of geopolitical tensions, many globally active companies are increasingly regionalizing their supply chains. However, the relocation of supply chains to high-wage countries is only competitive if productivity increases at least as much as production costs. This is only possible through the automation of production processes with the increasing use of industrial robots. This is a trend that has already become apparent in recent years and will continue in the future.

The market for industrial robots will also benefit in the long term from society's demand for a reduced carbon footprint. Modern robots make a decisive contribution to improving energy efficiency in complex production processes and thus directly reducing energy consumption in production. At the same time, the greater precision of industrial robots leads to fewer rejects, significantly improving the ratio of resource input to output.

Demographic change offers opportunities, but also challenges for suppliers of industrial robots. Many countries such as Japan, Germany and the USA are already experiencing a general shortage of skilled workers and young talent. To compensate for this shortage, more and more production processes need to be automated. The demand for industrial robots is increasing accordingly. At the same time, however, companies in the automation sector also have to compete for young talent.

Overall, the IFR believes that the long-term growth trend in the market for industrial robots is intact. According to their estimates, the number of industrial robots installed worldwide is set to increase at a compound annual growth rate (CAGR) of 4% between 2024 and 2027. Based on stable development in 2024 with around 541,000 installed units, around 555,000 installations are forecast for 2025. Around 575,000 industrial robots are expected to be installed in 2026 and around 601,600 in 2027.

For the Asian market, the IFR expects an average growth rate of 4% to 433,120 installed units by 2027. In 2025, the market is expected to grow by 2%. China remains by far the largest market in this economic area with a share of 70.6%, followed by Japan with a share of 12.4% and South Korea with a share of 8.2%. The European market for industrial robots is expected to grow at an average rate of 3% until 2027. This corresponds to a volume of 90,700 installed units, after a forecast of 84,850 installed units in 2025. For the North American market, IFR economists expect an average growth rate of 5% until 2027, corresponding to an increase to 59,000 installed units. In 2025, the number of installed units is expected to increase by 7% to 55,200.

Automotive

The global automotive industry will continue to be exposed to the diverse effects of the ongoing transformation process towards electromobility in 2025. Established car manufacturers are facing increasing competition from dynamic start-ups, particularly from China. According to the IFR, these young market players have massively expanded their production capacities and will continue to do so in the coming years. In the highly complex production processes of the automotive industry, the parallel production of vehicles with combustion engines, hybrid drives or purely electric drives is only possible at acceptable cost structures with great effort and expense. Innovative robots have a decisive contribution to make here. As one of the largest users, automotive manufacturers are a key driver of innovations in industrial robotics, for which areas of application are subsequently also found in other branches of industry.

The market research company Dataforce expects new registrations in the European automotive market to rise by 4.1% to around 13.7 million units in a difficult environment. Although this could further reduce the gap to the pre-crisis level of 15.9 million vehicles, the gap is still a long way from being closed. Driven by the upcoming tightening of CO_2 targets for the fleets of individual manufacturers, new registrations of battery electric vehicles (BEVs) and plug-in hybrids (PHEVs) are likely to increase significantly in 2025, after the noticeable loss of growth momentum in these segments in 2024.

German manufacturers are therefore under considerable pressure to modernize their fleets and counter Chinese competitors with attractive offers. As these increasingly also cover the high-margin premium segment in the field of electromobility, the Institute for the German Economy (IW) believes that this will lead to an additional burden on Germany as an export-oriented automotive location.

Non-Automotive

The German Engineering Federation (VDMA) expects only a slight recovery in the industry in 2025. After a noticeable decline in global machine sales in 2024, sales are expected to increase by 1% in real terms in the coming year. The lower interest rate level and rising real income should have a positive impact on investment activity over the course of the year, although the leading economic indicators at the end of 2024 only provide cautious signals for a return to a dynamic upward trend.

The increasing automation of processes can play a key role when it comes to producing faster and more efficiently. This applies not only to the automotive industry, which is a pioneer in the use of robot technology, but also to other manufacturing industry sectors. Although robot density in the non-automotive industry is still comparatively low, it has continuously increased in recent years, according to the IFR. This trend is set to continue, meaning that there is still great potential for growth. According to the

IFR report of November 2024, the so-called robot density, defined as the number of industrial robots in operation per 10,000 employees, rose significantly by 9.2% to 130 robots in 2023 (2022: 119). In Germany, robot density in the non-automotive industry also increased noticeably in 2023, from 258 to 275 robots. By comparison, the automotive industry had a robot density of 1,492 robots (2022: 1,513). In the USA, robot density in the non-automotive industry rose to 190 robots in 2023 (2022: 181), while it fell slightly in the automotive industry to 1,493 robots (2022: 1,505). Robot density in China developed particularly dynamically, with an increase in 2023 to 400 robots (2022: 339) in the non-automotive industry and growth to 987 robots (2022: 866) in the automotive industry.

According to the IFR, the electronics industry lost its position as the largest customer group for robot-based automation in 2023 after three years. The number of robots installed fell significantly by 20% to 125,804 units (2022: 156,936). It must be noted here that demand for consumer electronics increased during the COVID-19 pandemic. At the same time, disruptions in the supply chain and limited production capacities led to bottlenecks that could only be resolved once the pandemic was over and additional production capacities came on stream. In 2023, many companies reduced their inventories back to normal levels, which led to a temporary decline in demand from customers in the electronics industry.

China

The Chinese economy remains on course for growth and continues to develop much more dynamically than many other large economic areas. The IMF is forecasting a disproportionately high increase in GDP of 4.5% for 2025. This would correspond to a slowdown in economic growth of 0.3 percentage points compared to the previous year. This continued slowdown in growth momentum is due in particular to the ongoing problems in the Chinese real estate sector and increasingly dwindling consumer confidence. The IMF specialists also see risks in a possible intensification of protectionist policies, which could lead to further trade tensions, reduced market efficiency and disrupted supply chains.

The IFR is also forecasting a noticeable slowdown in the Chinese market for industrial robots and expects the number of new installations to remain virtually unchanged at 276,300 units in 2024 and only slight growth to 280,000 units in 2025. In 2023, 276,288 robots were installed in China, the second-highest figure ever recorded. The share of Chinese manufacturers in the domestic market rose to 47% in 2023. By contrast, robots from foreign manufacturers fell by 21% to 145,772 units. The installed base increased from 1.50 million to 1.76 million units in 2023 – an increase of 16.9%. Overall, the Chinese market remains the largest robot market in the world. The Chinese robot and automation market remains a core element of KUKA's growth strategy.

Summary *

KUKA anticipates that customers will continue to hold back on capital expenditure due to geopolitical developments and the trade conflicts. The global conflicts and the announced US tariffs on imports are impacting on the outlook and will continue to cause uncertainty in the future. Despite these difficult conditions, KUKA is looking ahead into 2025 with confidence.

Anticipated business development in KUKA Group

in € millions	2024	2025 expectations
Orders received	4,078.0	slightly above prior-year level[1]
Revenues	3,732.4	above prior-year level[1]
EBIT margin in %	2.0	rising
Free cash flow	223.7	positive[1]

[1] Definitions:

slightly above/below prior-year level: absolute change compared to prior year < ±10%

above/below prior-year level: absolute change compared to prior year ≥ ±10%

at prior-year level: absolute change compared to prior year ≤ ±3%

Orders received, sales revenues and EBIT margin

Moderate growth is expected for orders received, leading to a figure slightly above that of the previous year. An increase in sales volume is forecast, i. e. growth of more than 10%. The EBIT margin is also expected to increase, remaining in the single-digit range.

Free cash flow

KUKA Group's free cash flow is primarily generated from operating profits and the development of working capital. For 2025, free cash flow is expected to be positive, but below the prior-year level.

KUKA AG

KUKA AG's result in the separate financial statements depends mainly on the profit transfers of the German subsidiaries and on dividends from subsidiaries. Net income for the year is the most important performance indicator. KUKA Aktiengesellschaft expects annual net income to be below the previous year's level.

* The forward-looking statements are based on the information, expectations and estimates of the company available at the time the forecast report was prepared.

Corporate Governance Statement

For the corporate governance statement (quota for women) pursuant to section 289f of the German Commercial Code (HGB), reference is made to information published on the website https://www.kuka.com/en-de/company/about-kuka/investor-relations/corporate-governance-statement.

Group financial statements

Group financial statements

Group income statement

of KUKA Aktiengesellschaft for the period January 1 to December 31, 2024

in € millions	Explanation	2023	2024
Sales revenues	**1**	**4,053.7**	**3,732.4**
Cost of sales	2	-3,107.0	-2,891.8
Gross earnings from sales		**946.7**	**840.6**
Selling expenses	2	-349.0	-326.3
(of which, impairment losses including reversal of impairment losses on trade receivables, lease receivables and contract assets)		(-19.0)	(4.9)
Research and development expenses	2	-194.9	-202.3
General and administrative expenses	2	-249.1	-232.4
Other operating income	3	17.6	13.8
Other operating expenses	3	-13.5	-10.0
Earnings from companies valued at equity		0.4	-6.9
Earnings before interest and taxes (EBIT)		**158.2**	**76.5**
Depreciation and amortization		135.8	151.8
Earnings before interest, taxes, depreciation and amortization (EBITDA)		**294.0**	**228.3**
Result from changes in the fair value of financial instruments	4	0.1	-4.1
Interest income	4	17.3	17.4
Interest expense	4	-30.5	-27.4
Foreign currency gain	4	7.7	6.8
Financial result		**-5.4**	**-7.3**

in € millions	Explanation	2023	2024
Earnings before taxes		**152.8**	**69.1**
Taxes on income	5	-41.6	-112.7
Earnings after taxes		**111.2**	**-43.5**
Loss from discontinued operations		-25.6	–
Earnings after taxes and after loss from discontinued operations		**85.6**	**-43.5**
(of which, attributable to minority interests)		(15.8)	(5.4)
(of which, attributable to KUKA AG)	6	(69.8)	(-48.9)
Earnings per share after taxes and after loss from discontinued operations attributable to KUKA AG (undiluted/diluted) in €		**1.76**	**-1.23**
Earnings per share after taxes attributable to KUKA AG (undiluted/diluted) in €		**2.40**	**-1.23**

Group statement of comprehensive income

of KUKA Aktiengesellschaft for the period January 1 to December 31, 2024

in € millions	Explanation	2023	2024
Earnings after taxes and after loss from discontinued operations		**85.6**	**-43.5**
Items that may potentially be reclassified to profit or loss			
Differences from currency translation attributable to KUKA AG		-38.3	52.2
Differences from currency translation attributable to minority interests		-21.9	11.4
Items that are not reclassified to profit or loss			
Changes of actuarial gains and losses	23	-11.7	-6.4
Deferred taxes on changes of actuarial gains and losses		1.9	-1.7
Changes in value recognized directly in equity (other comprehensive income)		**-70.0**	**55.5**
Total comprehensive income		**15.6**	**12.0**
(of which, attributable to minority interests)		(-6.1)	(16.8)
(of which, attributable to KUKA AG)		(21.7)	(-4.8)

Group cash flow statement[1]

of KUKA Aktiengesellschaft for the fiscal year 2024

in € millions	2023	2024
Earnings after taxes and after loss from discontinued operations	**85.6**	**-43.5**
Income taxes	99.6	87.0
Net interest	13.3	10.0
Amortization of intangible assets	46.4	56.5
Depreciation of tangible assets	48.4	53.0
Depreciation of investment property IAS40	0.3	0.4
Depreciation of financial investments	0.5	4.4
Depreciation of right-of-use assets	40.5	41.8
Other non-payment-related income	-63.5	-17.9
Other non-payment-related expenses	51.0	50.6
Cash earnings	**322.1**	**242.3**
Result on the disposal of assets	1.6	0.5
Changes in provisions	5.3	29.4
Changes in current assets and liabilities		
Changes in inventories	136.3	29.9
Changes in receivables and deferred charges	-98.8	118.3
Changes in liabilities and deferred income (excl. financial debt)	60.9	-41.3
Income taxes paid	-94.2	-105.6
Investments/financing matters affecting cash flow[2]	-1.7	-0.6
Cash flow from operating activities[2]	**331.5**	**272.9**

in € millions	2023	2024
Payments from disposals of tangible assets	3.0	3.2
Payments for capital expenditures on intangible assets	-44.6	-39.2
Payments for capital expenditures on tangible assets	-82.5	-58.1
Payments from grants related to assets	8.6	14.2
Proceeds from financial assets related to short-term financial management	–	44.5
Payments for financial assets related to short-term financial management	-42.5	-34.4
Payments for the acquisition of consolidated companies and groups of assets	-0.8	–
Proceeds from investment in financial investments and at-equity investments	1.3	3.4
Payments from the disposal of consolidated companies and other business units	-12.5	–
Dividends received [2]	1.5	0.3
Interest received	17.0	16.9
Cash flow from investment activities [2]	**-151.5**	**-49.2**
Free cash flow [2]	**180.0**	**223.7**
Proceeds from the acceptance of bank loans and inter-company loans as well as changes in current liabilities to banks	25.5	–
Payments for the repayment of bank loans and inter-company loans as well as changes in current liabilities to banks	-56.8	-98.4
Interest paid	-28.4	-26.9
Repayment of lease liabilities	-40.8	-42.6
Cash flow from financing activities [2]	**-102.5**	**-167.9**
Payment-related changes in cash and cash equivalents	**77.5**	**55.8**
Exchange-rate-related and other changes in cash and cash equivalents	-40.6	41.7
Changes in cash and cash equivalents related to the scope of consolidation	–	27.1
Changes in cash and cash equivalents	**36.9**	**124.6**
Cash and cash equivalents at the beginning of the period	494.5	531.4
Cash and cash equivalents at the end of the period	**531.4**	**656.0**

[1] See the notes for further information on the Group cash flow statement

[2] Previous year's figures have been adjusted

Group balance sheet

of KUKA Aktiengesellschaft as at December 31, 2024

Assets

in € millions	Explanation	Dec. 31, 2023	Dec. 31, 2024
Non-current assets			
Intangible assets	(7)	565.5	545.7
Property, plant and equipment	(8)	412.1	413.7
Investment property	(8)	8.4	8.3
Financial investments	(9)	3.6	1.4
Investments accounted for at equity	(10)	28.9	0.7
Right-of-use assets	(11)	127.9	135.2
Finance lease receivables	(11)	19.5	7.8
Other receivables and other assets	(15)	6.4	7.7
Deferred taxes	(5)	205.0	187.5
		1,377.3	**1,308.0**
Current assets			
Inventories	(12)	539.0	533.5
Trade receivables	(13)	843.5	843.1
Contract assets	(14)	431.9	435.4
Finance lease receivables	(11)	38.4	20.6
Income tax receivables	(5)	25.3	35.4
Other receivables and other assets	(15)	184.9	166.1
		2,063.0	**2,034.1**
Cash and cash equivalents	**(16)**	**531.4**	**656.0**
		2,594.4	**2,690.1**
		3,971.7	**3,998.1**

Equity and liabilities

in € millions	Explanation	Dec. 31, 2023	Dec. 31, 2024
Equity	**(17)**		
Subscribed capital	(18)	103.4	103.4
Capital reserve	(19)	306.6	306.6
Revenue reserve	(20)	734.3	686.2
Other reserves	(22)	44.7	88.8
Minority interests	(21)	327.4	367.6
		1,516.4	**1,552.6**
Non-current liabilities			
Financial liabilities	(26)	0.4	0.1
Accounts payable to affiliated companies	(26)	198.0	–
Lease liabilities	(25)	97.6	104.1
Other liabilities	(27)	20.1	22.8
Pension provisions and similar obligations	(23)	66.9	72.4
Other provisions	(24)	–	18.0
Deferred taxes	(5)	22.5	19.8
		405.5	**237.2**
Current liabilities			
Financial liabilities	(26)	253.9	246.4
Lease liabilities	(25)	41.4	44.7
Trade payables	(25)	594.9	625.1
Contract liabilities	(14)	548.0	560.9
Accounts payable to affiliated companies	(25/26)	90.3	199.6
Income tax provisions	(25)	44.7	35.3
Other liabilities	(27)	345.9	344.3
Other provisions	(24)	130.7	152.0
		2,049.8	**2,208.3**
		3,971.7	**3,998.1**

Development of Group equity

of KUKA Aktiengesellschaft for the fiscal year 2024

Explanation	18	18	19	22		20		21	
				Other reserves					
in € millions	Number of shares outstanding	Subscribed capital	Capital reserve	Currency translation	Actuarial gains and losses	Annual net income and other revenue reserves	Equity attributable to KUKA	Minority interests	Total
Dec. 31, 2022/Jan. 1, 2023	**39,775,470**	**103.4**	**306.6**	**97.0**	**-4.2**	**665.4**	**1,168.2**	**332.2**	**1,500.4**
Earnings after taxes	–	–	–	–	–	69.8	69.8	15.8	85.6
Other income	–	–	–	-38.3	-9.8	–	-48.1	-21.9	-70.0
Total comprehensive income	**–**	**–**	**–**	**-38.3**	**-9.8**	**69.8**	**21.7**	**-6.1**	**15.6**
Employee share program	–	–	–	–	–	1.4	1.4	1.2	2.6
Change in scope of consolidation/ other changes	–	–	–	–	–	-2.3	-2.3	–	-2.3
Dec. 31, 2023/ Jan. 1, 2024	**39,775,470**	**103.4**	**306.6**	**58.7**	**-14.0**	**734.3**	**1,189.0**	**327.4**	**1,516.4**
Earnings after taxes	–	–	–	–	–	-48.9	-48.9	5.4	-43.5
Other income	–	–	–	52.2	-8.1	–	44.1	11.4	55.5
Total comprehensive income	**–**	**–**	**–**	**52.2**	**-8.1**	**-48.9**	**-4.8**	**16.8**	**12.0**
Employee share program	–	–	–	–	–	0.8	0.8	1.0	1.8
Change in scope of consolidation/ other changes	–	–	–	–	–	–	–	22.4	22.4
Dec. 31, 2024	**39,775,470**	**103.4**	**306.6**	**110.9**	**-22.1**	**686.2**	**1,185.0**	**367.6**	**1,552.6**

Group notes

General comments

Accounting principles

KUKA Aktiengesellschaft, registered at the district court of Augsburg under HRB 22709 and headquartered in Augsburg (Zugspitzstrasse 140, 86165 Augsburg, Germany), has prepared its consolidated financial statements for the period ending December 31, 2024 according to the International Financial Reporting Standards (IFRS) of the International Accounting Standards Board (IASB) applicable for use in the European Union as at the balance sheet date. The term IFRS also includes all valid international accounting standards (IAS). The interpretations of the Standing Interpretations Committee (SIC) and the International Financial Reporting Standards Interpretations Committee (IFRS IC) – supplemented by the guidelines stipulated in section 315e para. 1 of the German Commercial Code (HGB) – are also taken into consideration.

The accounting policies used conform to the methods applied in the previous year. Exceptions from this are the standards and interpretations for which application is mandatory for the first time in the 2024 fiscal year. The currency reported in the consolidated financial statements is the euro. Unless otherwise noted, all amounts in the notes to the accounts are stated in millions of euros (€ million). The key performance indicators in the entire annual report have been rounded in accordance with standard commercial practice. In individual cases, it is therefore possible that figures in this report do not add up exactly to the total stated and that percentages do not precisely correspond to the values indicated.

With the exception of specific financial instruments and plan assets reported at fair value, the Group's consolidated financial statements are prepared based on historical costs. In this case, fair value is defined under IFRS 13 as the price that would be paid by independent market participants in an arm's length transaction on the measurement date if an asset were sold or a liability transferred.

KUKA Group does not carry any assets with an indefinite useful life with the exception of goodwill and specific brand names.

The Group's consolidated income statement is prepared using the cost of sales method. The classification regulations of IAS 1 are applied in the consolidated financial statements. The presentation in the Group's consolidated balance sheet distinguishes between current and non-current assets and liabilities.

Midea Group Co. Ltd holds 100% of the shares in KUKA Aktiengesellschaft. KUKA Aktiengesellschaft is thus an indirect subsidiary of Midea Group Co. Ltd, Foshan City, Guangdong Province, China and is included in its consolidated financial statements. These statements are available on the website www.cninfo.com.cn or directly on the website of Midea Group Co. Ltd at https://www.midea-group.com/investors/financial-reports. Mr. Xiangjian He can exercise significant influence over Midea Group Co. Ltd, Foshan City, Guangdong Province, China, which means that from the perspective of KUKA Group, Mr. He is to be regarded as the ultimate controlling party, represented in this case by a natural person.

Scope of consolidation

KUKA Group's scope of consolidation changed in the course of fiscal 2024 due to newly established companies and other changes. Although reference is made to the segments throughout the annual report, IFRS 8 is not applied and no segment reporting is prepared.

The following table shows the development of the scope of consolidation of KUKA AG by region for the 2024 fiscal year:

The Systems segment comprises 13 fully consolidated entities (2023: 13 entities). There were no changes in the fiscal year.

Four entities from the Robotics division were transferred to the newly established KUKA Digital segment. As at the balance sheet date, the Robotics division had 34 fully consolidated entities (2023: 38 entities).

The Swisslog segment comprises 22 fully consolidated entities (2023: 21 entities). The change is due to the formation of a new company.

In Swisslog Healthcare, one at-equity entity was sold, so the segment reported 12 fully consolidated entities as at December 31, 2024 (2023: 12 entities) and no at-equity entities (2023: one entity).

The newly founded KUKA Digital division will report four entities. These were transferred from the Robotics division in the 2024 fiscal year.

The China business segment reported eleven fully consolidated entities (2023: nine entities). The increase is due to the change in method for the two at-equity entities, which are now fully consolidated. As a result, no more at-equity entities will be reported in the China segment in 2024 (2023: two entities).

Five fully consolidated entities are reported in Corporate Functions as at the balance sheet date (2023: four entities). One new company was established in this segment in the fiscal year.

Overall, the number of fully consolidated companies increased to 101 as at December 31, 2024 (2023: 97). The number of entities accounted for at equity decreased from four entities in the previous year to one now.

Country	EMEA		Americas		APAC		Total	
	Consolidated companies	At equity companies	Consolidated companies	At equity companies	Consolidated companies	At equity companies	Consolidated companies	At equity companies
Jan. 1, 2024	**55**	**–**	**16**	**–**	**26**	**4**	**97**	**4**
Start-up/purchase	2	–	–	–	–	–	2	–
Mergers	–	–	–	–	–	–	–	–
Change of consolidation type	–	–	–	–	2	-3	2	-3
Total changes	2	–	–	–	2	-3	4	-3
Dec. 31, 2024	**57**	**–**	**16**	**–**	**28**	**1**	**101**	**1**

Newly established companies

In fiscal 2024, KUKA Group founded KUKA Business Service Kft, Taksony, Hungary, and Swisslog Lithuania UAB, Vilnius, Lithuania, which were included in the consolidated financial statements for the first time in fiscal 2024 and allocated to the Corporate Functions and Swisslog segments.

Change of consolidation type

With effect from July 1, 2024, KUKA gained control over the following two affiliated companies and began to fully consolidate them and include them in the internal and external reporting structure:

- Shanghai Swisslog Technology Co., LTD.
- Guangdong Swisslog Technology Co., LTD.

The joint venture agreements of both companies were amended to change the composition of the administrative board and establish the meeting of shareholders. As a result, KUKA gained control of these two companies.

As at July 1, 2024, the fair values of the assets and liabilities were determined on the basis of external valuations. At the time of acquisition, the fair values of the acquired assets and assumed liabilities of the two companies are broken down as follows:

	Opening balance sheet	Opening balance sheet
in € millions	**Shanghai Swisslog Technology Co., Ltd., Shanghai, China**	**Guangdong Swisslog Technology Co., Ltd., Shunde, China**
Non-current assets	4.3	1.0
Inventories	2.3	3.6
Receivables, contract assets and other receivables	82.0	4.1
Cash on hand	25.0	0.8
Liabilities and provisions	-71.9	-8.5
Total	**41.7**	**1.0**

Consolidation principles

If subsidiaries are directly or indirectly controlled pursuant to the control concept under IFRS 10, they are included in KUKA's consolidated financial statements in accordance with the rules of full consolidation. Control can be assumed if KUKA Group has a right to the variable returns. Through its control, KUKA Group is also in a position to influence the returns from the company. The date on which control is gained or lost is decisive for inclusion of a company in consolidation or deconsolidation.

The consolidated financial statements are based on the financial statements of KUKA Aktiengesellschaft and those of the consolidated subsidiaries and were prepared according to the uniform accounting policies for the Group. Capital consolidation takes place by offsetting the carrying amounts of the investment against the pro rata newly measured equity capital of the subsidiaries at the time of acquisition. In line with IFRS 3, any positive differences are capitalized as goodwill under intangible assets. Any negative differences are recognized in the income statement.

Intra-Group sales, expenses and income as well as receivables and liabilities are offset and any inter-company profits and losses are eliminated. The necessary deferred taxes are recognized for consolidation transactions.

Guarantees or warranties that KUKA AG issues on behalf of consolidated subsidiaries are eliminated if there is no external effect.

Currency translation

Receivables and payables denominated in foreign currency are initially recognized at the transaction rate and translated at the applicable middle rate on the balance sheet date. Any resulting translation gains or losses are recognized in the income statement in the functional area in which they arose. If, for example, a translation gain or loss arises from a foreign currency transaction in respect of supplies and services, it is reported under the cost of sales. In the case of translation effects due to loan transactions, these are reported within the financial result.

The annual financial statements of foreign companies included in the consolidated financial statements are translated from their functional currency into euro in accordance with IAS 21.

Unrealized price differences from the translation of equity-replacing loans to foreign subsidiaries in foreign currency are reported directly in the aggregate income/loss and so recognized directly in equity. On loss of control of a foreign business operation, these effects are released through profit or loss. For derivative goodwill recognized prior to January 1, 2005, the translation rate into euro has been fixed at the respective historical rates.

Equity is translated at historical rates. Expenses and income are translated at the average monthly rates. Both differences arising from the translation of assets and liabilities compared to the prior year and translation differences between the income statement and the balance sheet are recognized directly in equity within the other reserves. If exchange rate differences exist when a foreign business operation leaves the Group, they are released to income.

Within KUKA Group, there are leases in accordance with IFRS 16 that were concluded in currencies other than the functional currency of the respective entity. These leases are first translated into the functional currency of the subsidiary and then into euro as the Group currency.

The most important exchange rates used for the year under review and the previous year are shown in the following table:

Country	Currency	Rate – balance sheet date	
		Dec. 31, 2023	Dec. 31, 2024
China	CNY	7.8509	7.5833
Switzerland	CHF	0.9260	0.9412
Japan	JPY	156.3300	163.0600
USA	USD	1.1050	1.0389

Accounting and valuation principles

Orders received

An order is recognized under orders received once a binding purchase order has been received. The volume of orders received is a non-cumulative value that relates to a fiscal year. Framework agreements per se or even memoranda of understanding do not yet result in orders received. Only when there is a legally binding order release under this framework agreement is an incoming order recognized.

Order backlog

The order backlog represents a stock variable and contains orders as long as a binding customer order has not yet been invoiced. In the case of long-term contract manufacturing, revenue is taken as the reference value. In the event of an order cancellation, the orders received and correspondingly the order backlog are reduced.

Revenue recognition

KUKA Group's revenues result from the sale of robots and automation solutions for a wide range of industrial and healthcare sectors. Revenues are recognized upon fulfillment of the performance obligation, for example, when control is transferred to the customer. When the contractual performance obligation is fulfilled, this portion is recognized as revenue over time or at a point in time. In order to determine a percentage of completion for over-time accounting, for example, it must be possible to determine the costs associated with the sale sufficiently reliably. In the case of point-in-time performance, the invoice is usually issued after the performance obligation has been fulfilled. In the case of performance over time, invoicing is linked to the achievement of milestones. Performance obligations with regard to returns, refunds, obligations exceeding statutory guarantees and similar obligations are of secondary importance for KUKA Group.

Orders meeting the criteria of IFRS 15.35 are accounted for over time. Revenue is recognized on the basis of the percentage of completion of an order, which is determined for each project using the cost-to-cost method. The cost-to-cost method involves placing the costs already incurred for the project, based on an assessment of the progress already achieved, in relation to the anticipated total costs. If an order is accounted for over time, the profit from it is recognized on the basis of the calculated percentage of completion. If the advance payments received exceed the services already provided, the resulting negative balance will be disclosed under contract liabilities. A contract asset is recognized if the services rendered exceed the advance payments received. If the right to consideration is unconditional, a contract asset becomes a trade receivable. This is the case if the due date of the consideration is only dependent on the passage of time. Impairment of contract assets is measured, recognized and disclosed on the same basis as for financial assets within the scope of IFRS 9. Further information on this can be found in the section "Financial instruments". KUKA Group applies industry-standard payment terms when invoicing. For impending project losses, please refer to the "Provisions" section within this chapter.

Cost of sales

The cost of production of the goods sold as well as the acquisition cost of any merchandise sold are recognized under the cost of sales. In addition to the cost of attributable direct materials and labor, indirect costs, including the depreciation and amortization of production plants and intangible assets, as well as write-downs of inventories are also reported in the cost of sales.

If provisions for product warranties have to be taken into account, the expense incurred is recorded as part of the cost of sales at the time of revenue recognition. If the currently estimated total costs exceed the sales revenues of an order, the resulting impending losses are taken into account in the reporting period in which they are first exceeded.

Business combinations

Business combinations are accounted for using the purchase method, whereby the cost of acquisition is determined by reference to the fair values of the assets and liabilities involved at the date of acquisition. The agreed contingent consideration is recognized at fair value at the acquisition date. Irrespective of the extent of non-controlling interests, the identifiable assets acquired and liabilities (including contingent liabilities) assumed in a business combination are recognized at fair value at the acquisition date. Gains and losses arising are subsequently recognized in proportion to the interest held without limitation.

Investments in associates and joint ventures

Investments in associates and joint ventures are initially recognized at cost. For subsequent measurement, which is carried out in accordance with the equity method, IAS 28 is applicable. The results of associates are recognized in a separate item of the income statement.

Goodwill

Goodwill is tested for impairment in the fourth quarter of each fiscal year or whenever there are indications of impairment. For this, the carrying amount of the respective cash generating units (CGUs) is compared with the recoverable amount. As soon as the carrying amount of a CGU exceeds the recoverable amount, an impairment loss must be recognized for the goodwill allocated to the CGU. The recoverable amount is defined as the higher of the CGU's fair value less potential costs to sell and its value in use. KUKA Group normally uses a CGU's value in use to determine its recoverable amount. The data for the detailed planning phase from the business plan for the next three years are used for this purpose, supplemented by the strategic planning for the following two years. An impairment loss recognized for goodwill may not be reversed.

For the segment-specific discount rates as well as the further parameters and their derivation, and also for the identification of the principal items of goodwill, please refer to the explanations under note 7.

Self-developed software and other development costs

When all the requirements of IAS 38 have been cumulatively met, the direct and indirect costs directly attributable to the development process are capitalized.

From the beginning of the economic use of the asset, it is depreciated on a straight-line basis over a period of generally three to five years according to the consumption of its value. Development projects that have not yet been completed but have already been capitalized are tested for impairment as part of the impairment test for goodwill.

Research and development costs that are not eligible for capitalization are recognized as expenses.

Other intangible assets

In KUKA Group, the purchased intangible assets essentially comprise software and patents. They are recognized at their acquisition cost and are amortized over their expected useful economic life of usually one to five years using the straight-line method.

Property, plant and equipment

The balance sheet item of property, plant and equipment comprises the respective acquisition or production cost less accumulated depreciation and impairment losses. The straight-line depreciation method that is generally applied is subject to ongoing evaluation.

The following table shows the useful economic lives on which scheduled depreciation is generally based: The actual useful lives may vary due to contractual, regional or time-related circumstances:

	Years
Land and buildings	20 – 33
Technical plant and equipment	2 – 21
Factory and office equipment	2 – 25

If the carrying amount of an asset in the balance sheet exceeds its recoverable amount, an impairment loss is recognized in accordance with IAS 36. This is done in the context of an impairment test, which is performed as soon as impairment indicators are identified (a so-called triggering event). Whether this is the case is subject to an ongoing review within KUKA Group. If there is a change in parameters relevant to the calculation, such as a significant increase in market yields, or if there are changes with adverse consequences in the technological, market-related, economic or even legal environment, this indicates a triggering event. The recoverable amount is determined for each asset concerned. This is the higher of the fair value less costs to sell and the value in use. If the reasons for a previous impairment no longer apply, the value is recovered.

Investment property

Investment property is property held for the purpose of earning rentals and/or for capital appreciation and is not owner-occupied or held for sale in the ordinary course of business. Investment property includes undeveloped land, buildings and/or parts of buildings. Right-of-use assets from leased developed and undeveloped land, as well as from leased residential and commercial real estate (interim leases) as defined by IFRS 16, may also meet the definition of an investment property.

Investment property is measured at cost on acquisition or construction. Subsequent measurement in KUKA Group is at amortized cost. The useful economic life on which scheduled straight-line depreciation is based is 20 years for investment property.

Borrowing costs and qualifying assets

In accordance with IAS 23, financing costs must be recognized for so-called qualifying assets. The borrowing costs relating to these qualifying assets are capitalized if material. In KUKA Group, a qualifying asset is defined as an asset for which a period longer than twelve months is required to make it ready for its intended use or sale (please refer to IAS 23.5). Examples here within KUKA Group in particular are manufacturing plants and internally-generated intangible assets.

Government grants

If there is sufficient certainty in accordance with IAS 20.7 that the company fulfills the conditions for the grants and that they will actually be received, government grants are recognized. In the balance sheet, government grants related to assets are disclosed as deferred income and amortized systematically in the income statement over the useful life of the asset. Grants related to income are recognized immediately in the income statement.

Leases

As a lessee, KUKA Group generally recognizes all leases in the balance sheet in accordance with IFRS 16, with the exception of the existing relief regarding short-term leases (maximum term twelve months) and leases of assets with a low original price (maximum €5,000). The regular payments for leases subject to relief are recognized as an expense in the income statement. The right of use that is granted under the lease is recognized by the lessee at the present value of the future lease payments and an associated lease liability. Discounting is carried out using the interest rate on which the lease is based, insofar as this can be determined. If this is not possible, the incremental borrowing rate is applied. The incremental borrowing rate is calculated dependent on the lease term and the currency in which the lease is concluded, among other things.

In subsequent measurement, the right-of-use asset is amortized on a straight-line basis over the shorter of the lease term and the economic benefit. The lease liability is reduced by the repayment component.

If KUKA Group acts as lessor and the contract is classified as a finance lease, it is accounted for as a sale or financing transaction. A receivable is valued at the amount of the net investment in the lease and the resulting interest income is recognized as income. Impairment of lease receivables is measured, recognized and disclosed on the same basis as for financial assets within the scope of IFRS 9. Further information on this can be found in the section “Financial instruments”.

The classification of a contract as an operating lease with KUKA Group acting as the lessor means that the asset remains on KUKA Group’s balance sheet. The income from it is recognized in the income statement over the term of the lease. The asset is amortized in accordance with the applicable standard, if necessary.

Financial instruments

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

(i) Recognition and initial measurement

Financial instruments are recognized as soon as KUKA Group becomes a party to the contractual provisions of the financial instrument. In the case of standard market purchases or sales, the settlement date is relevant for initial recognition and derecognition.

A financial asset (other than a trade receivable without a significant financing component) or financial liability is measured initially at fair value. For an item that is not measured at fair value through profit or loss, transaction costs that are directly attributable to its acquisition or issue are added or deducted. Trade receivables without a significant financing component are initially measured at the transaction price.

(ii) Classification and subsequent measurement

Financial assets

Depending on the business model and the structure of contractual cash flows, financial assets are classified in the categories “at amortized cost”, “at fair value through other comprehensive income” or “at fair value through profit or loss”.

Thus, a financial asset in KUKA Group is classified and measured upon initial recognition as follows:

- Debt instruments measured at amortized cost (AC)
- Equity instruments measured at fair value through other comprehensive income (FVOCI)
- Equity instruments and derivatives measured at fair value through profit and loss (FVtPL)

Financial assets are not reclassified after initial recognition unless KUKA Group changes its business model for managing financial assets. In this case, all affected financial assets are reclassified on the first day of the reporting period following the change of business model.

KUKA Group recognizes a financial asset measured at amortized cost if both of the following conditions are met:

- The financial asset is held as part of a business model whose objective is to hold financial assets for the collection of contractual cash flows
- and the contractual terms of the financial asset give rise to cash flows at specified times that are solely repayments and interest payments on the outstanding principal.

On initial recognition of an equity investment that is not held for trading purposes, the Group may irrevocably elect to disclose subsequent changes in the fair value of the investment under other comprehensive income. This choice is made on a case-by-case basis for each investment.

All financial assets that are not measured at amortized cost or FVOCI are measured at FVtPL. This includes all derivative financial assets. On initial recognition, the Group may irrevocably elect to designate financial assets that otherwise meet the requirements for measurement at amortized cost or as debt instruments in the FVOCI category as FVtPL if doing so results in the elimination or significant reduction of accounting mismatches that would otherwise arise. KUKA Group does not make use of the fair value option.

Certain financial assets to third parties are subject to an intention to sell and, depending on the business model, either

- classified as “sell” and thus in the FVtPL category or
- classified as “hold and sell” and accordingly in the FVOCI category or
- classified as “hold” and therefore in the AC category.

This concerns specific trade receivables that are subject to factoring agreements. The factoring agreements are contingents, i. e. the respective Group company can selectively decide whether a receivable is sold or not. The decision as to which business model is to be applied is made when the contingent is booked for the first time.

The “hold” business model is used if no sales are planned, if they are very rare or if the assets to be transferred are classified as immaterial. If all financial assets in the portfolio under review are intended for sale, KUKA applies the “sell” business model. The remaining receivables are allocated to the “hold and sell” business model.

Financial assets in the FVtPL and FVOCI categories are subsequently measured at fair value. Changes in fair value are recognized in the income statement in the “FVtPL” category and in other comprehensive income in the “FVOCI” category. In all cases, however, interest or dividend income as well as impairment losses as part of loan loss provisions are recognized in profit or loss.

Financial assets in the AC category are subsequently measured at amortized cost using the effective interest method. The amortized cost is reduced by impairment losses. Interest income and/or expenses, exchange rate effects, impairments and effects from derecognition are recognized in profit or loss. This mainly includes trade receivables held under the “hold” business model, rental deposits and current securities.

Equity instruments in the FVOCI category are subsequently measured at fair value. Dividends are recognized as income in profit or loss. Other changes in value are recognized in other comprehensive income and never reclassified to profit or loss, where appropriate within other comprehensive income.

To determine the impairment losses, KUKA Group applies a fixed percentage depending on the overdue period. In the event of default, a receivable is always derecognized. However, if there are initial indications that receivables cannot be collected in full, an immediate impairment loss is recognized. For the value adjustments of financial assets (excluding lease receivables, trade receivables and contract assets), KUKA Group in principle applies the general approach described in IFRS 9. The amount of the value adjustment is measured at initial recognition based on the expected 12-month credit loss, which corresponds to level 1. If there are indications as at the balance sheet date that the default risk has increased significantly since initial recognition, the value adjustment is calculated in the amount of the expected credit losses over the term of the loan (level 2). An indicator that a default risk has increased significantly is that the debtor no longer meets its short-term payment obligations or there are signs of a deterioration in the debtor's business performance.

For the aforementioned exceptions, the simplified approach according to IFRS 9 is applied. The amount of the value adjustment for lease receivables, trade receivables and contract assets is based on the expected credit losses over the entire term. It is irrelevant for allocation to level 2 whether the credit risk has increased since initial recognition.

Level 3 comprises financial assets that are credit-impaired at the balance sheet date due to the existence of objective indications, but which were not yet credit-impaired when they were initially recognized. The value adjustment is then recognized in the amount of the credit losses expected to be incurred over the term. KUKA Group views customer insolvencies as objective indications of value adjustment. Payments that are more than 90 days past due are also included in the analysis.

Among other things, current data relating to rating classes or historical default rates (provision matrix) are used for determining the risk provision. Forward-looking, publicly available information on macroeconomic factors and insolvency forecasts are also taken into account here. The default risk is reviewed and the default rates are updated once each year.

Default risks are taken into account using historical default rates in the area of trade receivables and contract assets. At the portfolio level, particularly in the case of business with major customers in the automotive sector, value adjustments are subject to separate credit rating monitoring. This credit rating monitoring is ensured by means of regular updates of credit default swaps. The same applies to value adjustment in the area of receivables from finance leases.

Financial liabilities

Financial liabilities are classified and measured at amortized cost or fair value through profit or loss (FVtPL). A financial liability is allocated to FVtPL if it is classified as held for trading purposes, is a derivative, or is designated as FVtPL upon initial recognition. KUKA Group does not make use of the fair value option.

Financial liabilities at FVtPL are measured at fair value, and changes in value, including interest expenses, are recognized in profit or loss. This includes derivative financial instruments with negative fair values.

Other financial liabilities are subsequently measured at amortized cost using the effective interest method. Interest expenses and foreign currency translation differences are recognized in profit or loss. Gains or losses on derecognition are also recognized in profit or loss. KUKA Group subsumes, for example, financial liabilities or liabilities to affiliated companies within this category.

(iii) Derecognition

Financial assets
KUKA Group derecognizes a financial asset when

- its contractual rights to cash flows from the financial asset expire, or
- it transfers its right to receive contractual cash flows to a transaction in which either:
  - essentially all the risks and rewards of ownership of the financial asset are transferred, or
  - if the Group neither transfers nor retains essentially all the risks and rewards of ownership and does not retain control of the transferred asset.

Financial liabilities
A financial liability is derecognized when the contractual obligations are fulfilled, canceled or have expired. Furthermore, a financial liability is also derecognized if its contractual terms are modified and the cash flows of the adjusted liability are significantly different. In this case, a new financial liability is recognized at fair value based on the adjusted terms. On derecognition of a financial liability, the difference between the carrying amount of the liability extinguished and the amount paid (including any non-cash assets transferred or liabilities assumed) is recognized in profit or loss.

(iv) Balancing

KUKA Group only offsets financial assets and financial liabilities if there is a legally enforceable right to offset the recognized amounts at the present time. Moreover, it must be intended that the adjustment be made on the basis of the net amount. If offsetting is excluded, the financial assets and liabilities are presented in the balance sheet at their gross amount.

(v) Derivatives

Derivative financial instruments constitute financial contracts whose value is derived from the price of an underlying asset (such as stocks, bonds, money market instruments or commodities) or a reference rate (such as currencies, indices or interest rates). Little or no initial investment is required and their settlement takes place at a future date. Examples of derivative financial instruments include options, forward contracts and interest rate swap transactions. KUKA Group uses derivative financial instruments to hedge cash flow risks. Derivative financial instruments are used in particular to hedge currency fluctuations.

In KUKA Group, all derivative financial instruments are recognized at fair value as at the trading date. Subsequent measurement is also at fair value. The fair values are determined with the aid of standard financial mathematical techniques, using current market parameters such as exchange rates and counterparty credit ratings (mark-to-market method).

If the derivative financial instruments have a positive fair value, they are recognized under other assets. A negative fair value, on the other hand, results in disclosure under other liabilities.

Cash and cash equivalents

Cash and cash equivalents comprise liquid funds, namely cash on hand, checks and cash balances with financial institutions, and are measured at amortized cost. Cash and cash equivalents are short-term, highly liquid financial instruments that are subject to an insignificant risk of changes in value. Cash equivalents serve the purpose of meeting payment obligations. For this reason, a financial asset can generally only be considered a cash equivalent if it has a maturity of three months or less from the date of acquisition. The relevant date for the remaining time to maturity is the date of acquisition.

If cash or cash equivalents cannot be defined as current (maturity of more than three months from the acquisition date) and are not highly liquid due to certain restrictions (so-called restricted cash), the accounting treatment is based on various special rules. For example, seized or frozen bank accounts or funds deposited in escrow accounts are considered restricted.

Financial investments

In KUKA Group, investments in continuing business units that are not material to the net assets, financial position and performance of the Group are classified in the FVtPL category and measured at fair value if this can be reliably determined. Under certain circumstances, however, the acquisition cost is a reasonable estimate of the fair value. If the indicators in accordance with IFRS 9 B5.2.4 are not met, cost is the best estimate of fair value.

Investments measured at equity

Investments measured at equity are accounted for in KUKA Group using the equity method. The starting point is the cost of the shares at the time of acquisition. Subsequently, the carrying amount of the investment is increased or reduced by the pro rata earnings and other changes in equity.

Inventories

In accordance with IAS 2, KUKA Group capitalizes and measures existing inventories at the lower of cost and current purchase price or net realizable value. The average cost method is used as the measurement standard for acquisition and production costs. The production costs include not only the direct unit costs but also an appropriate share of material and production overheads. Where necessary, discounts to lower net realizable values were also applied. In addition to valuation allowing disposal at no net loss, these discounts also take all other inventory risks into account. An impairment loss is reversed if the reasons for a write-down of inventories in the past no longer exist.

Current and deferred taxes

The actual income taxes are calculated based on the respective national taxable income and regulations for the year. In addition, the actual taxes reported in the fiscal year also include adjustment amounts for any tax payments or refunds for years not yet finally assessed, but excluding interest payments or interest refunds and penalties for back taxes. Tax liabilities are recognized for any amounts reported in the tax returns that will probably not be realized (uncertain tax positions). The amount is determined from the best possible estimate of the expected tax payment (expected value or most probable value of the tax uncertainty). Tax receivables from uncertain tax positions are recognized in the balance sheet if it is probable that they can be realized. Only if a tax loss carryforward or an unused tax credit exists will no tax liability or tax receivable be recognized for these uncertain tax positions, but instead the deferred tax asset will be adjusted for the tax loss carryforwards and tax credits not yet utilized.

Deferred tax assets and liabilities are recorded according to IAS 12 for all temporary differences between the carrying amounts of assets and liabilities on the Group balance sheet and their recognized value for tax purposes (liability method) as well as for tax loss carryforwards. Deferred tax assets for accounting and valuation differences as well as for tax loss carryforwards are only recognized to the extent that there is a sufficiently probable expectation that the corresponding benefit will be realized in the future. Deferred tax assets and liabilities are not discounted. Deferred tax assets are netted against deferred tax liabilities if the tax creditor is the same.

Pension provisions and similar obligations

The measurement of pension provisions and similar obligations is performed in accordance with IAS 19 and includes pension liabilities of KUKA Group from performance-based pension systems. Company obligations from defined benefit plans are determined separately for each defined benefit plan according to actuarial principles. The first step involves the retirement benefits being estimated that employees have acquired in return for their service in the current period and prior periods. The next step involves these retirement benefits being discounted using the project unit credit method. Not only the pensions and vested benefits known at the balance sheet date are taken into account with this method, but also expected future increases in salaries and pensions. The calculation is based on actuarial reports prepared annually under consideration of biometric accounting principles. If actuarial gains or losses arise in a period, they are recognized in other comprehensive income. The company determines the net interest expense (net interest income) by multiplying the net liability (net asset value) at the beginning of the period with the underlying interest rate of the discount of the gross defined benefit pension obligation at the beginning of the period. If a past service cost is incurred due to changes in the plan, this is recognized directly in profit or loss in the period. The standard return on plan assets is recognized in the amount of the discount rate applied to pension obligations. Administrative expenses that are incurred for plan assets are recognized as part of the revaluation component in other comprehensive income, while other administrative costs are allocated to operating profit at the time the costs occur. Reinsurance policies with insurance companies are in place for obligation surpluses from pre-retirement schemes according to the block model, which are taken into account using a separate interest rate in the same way as the corresponding obligation. The amount added for obligations from pre-retirement schemes is proportional to the amounts in the applicable collective bargaining agreements. For the defined contribution plans, KUKA pays contributions to a public or private pension insurance carrier. Upon payment of the contributions, KUKA has no further obligations.

Other provisions

Other provisions are recognized if there is an equivalent obligation to third parties arising from a past event, the amount of the provision can be reliably estimated and the outflow of resources is deemed to be more likely than not.

A provision for restructuring measures is only recognized if the general requirements and those of IAS 37.72 are cumulatively met beforehand. According to IAS 37.72, a detailed, formal restructuring plan must additionally be drawn up and communicated to the persons affected. It is highly probable that the company can no longer withdraw from the resulting obligation.

As neither the time of occurrence nor the amount of the obligation is subject to uncertainty, liabilities in the personnel area such as vacation pay, and pre-retirement schemes are recognized under other liabilities.

If a provision is likely to occur within an ordinary business cycle, it is shown as current in the balance sheet. This period may also extend for longer than a year in individual cases. Non-current provisions with a term of more than one year are discounted to the balance sheet date on the basis of appropriate interest rates provided that the interest effect is classified as material.

Assets held for sale and liabilities directly associated with assets held for sale

Non-current assets (or a disposal group) are held for sale according to IFRS 5.6 – 9 if the associated carrying amount is mainly realized by a sales transaction or a distribution to shareholders and not by continued use. For this to be the case, the asset (or disposal group) in its current state under conditions that are established practice and common for the sale of such assets (or disposal groups) must be immediately available for sale and such sale must be highly probable. A sale is regarded as highly probable if the responsible management level has adopted a plan for the sale of the asset (or disposal group) and has actively started searching for a buyer and executing the plan. In addition, the asset (or disposal group) must actually be offered for sale at a price that adequately reflects its current fair value. The disposal must be expected to qualify for recognition as a completed sale within one year from the date of classification. Non-current assets and disposal groups held for sale are measured at the lower of carrying amount and fair value, less disposal costs. This does not apply to items that are presented within the disposal group but do not fall within the scope of IFRS 5.

Share-based compensation

A small number of people participate in the employee share program of Midea Group. Settlement is effected by means of equity instruments of Midea Group. The fair value at the date share-based payment arrangements are granted to employees is recognized as an expense with a corresponding increase in equity over the period in which the employees become unconditionally entitled to the awards. The amount recognized as an expense is adjusted to reflect the number of awards for which the relevant service conditions and non-market performance conditions are expected to be met, so that the final amount recognized as an expense is based on the number of awards that meet the relevant service conditions and non-market performance conditions at the end of the vesting period. For share-based compensation awards with non-vesting conditions, the grant-date fair value is determined by reference to those conditions and no adjustment is made for differences between expected and actual outcomes. Detailed effects on the Group are presented under other notes.

The fair value of the amount payable to employees in respect of stock appreciation rights that are settled in cash is recognized as an expense with a corresponding increase in liabilities over the period in which the employees become unconditionally entitled to those payments. The liability is remeasured at each reporting date and at the settlement date based on the fair value of the stock appreciation rights. Any changes in the liability are recognized in profit or loss.

Assumptions and estimates

KUKA Group's consolidated financial statements are prepared in compliance with the IFRS standards mandatory in the EU. In some cases, the structure of the rules and regulations means that estimates and assumptions have to be made which may subsequently change and deviate from the actual values. The assumptions and estimates could also have been made differently by the company management in the same reporting period for equally justifiable reasons. In the application of accounting policies, the company has made the following discretionary decisions, which in some cases have a significant effect on the amounts in the annual financial statements. Assumptions and estimates were used within KUKA Group for the following matters:

- Definition of the scope of consolidation
- Development costs
- Goodwill impairments
- Impairments of brand names with an indefinite useful life
- Deferred tax assets on loss carryforwards
- Impairment losses on trade receivables, lease receivables and contract assets
- Contract assets and contract liabilities
- Pensions and other post-employment benefits
- Provisions

Definition of the scope of consolidation

If KUKA Group has existing rights to direct the significant operations of a company, the latter is referred to as a subsidiary. Significant operations are those which have a material impact on the profitability of the company. Control is deemed to exist if KUKA Group is exposed to variable returns from its relationship with a company and can exert influence on the returns through its power to direct the significant operations. As a rule, the possibility of exercising control is based on KUKA Group having direct or indirect majority voting rights. Often, additional parameters are necessary for the assumption of control over a subsidiary. These include additional contractual agreements, which must be included in the assessment of the overall construct. A final assessment of the type of consolidation can only be made after all the relevant factors have been evaluated. Joint ventures are based on joint agreements, which exist if KUKA Group shares the management of activities conducted with a third party on the basis of a contractual agreement. Joint management is only present if decisions on significant activities require unanimous agreement from the parties involved. In the case of joint ventures the parties exercising the joint management hold rights to the net assets of the agreement. They are accounted for using the equity method, which is also applied to associated companies. Here, KUKA Group generally exercises a significant influence based on a shareholding of between 20% and 50%. Ultimately, the assessment of all parameters of the respective relationship is decisive for determining the type of consolidation.

Development costs

The requirements for capitalization have already been described in the accounting and valuation methods. However, the recoverability of the capitalized amounts must also be determined on the basis of estimates. For this purpose, management must make assumptions concerning the expected future cash flows from assets, the applicable discount rates and the timing of the inflow of expected future cash flows. If projects are still in the development stage, assumptions must additionally be made regarding costs yet to be incurred and the time of completion.

Goodwill

Goodwill existing within KUKA Group must be tested for impairment at least once a year. For each cash generating unit (CGU) to which goodwill is allocated, an estimate of the respective value in use must be made. To determine the value in use, management must estimate the future cash flows of the respective CGUs. Additionally, an appropriate discount rate must be selected to determine the present value of the cash flows. The selected discount rate is influenced by volatility in capital markets and interest rate trends. Exchange rate fluctuations and expected economic developments also affect the expected cash flows. Furthermore, continuous review is necessary to determine whether there is any indication of impairment. In addition to changes in individual parameters that affect computation such as a significant increase in market yields, a particular focus is placed on changes with an adverse effect on the company in the technological, market, economic or legal environment in which it operates. By means of these indicators KUKA regularly observes whether a triggering event is present that would necessitate an impairment test in accordance with IAS 36 for goodwill, but also for other non-current assets. For details about the carrying amounts of the assets recognized as goodwill and the performance of the impairment tests please refer to the discussion under note 7.

Brand names with an indefinite useful life

KUKA Group assesses the intrinsic value of brand names with an indefinite useful life at least once a year. This involves estimating the future cash flows based on a potentially fictitious licensing income and selecting an appropriate discount rate for calculating the present value of these cash flows for each brand name. In this case too, the selected discount rate, for example, is influenced by volatility in capital markets and interest rate trends. The expected cash flows are also influenced by exchange rate fluctuations and the expected economic developments.

Deferred tax assets on loss carryforwards

Deferred tax assets for loss carryforwards are recognized to the extent that it is probable that taxable income will be available such that the loss carryforwards can actually be used. The determination of the amount of deferred tax assets requires an estimate on the part of management regarding the expected timing and amount of anticipated future taxable earnings as well as future tax planning strategies. In the event of a series of losses in the recent past, deferred tax assets are only recognized to the extent that there is convincing evidence that sufficient taxable earnings will be available in excess of taxable temporary differences.

In assessing the probability that taxable earnings will be available, identifiable causes are also ascertained which in all probability will not recur. For details please refer to the explanations under note 5.

Valuation allowances on trade receivables, lease receivables and contract assets

The valuation allowance on receivables or contract assets includes, to a significant extent, estimates and assessments of individual receivables or and contract assets based on the creditworthiness of the respective customer, current economic developments and the analysis of historical defaults on a portfolio basis. As far as the company derives the impairment on a portfolio basis using historical default rates, a decrease in the volume of receivables reduces such provisions accordingly and vice versa.

Contract assets and contract liabilities

In the Systems, Swisslog and Swisslog Healthcare segments in particular, there is a significant share of business from long-term projects which are accounted for over time in accordance with the provisions of IFRS 15.35. Revenue from the project is recognized depending on the percentage of completion. Particular emphasis is placed on the careful estimate of the progress of the work performed. Depending on the method used to determine the percentage of completion, the most important estimates include the total order costs, the costs yet to be incurred until completion, the total project revenues and risks as well as other assessments. The management team responsible for the respective project continuously monitors all estimates on a monthly basis and adjusts these as needed. Depending on the project progress and the consideration received, there is a contractual asset or a contractual liability for each project.

Pensions and other post-employment benefits

Expenditures under defined-benefit plans and other post-employment benefits are determined on the basis of actuarial calculations. The actuarial calculations are prepared on the basis of assumptions with respect to discount rates, future increases in wages and salaries, mortality rates and future pension increases. In line with the long-term orientation of these plans, such estimates are subject to significant uncertainties. Please see note 23 for further details.

Provisions

To a considerable degree, the designation and measurement of provisions for impending losses from contracts, of provisions for warranty obligations and of litigation provisions are subject to estimates being made.

KUKA Group recognizes a provision for impending losses when the current estimated total costs arising from the respective contract exceed the expected total revenue. These estimates may change due to new knowledge as the project progresses because long-term construction contracts in particular are awarded based on invitations to tender. Deficit orders are identified based on continuous project costing. This makes it necessary for the performance requirements and warranty costs to be assessed.

KUKA Group is also confronted with various legal disputes, the proceedings of which may result in penal or civil sanctions or fines. A provision is always recognized when it is likely an obligation will result that will lead to future cash outflows and the amount of which can be reliably assessed. The underlying issues are often complex and associated with great uncertainties. Judgment whether a present obligation arising from a past event is to be recognized on the balance sheet date, whether future cash outflows are probable and the obligation can be reliably assessed is therefore largely at the discretion of management. The company, with the assistance of external legal professionals, regularly assesses the respective stage of the proceeding. New findings can change the assessment and it may be necessary to adjust the provision accordingly. For further details please refer to note 24.

Changes in accounting and valuation methods

In fiscal 2024, KUKA Group took the following revised standards into account in the consolidated financial statements for the first time:

- Amendments to IAS 1: Classification of Liabilities
- Amendments to IAS 12: Global Minimum Taxation (Pillar 2)
- Amendments to IAS 7 and IFRS 7: Supplier Finance Arrangements
- Amendments to IFRS 16: Lease Liability in a Sale and Leaseback

Amendments to IAS 1 – Classification of Liabilities

The amendments to IAS 1 contain clarifying specifications regarding the classification of current and non-current liabilities. Furthermore, new disclosures on non-current liabilities that are subject to forward-looking covenants are prescribed. The new regulations apply to KUKA from the start of the 2024 fiscal year on January 1, 2024. The amendments to IAS 1 did not have a material impact on KUKA Group.

Amendments to IAS 7 and IFRS 7 – Supplier Finance Arrangements

The amendments to IAS 7 and IFRS 7 relate to disclosures on the terms and conditions of supplier finance arrangements, ranges of maturity dates and information on liquidity risk. In addition, the characteristics of supplier finance agreements are defined in more detail. With regard to the disclosure of ranges of maturity dates, both the maturity dates for liabilities that are subject to reverse factoring and comparable trade payables that are not subject to finance arrangements must be disclosed. Furthermore, the amounts of liabilities subject to such an arrangement must be disclosed and broken down by amounts for which the suppliers have already received payments from the financial service providers. Moreover, the point at which the liabilities concerned are recognized in the balance sheet must also be disclosed. The amendments to IAS 7 and IFRS 7 did not have any material impact on KUKA Group.

Amendments to IFRS 16 – Lease Liability in a Sale and Leaseback

The amendments made by the IASB to IFRS 16 and published in September 2022 relate to the subsequent accounting of sale and leaseback transactions. The amendments prevent the seller or lessee from recognizing a gain or loss on the retained right-of-use asset in the subsequent measurement of the lease liability. There may be an impact on sale and leaseback transactions that include variable lease payments that are not dependent on an index or interest rate. The amendments to IFRS 16 did not have any material impact on KUKA Group.

Effects of new accounting standards to be applied as of the 2025 fiscal year

KUKA does not plan to apply at an early stage the new or amended standards and interpretations whose application is not mandatory until later fiscal years. The effects of these new standards are being continuously evaluated. Standards whose application is mandatory as of January 1, 2025 are not expected to have any material impact on the consolidated financial statements.

Standard/Interpretation	Effective date	Planned application by KUKA AG
Amendment to IAS 21: Lack of Exchangeability	Jan. 1, 2025	Fiscal 2025
Amendments to IFRS 9 and IFRS 7: Classification and Measurement of Financial Instruments	Jan. 1, 2026	Fiscal 2026[1]
IFRS 18: Primary Financial Statements	Jan. 1, 2027	Fiscal 2027[1]
IFRS 19: Subsidiaries without Public Accountability	Jan. 1, 2027	Fiscal 2027[1]

[1] Pending adoption (endorsement) by the European Union

Amendments to IAS 21: Lack of Exchangeability

In August 2023, the IASB published amendments to IAS 21 “The Effects of Changes in Foreign Exchange Rates”. The amendments relate to the assessment of whether a currency is exchangeable and how the spot exchange rate is to be determined if it is not exchangeable. For example, a currency may be considered non-exchangeable if an official exchange rate is quoted but the volume of foreign exchange transactions that can be made at that rate is severely limited. Additionally, the amendments to IAS 21 also require the disclosure of information on how the non-exchangeable currency affects the net assets, financial position and results of operations of the company or what potential effects may arise. The amendments to IAS 21 take effect for years under review beginning on or after January 1, 2025. KUKA is currently investigating the impact of the amendments on the Group.

Explanation of items in the financial statements

Notes to the Group income statement

1. Sales revenues

KUKA Group recognizes sales revenues when a performance obligation has been fulfilled, for example, through the transfer of promised goods to the customer or a service rendered. With the sale of products such as industrial robots, the performance obligation is fulfilled at a specific point in time. KUKA Group also provides services over time, for example in the context of construction contracts. In these, the performance obligations are fulfilled over a specific period of time. In the case of predominantly downstream services, performance takes place both over a period of time and at a specific point in time.

Revenue from contracts for the provision of a software license and the provision of professional services and support services after delivery to the customer is generally recognized at a specific point in time.

The breakdown of revenues by region, based on the regional allocation of the subsidiaries, and also by segment is presented below.

	EMEA		Americas		APAC		Group	
in € millions	2023	2024	2023	2024	2023	2024	2023	2024
Services provided over a period of time	787.2	751.3	1,038.0	852.5	382.8	447.1	2,208.0	2,050.9
Services provided at a specific point in time	934.9	805.1	290.4	306.2	620.4	570.2	1,845.7	1,681.5
Total	**1,722.1**	**1,556.4**	**1,328.4**	**1,158.6**	**1,003.2**	**1,017.3**	**4,053.7**	**3,732.4**

	Systems		Robotics		Swisslog		Swisslog Healthcare		KUKA Digital		China		Corporate Functions/ Consolidation		Group	
in € millions	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024
Services provided over a period of time	917.4	752.5	44.4	26.5	752.4	704.3	235.0	229.0	–	–	275.9	363.0	-17.1	-24.4	2,208.0	2,050.9
Services provided at a specific point in time	89.1	104.5	1,182, 1	1,065.5	86.0	67.3	20.7	10.9	30.1	31.0	557.1	545.3	-119.4	-143.0	1,845.7	1,681.5
Total	**1,006.5**	**857.0**	**1,226.5**	**1,092.0**	**838.4**	**771.6**	**255.7**	**239.9**	**30.1**	**31.0**	**833.0**	**908.3**	**-136.5**	**-167.4**	**4,053.7**	**3,732.4**

For the purpose of presenting the previous year's figures for the KUKA Digital segment, the previous year's figures for the Robotics segment were adjusted, as all companies in the KUKA Digital segment were allocated to the Robotics segment in the previous year.

Use has been made of the exemption provided for in IFRS 15.121. The anticipated sales revenues from the existing order backlog of projects with an original expected term of more than one year in the amount of €1,748.9 million are expected to be realized in the following periods:

in € millions	2023	2024
Anticipated sales revenues from the existing order backlog[1]	1,435.4	1,748.9
(of which, not later than one year)	(804.9)	(1,086.7)
(of which, later than one year)	(630.5)	(662.2)

[1] Estimated amounts of variable consideration, which may only be recognized under certain conditions, are not included in the expected sales revenues.

2. Cost of sales, selling expenses, research & development expenses and general and administrative expenses

The breakdown of the cost of sales, selling expenses, research & development expenses and general and administrative expenses is shown below:

	Cost of sales		Selling expenses		Research and development expenses		General and administrative expenses		Total	
in € millions	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024
Cost of materials	2,170.7	1,872.0	4.2	4.3	22.1	20.7	7.6	7.8	2,204.6	1,904.8
Personnel expenses	740.1	732.1	189.0	186.3	139.5	131.5	188.8	180.5	1,257.4	1,230.4
Depreciation and amortization	54.4	62.7	15.5	15.9	33.8	41.9	32.1	31.3	135.8	151.8
Other expenses and income	141.8	225.0	140.3	119.8	-0.5	8.2	20.6	12.8	302.2	365.8
Total	**3,107.0**	**2,891.8**	**349.0**	**326.3**	**194.9**	**202.3**	**249.1**	**232.4**	**3,900.0**	**3,652.8**

In the 2024 fiscal year, costs across all functional areas were reduced by 6.3% (2023: increase of 3.0%). The cost of sales decreased from €3,107.0 million in 2023 to €2,891.8 million in 2024. Material usage and personnel expenses fell in line with the reduction in sales revenues in the current fiscal year. Impairment losses in the cost of sales resulted from the impairment of capitalized contract costs and amounted to €3.7 million (2023: €0.0 million). Moreover, the formation of a provision for pending transactions increased other expenses and income in 2024. Foreign currency gains of €35.7 million (2023: €52.6 million) and losses of -€49.4 million (2023: -€59.2 million) from operational foreign currency transactions are also recognized here. This also includes effects from derivatives used to hedge operational foreign currency risks.

Selling expenses decreased by €22.7 million on the previous year (2023: increase of €36.4 million). The reduction in other expenses in particular had a positive effect. The significant reduction in risk provisions for expected default risks from trade receivables, lease receivables and contract assets contributed to this (2024: reversal of impairment losses in the amount of €4.9 million; 2023: impairment loss in the amount of €19.0 million).

Research and development costs rose by 3.8% 2024 (2023: increase of 13.8%). In the current fiscal year, no impairment losses were necessary in the area of research and development (2023: €5.2 million). Amortization of interest on borrowings capitalized in prior years remained virtually unchanged (2024: €0.6 million; 2023: €0.5 million). The lower volume of subsidies in China is reflected in the reduction in other expenses and income (2024: expenses of €8.2 million; 2023: income of €0.5 million).

Administrative expenses fell year on year, reflecting the effects of the projects initiated in previous years to optimize internal processes. Personnel costs fell by 4.4% (2023: increase of 6.5%) and other costs by 37.9% (2023: increase > 100%). There were no unscheduled write-downs in the administrative area (2023: €0.4 million).

Personnel expenses are directly allocated to the functional areas. The following figures result:

in € millions	2023	2024
Wages and salaries	1,022.0	991.1
Social security payments and contributions for provident funds[1]	169.9	165.4
Contributions for retirement benefits[1]	65.5	73.9
Personnel expenses	**1,257.4**	**1,230.4**

[1] Previous year's figures have been adjusted

The table below shows the annual average number of employees in KUKA Group at the balance sheet date:

Employees by functional areas[1]	Annual average		Balance sheet date			
	2023	2024	Total 2023	Total 2024	of which, Germany	of which, abroad
Manufacturing	9,932	9,449	9,663	9,303	2,576	6,727
Sales	1,738	1,728	1,738	1,711	503	1,208
Research and development	1,602	1,750	1,704	1,785	605	1,180
Administration	1,689	1,872	1,737	1,962	591	1,371
	14,961	**14,800**	**14,842**	**14,761**	**4,275**	**10,486**
Apprentices	292	289	317	335	257	78
Student trainees	160	146	159	127	92	35
Total	**15,413**	**15,235**	**15,318**	**15,223**	**4,624**	**10,599**

[1] Previous year's figures have been adjusted

3. Other operating income and expenses

The other operating income and expenses include income and expenses that are not allocated to any of the functional areas (cost of sales, selling expenses, research & development, general and administrative expenses) or reported in another, separate item.

In the 2024 fiscal year, other operating income amounted to €13.8 million (2023: €17.6 million). Other operating income includes grants, special discounts and income from settlement agreements. In the previous year, income in connection with the newly founded associated company ME Industrial Simulation Software Corporation in Japan was reported here.

Other operating expenses decreased by €3.5 million from €13.5 million in 2023 to €10.0 million in 2024. This area includes costs for organizational realignment and the associated expenses as well as other taxes (2024: -€5.9 million; 2023: €5.3 million).

4. Financial result

The financial result, comprising financial expenses and financial income, showed a loss of €7.3 million in the year under review. This corresponds to an increase in costs of €1.9 million on the previous year (2023: loss of €5.4 million).

in € millions	2023	2024
Gains from changes in the fair value of financial investments	**1.5**	**0.3**
Losses from changes in the fair value of financial instruments	**-1.4**	**-4.4**
Interest income from finance leases	7.6	5.0
Remaining interest and similar income	9.7	12.4
Interest and similar income	**17.3**	**17.4**
Net interest component from pension provisions and other non-current liabilities to employees	-2.4	-2.9
Guarantee commissions	-1.5	-1.5
Interest expense for promissory note loans	-1.5	–
Interest expense for inter-company loans	-8.8	-6.1
Capitalized financing costs	0.4	0.2
Interest expenses IFRS 16	-6.4	-7.4
Other interest and similar expenses	-10.3	-9.7
Interest and similar expenses	**-30.5**	**-27.4**
Foreign currency gains	**81.2**	**65.0**
Foreign currency losses	**-73.5**	**-58.2**
Financial result	**-5.4**	**-7.3**

The result from changes in the fair value of financial instruments decreased to -€4.1 million in fiscal 2024 (2023: €0.1 million). Interest rate swaps already expired in 2023 and no new interest rate swaps were concluded. In addition, dividends were received from an investment in the USA (2024: €0.3 million; 2023: €1.5 million). By contrast, one other investment experienced a negative change in value at the end of fiscal 2024. Additionally, the fair value measurement of the investment, which has meanwhile been sold, led to a loss in fiscal 2024.

At €17.4 million, interest income in the year under review remained at the prior-year level (2023: €17.3 million) and mainly comprised interest income from finance leases (2024: €5.0 million; 2023: €7.6 million) and interest income on bank balances.

Interest expenses decreased from -€30.5 million in 2023 to -€27.4 million in 2024. The net interest component from pension provisions and other non-current liabilities to employees as well as the interest expenses for IFRS 16 increased year on year. Guarantee commissions remained at the same level. Both interest expenses for the inter-company loan and the credit lines from Midea Group and other interest and similar expenses decreased year on year. For further information, please refer to note 26.

The foreign currency gains fell from €81.2 million in the previous year to €65.0 million. Gains from derivatives accounted for €51.4 million (2023: €38.0 million). The foreign currency losses fell from -€73.5 million in the previous year to -€58.3 million. Foreign currency losses from derivatives amounted to -€22.4 million (2023: -€49.6 million).

5. Taxes on income

Tax expense

Income tax expense breaks down by origin as follows:

in € millions	2023	2024
Current taxes	-99.6	-87.0
(of which, relating to other periods)	(8.0)	(4.1)
Deferred taxes (previous year: tax income)	58.0	-25.6
(of which, from temporary differences)	(35.2)	(-18.2)
(of which, from loss carryforwards)	(22.8)	(-7.4)
Tax expense	**-41.6**	**-112.7**

Of the current expenses for income taxes, -€7.2 million is attributable to domestic expenditure (2023: -€7.8 million) and -€79.8 million to foreign expenditure (2023: -€91.8 million). Non-period current tax income of €4.1 million (2023: €8.0 million) arose in German and foreign operations.

Deferred tax expenses relate to Germany in the amount of -€45.2 million (2023: income of €0.6 million) and deferred tax income relates to other countries in the amount of €19.6 million (2023: income of €57.4 million). Deferred tax income results primarily from temporary valuation differences.

The expected tax expense based on earnings before taxes and the applicable tax rate for the KUKA companies in Germany remained unchanged at 32.0% and leads to the following actual tax expense:

in € millions	2023	2024
Earnings before tax expense	**152.8**	**69.1**
Expected tax expense	**-48.9**	**-22.1**
Tax rate-related differences	24.2	21.5
Tax reductions due to tax-exempt income	25.9	10.9
Tax increases due to non-deductible expenses	-9.4	-8.8
Tax expenses (–)/tax income (+) for prior years	7.2	-6.7
Change in allowance on deferred taxes	-37.0	-96.8
First-time recognition of previously unrecognized deferred tax assets on tax loss carryforward	5.1	7.1
Change in permanent differences	-1.4	-3.8
Tax impact of investments accounted for by the equity method	0.1	-0.2
Effects resulting from tax rate changes	-1.1	0.0
Tax effect due to non-creditable withholding taxes	-6.1	-14.0
Other differences	-0.2	0.2
Taxes on income (actual tax expense)	**-41.6**	**-112.7**

The applicable tax rate in Germany still comprises corporate income tax of 15.0% as well as a solidarity surcharge of 5.5% and trade tax of 16.2% based on a uniform assessment rate, as was the case in the previous year.

In principle, deferred taxes were recognized on the basis of the applicable tax rate for each company in question.

There are no tax credits for which deferred taxes would need to be accounted.

The global minimum taxation (Pillar 2) was adopted by the German legislator in December 2023 and the Minimum Tax Act therefore came into force with effect from January 1, 2024. KUKA applies the exception regarding the recognition of deferred taxes resulting from the introduction of global minimum taxation.

As a multinational group, KUKA must generally apply the Minimum Tax Act, as the application requirements are met. The simplified calculation of the provisions for global minimum taxation on the basis of the CbCR safe harbor regulations has no impact on any additional current taxes for the Group, as these are fulfilled with the exception of Thailand, Singapore and the United Arab Emirates. As KUKA is not the ultimate parent company, an additional supplementary tax based on a full calculation for 2024 should be incurred at shareholder level.

Deferred taxes

The value of deferred tax assets and liabilities due to temporary differences and tax loss carryforwards in the Group is associated with the following items:

	Deferred tax assets		Deferred tax liabilities	
in € millions	Dec. 31, 2023	Dec. 31, 2024	Dec. 31, 2023	Dec. 31, 2024
Non-current assets	188.3	230.4	86.1	88.1
Current assets	62.3	70.6	54.6	81.1
Provisions	41.2	45.9	20.6	19.7
Liabilities	39.9	29.6	30.9	33.3
Subtotal	**331.7**	**376.5**	**192.2**	**222.2**
Balancing item	-169.7	-202.4	-169.7	-202.4
Deferred taxes on temporary differences	**162.0**	**174.1**	**22.5**	**19.8**
Deferred taxes on tax loss carryforwards	43.0	13.4	–	–
Total	**205.0**	**187.5**	**22.5**	**19.8**
(of which, from items recognized in equity)	(4.0)	(4.8)	(2.3)	(2.5)

Valuation allowances to the carrying amount of deferred tax assets are recognized if the realization of the expected benefit of the deferred taxes in the planning period is not sufficiently probable. The estimates made are subject to change over time, which may result in the reversal of the valuation allowance in subsequent periods.

The recognized values on the balance sheet are written off in the event that the tax benefits that they represent are no longer expected to be realized. No deferred taxes were recognized on temporary differences amounting to €203.8 million (2023: €134.7 million).

In the loss carryforwards of €1,172.1 million (2023: €989.7 million), loss carryforwards amounting to €1,097.2 million (2023: €844.8 million) are not considered in the accounting of deferred taxes, which can for the most part be utilized indefinitely. An amount of €232.1 million from unrecognized loss carryforwards (2023: €146.1 million) will expire by 2030 if it is not utilized.

The loss carryforwards for which deferred taxes were capitalized relate to the total loss carryforwards as follows:

	Loss carryforwards for which deferred taxes were capitalized		Total existing loss carryforwards	
in € millions	Dec. 31, 2023	Dec. 31, 2024	Dec. 31, 2023	Dec. 31, 2024
Germany	122.2	0.0	523.2	616.3
China	2.4	49.5	88.8	154.4
Switzerland	10.2	11.5	238.0	246.2
Other	10.1	13.9	139.7	155.2
Total	**144.9**	**74.9**	**989.7**	**1,172.1**

Deferred tax income in the amount of €7.1 million (2023: €5.1 million) results from the recognition of deferred tax receivables on loss carryforwards from earlier periods which until now had not been included in or written down from the tax accrual/deferral. In the fiscal year, the valuation adjustment on deferred tax assets on loss carryforwards and on temporary differences totaling -€96.8 million (2023: -€37.0 million) had an effect on profit or loss.

Where deferred tax assets have not been impaired, it is generally expected, on the basis of a risk-adjusted and at the same time reliable planning horizon, that this tax-reducing potential will be utilized via taxable income, which is likely based on the expectations of Group companies. Planning uncertainty is accounted for by risk discounts on the tax planning calculations that increase over time.

As at the balance sheet date, the Group companies which had generated a tax loss in the current or prior period reported a net surplus of deferred tax assets totaling €26.4 million (2023: €53.7 million), mainly resulting from the German tax group of KUKA AG and various Chinese companies.

The Group companies of the German tax group generated tax losses in previous years, which led to a partial non-recognition of deferred tax assets in the past year.

For companies with a history of losses, deferred tax asset surpluses are not recognized unless there is convincing evidence of future taxable profits.

In accordance with IAS 12, deferred tax items must be recognized for the difference between the proportionate equity of a subsidiary recognized on the Group balance sheet and the investment carrying amount of this subsidiary on the tax balance sheet of the parent company (so-called outside basis differences) if it is likely that this difference will be realized. Since both KUKA Aktiengesellschaft and the subsidiaries in question are corporations, these differences are predominantly tax-exempt under section 8b of the Corporation Tax Law (KStG) upon realization and thus are permanent in nature. According to IAS 12.39, no deferred tax liability should be recognized even for temporary differences (e.g. those resulting from the 5% flat-rate allocation under section 8b KStG) if it is not likely, given control by the parent company, that these differences will reverse in the foreseeable future. Since no such reversal is expected, no deferred tax items had to be recognized on the balance sheet for this purpose. There are outside basis differences in the amount of €49.4 million (2023: €47.2 million).

Overall, the change in the balance of deferred tax assets and liabilities of -€14.8 million (2023: €56.0 million) comprises amounts affecting net income totaling -€25.6 million (2023: €58.0 million) and changes in deferred taxes not affecting net income, primarily relating to pension obligations, amounting to -€1.8 million (2023: €2.0 million). There is no effect from deconsolidation (2023: -€0.2 million), but there is an effect from the initial accounting for newly acquired fully consolidated companies amounting to €3.7 million (2023: -€1.4 million). There are also relevant foreign exchange effects amounting to €8.8 million (2023: -€3.8 million).

6. Earnings per share

Undiluted/diluted earnings per share are as follows:

	2023	2024
Earnings after taxes and after loss from discontinued operations attributable to KUKA AG (in € million)	69.8	-48.9
Weighted average number of shares outstanding (no. of shares)	39,775,470	39,775,470
Diluted/undiluted earnings per share after taxes and after loss from discontinued operations (in €)	**1.76**	**-1.23**
Loss from discontinued operations (in € million)	-25.6	–
Earnings after taxes attributable to KUKA AG (in € million)	95.4	-48.9
Diluted/undiluted earnings per share after taxes (in €)	**2.40**	**-1.23**

In accordance with IAS 33, undiluted earnings per share are calculated from the earnings due to KUKA Aktiengesellschaft and the weighted average number of shares outstanding for the year.

The weighted average number of shares in circulation remained unchanged at 39.8 million as at the balance sheet date (December 31, 2023: 39.8 million shares).

Notes to the Group balance sheet: Assets

7. Intangible assets

The breakdown of the intangible fixed asset items and their development in the year under review and the previous year are shown in the following two tables.

Development of intangible assets in 2024

in € millions	Acquisition/manufacturing costs							Accumulated depreciation and impairment losses						Net carrying amount
	As at Jan. 1, 2024	Exchange rate differences	Additions	Disposals	Change in scope of consolidation/other	Reclassifications	As at Dec. 31, 2024	As at Jan. 1, 2024	Exchange rate differences	Additions	Disposals	Change in scope of consolidation/other	As at Dec. 31, 2024	As at Dec. 31, 2024
1. Licenses and other rights	347.0	-0.3	4.0	-1.3	0.2	2.4	352.0	260.0	-0.2	23.5	-1.2	0.2	282.3	69.7
2. Self-developed software and other development costs	212.7	-2.4	35.0	-19.2	–	–	226.1	87.8	-1.2	33.0	-19.2	–	100.4	125.7
3. Goodwill	359.8	-1.1	–	–	–	–	358.7	8.6	–	–	–	–	8.6	350.1
4. Advances paid and construction in progress	2.4	–	0.2	–	–	-2.4	0.2	–	–	–	–	–	–	0.2
	921.9	**-3.8**	**39.2**	**-20.5**	**0.2**	**–**	**937.0**	**356.4**	**-1.4**	**56.5**	**-20.4**	**0.2**	**391.3**	**545.7**

Development of intangible assets in 2023

in € millions	Acquisition/manufacturing costs							Accumulated depreciation and impairment losses						Net carrying amount
	As at Jan. 1, 2023	Exchange rate differences	Additions	Disposals	Change in scope of consolidation/other	Reclassifications	As at Dec. 31, 2023	As at Jan. 1, 2023	Exchange rate differences	Additions	Disposals	Change in scope of consolidation/other	As at Dec. 31, 2023	As at Dec. 31, 2023
1. Licenses and other rights	335.8	6.0	13.4	-4.7	-4.7	1.2	347.0	239.3	5.0	20.4	-2.3	-2.4	260.0	87.0
2. Self-developed software and other development costs	220.0	7.8	29.3	-47.5	2.9	0.2	212.7	105.6	3.6	26.0	-47.4	–	87.8	124.9
3. Goodwill	349.4	10.4	–	–	–	–	359.8	8.6	–	–	–	–	8.6	351.2
4. Advances paid and construction in progress	2.0	-0.1	1.9	–	–	-1.4	2.4	–	–	–	–	–	–	2.4
	907.2	**24.1**	**44.6**	**-52.2**	**-1.8**	**–**	**921.9**	**353.5**	**8.6**	**46.4**	**-49.7**	**-2.4**	**356.4**	**565.5**

KUKA Group recognized brands in the amount of €27.0 million (2023: €27.5 million), which are subject to both scheduled depreciation and also always to an impairment test when a triggering event occurs, but at least once a year. The calculation is based on the value in use. The result of the impairment test for the 2024 fiscal year did not indicate any need for impairment, thus confirming the recoverability of the residual carrying amount. The carrying amounts of the brand names allocated to the cash-generating units (CGUs) Swisslog and Healthcare amounted to €16.1 million (2023: €16.6 million) and €9.2 million (2023: €9.5 million) respectively. The year-on-year changes in the carrying amount relate to scheduled depreciation and currency effects.

Goodwill

Goodwill amounted to €350.1 million in the year under review (2023: €351.2 million). The increase in goodwill in the current fiscal year is due to currency effects. The allocation of goodwill to the cash generating units (CGUs) listed below corresponded to the current segment structure. The pre-tax discount rate (weighted average cost of capital (WACC)) used at CGU level is also presented below.

	Dec. 31, 2023		Dec. 31, 2024	
in € millions	Goodwill	WACC (%)	Goodwill	WACC (%)
Systems	27.8	14.8	28.2	9.9
Robotics	76.3	16.5	75.0	11.6
Swisslog	145.4	16.5	144.2	10.8
Swisslog Healthcare	65.2	9.5	64.7	5.3
KUKA Digital	–	–	1.5	8.8
China	36.5	15.0	36.5	11.0
Total	**351.2**		**350.1**	

The impairment test carried out in the current year under review, which was again performed as at September 30, was based on a three-year detailed planning period and a further period of two years in which strategic planning was applied. Together with the market-specific growth rate of 2.0%, these five years formed the basis for calculating the perpetuity.

In the context of determining the pre-tax discount rate (weighted average cost of capital (WACC)), the cost of equity capital and borrowing costs were determined on the basis of segment-specific peer groups. These companies have similar activity and product portfolios to KUKA Group and thus comprise the most important national and international competitors. The ratios for the cost of equity capital and the cost of borrowed capital were determined by CGU based on the average leverage ratios of the respective peer group for the last two years.

The tax rates used per CGU were between 22.4% and 29.9% (Systems CGU: 25.6% (2023: 25.3%); Robotics CGU: 29.9% (2023: 29.6%); Swisslog CGU: 23.7% (2023: 20.1%); Swisslog Healthcare CGU: 26.0% (2023: 26.8%); KUKA Digital CGU: 22.4% (2023: –); China CGU: 25.0% (2023: 19.2%)).

The market risk premium for the respective CGUs was one of the most important components in the WACC calculation. A market risk premium of 6.75% (2023: 7.0%) was applied in all business segments. The beta factor determined as a two-year average of the respective peer group amounted to 1.059 (2023: 1.138) for the Systems CGU, 1.133 (2023: 1.149) for the Robotics CGU, 1.204 (2023: 1.367) for the Swisslog CGU, 0.416 (2023: 0.659) for the Swisslog Healthcare CGU, 0.903 (2023: –) for the KUKA Digital CGU and 1.126 (2023: 1.152) for the China CGU. While observing the possible ranges of the market risk premium, a 1.0% higher WACC would only marginally influence the goodwill – as marginally as a reduction in sales revenues over the entire planning period by 10.0% with a correspondingly lower cash flow.

Self-developed software and other product development costs

Research and development expenses increased from €194.9 million in 2023 to €202.3 million in 2024. IAS 38 stipulates that costs for self-developed software and other product developments must be capitalized if relevant criteria are met. KUKA Group recognizes these expenses at production cost, which includes directly attributable costs and appropriate allocations for overheads and depreciation.

Borrowing costs for qualifying assets are taken into account in the production costs based on the Group capitalization rate of 2.46% (2023: 1.74%).

The business segments are working – depending on their focus – on various projects relating to mechanical systems as well as power and control software for robots. In addition, applications for medical technology and automation solutions are being developed or improved. Borrowing costs of €0.2 million were recognized in the 2024 fiscal year (2023: €0.4 million).

As at December 31, 2024, development costs of €125.7 million (2023: €124.9 million) had been capitalized. This represents an increase of €0.8 million compared to the end of the 2023 fiscal year.

At €35.0 million, additions in the year under review were above the prior-year level (2023: €29.3 million).

In the year under review, impairment losses of €3.7 million were recognized on intangible assets due to project deteriorations (2023: €5.6 million).

8. Tangible assets

The breakdown of the tangible asset items and their development in the year under review and the previous year are shown in the following tables. Please refer to the management report for details of the investment focuses.

Schedule of changes in KUKA Group's tangible assets 2024

	Acquisition/manufacturing costs							Accumulated depreciation and impairment losses							Net carrying amount
in € millions	As at Jan. 1, 2024	Exchange rate differences	Additions	Disposals	Change in scope of consolidation/other	Reclassifications	As at Dec. 31, 2024	As at Jan. 1, 2024	Exchange rate differences	Additions	Disposals	Change in scope of consolidation/other	Reclassifications	As at Dec. 31, 2024	As at Dec. 31, 2024
1. Land, similar rights and buildings including buildings on land owned by third parties	391.1	6.5	4.3	-5.0	1.2	5.0	403.1	126.8	1.7	16.5	-4.0	1.2	–	142.2	260.9
2. Technical plant and equipment	213.4	1.9	14.2	-7.0	2.5	3.4	228.4	141.4	1.0	14.9	-6.1	2.5	–	153.7	74.7
3. Other equipment, factory and office equipment	212.4	1.8	19.2	-10.7	6.2	1.5	230.4	158.1	1.6	21.6	-10.0	5.7	–	177.0	53.4
4. Advances paid and construction in progress	27.4	0.3	20.4	-7.7	–	-9.9	30.5	5.9	-0.1	–	–	–	–	5.8	24.7
	844.3	**10.5**	**58.1**	**-30.4**	**9.9**	**–**	**892.4**	**432.2**	**4.2**	**53.0**	**-20.1**	**9.4**	**–**	**478.7**	**413.7**

Schedule of changes in KUKA Group's tangible assets 2023

	Acquisition/manufacturing costs							Accumulated depreciation and impairment losses							Net carrying amount
in € millions	As at Jan. 1, 2023	Exchange rate differ-ences	Additions	Disposals	Change in scope of consolida-tion/other	Reclassifi-cations	As at Dec. 31, 2023	As at Jan. 1, 2023	Exchange rate differ-ences	Additions	Disposals	Change in scope of consolida-tion/other	Reclassifi-cations	As at Dec. 31, 2023	As at Dec. 31, 2023
1. Land, similar rights and buildings including buildings on land owned by third parties	364.8	-7.1	6.8	-4.6	-10.3	41.5	391.1	124.1	-1.5	14.7	-3.4	-5.8	-1.3	126.8	264.3
2. Technical plant and equipment	201.1	-1.6	19.6	-6.3	-3.8	4.4	213.4	133.9	-1.0	14.7	-4.3	-2.2	0.3	141.4	72.0
3. Other equipment, factory and office equipment	198.2	-1.6	24.6	-4.5	-5.7	1.4	212.4	149.3	-1.3	19.0	-4.1	-4.5	-0.3	158.1	54.3
4. Advances paid and construction in progress	45.8	-2.1	31.5	-0.5	–	-47.3	27.4	4.6	–	–	–	–	1.3	5.9	21.5
	809.9	**-12.4**	**82.5**	**-15.9**	**-19.8**	**–**	**844.3**	**411.9**	**-3.8**	**48.4**	**-11.8**	**-12.5**	**–**	**432.2**	**412.1**

Investment property

in € millions	2023	2024
As at Jan. 1	9.4	8.4
Depreciation and amortization	-0.4	-0.4
Exchange rate differences	-0.6	0.3
As at Dec. 31	**8.4**	**8.3**

The property was completed at the end of December 2022. There were no further additions to this item in the years 2023 and 2024 under review.

As at December 31, 2024, the fair value of the investment property was €10.3 million, corresponding to an increase in value of 27% compared to the carrying amount. A valuation by an independent expert, who has a recognized, appropriate professional qualification and current experience with the location and type of property being appraised had taken place as at December 31, 2024. In the fair value hierarchy of IFRS 13, this investment property is classified as level 3.

The commercial property was leased to third parties under operating leases. Each of the leases initially consists of a term of three years. Subsequent extensions will be negotiated with the lessee. In 2024, rental income of €1.4 million was generated (2023: €1.2 million). In the future, lease income from operating leases where the Group is the lessor will be recognized in profit or loss on a straight-line basis over the lease term. Receivables in the amount of the minimum lease payments under the leases are as follows:

in € millions	2023	2024
Up to 1 year	2.6	1.3
1 – 5 years	2.7	–

Government grants

Within KUKA Group, only the gross presentation of government grants in accordance with IAS 20.26 was applied. This means that grant-related payments for an asset may not be deducted from the carrying amount of the asset. Instead of reducing the carrying amount of the asset, the payment is recognized under other liabilities, which is recognized systematically in the income statement over the useful life of the asset. Government grants totaling €10.6 million (2023: €25.0 million) were received and directly released to income. There were no contingently repayable grants as of the balance sheet date. Grants related to assets, which are reported under other liabilities, amounted to €14.2 million in the past fiscal year (2023: €8.6 million).

9. Financial investments

No new financial investments were made in the year under review. The following table shows the changes in financial investments for the reporting periods ending December 31, 2024 and 2023:

in € millions	FVtPL
Opening balance Jan. 1, 2023	**4.8**
Additions	2.1
Disposals/sales proceeds	-2.8
Reclassifications/foreign currency effects/dividend	-1.3
Amounts recognized in profit or loss	0.8
Balance as at Dec. 31, 2023/ Jan. 1, 2024	**3.6**
Additions	–
Disposals/sales proceeds	–
Reclassifications/foreign currency effects/dividend	–
Amounts recognized in profit or loss	-2.2
Closing balance Dec. 31, 2024	**1.4**

At the end of the 2024 fiscal year, one investment experienced a negative change in value.

10. Investments accounted for at equity

The number of investments accounted for using the equity method fell by three companies. Further explanations can be found in the section on changes in the scope of consolidation and under net assets and financial position. The Group does not apply the disclosures in the notes pursuant to IFRS 12.B12 and B13, as the investments are in themselves of minor importance for KUKA Group. In the 2024 fiscal year, the pro rata earnings amounted to -€6.9 million (2023: profit of €0.4 million). Expenses in connection with the change in the consolidation method of two companies had a negative impact on the result.

11. Leases

KUKA as a lessor

KUKA Toledo Production Operations LLC., Toledo, USA (KTPO)

KUKA Toledo Production Operations LLC, Toledo, USA (KTPO) manufactures Jeep Gladiator bodies under the terms of a pay-on-production contract with Chrysler. The contract is a finance lease and runs until March 2025. Production of the new Jeep Gladiator model started in 2024. The body of the new model has been slightly modified to support the improved safety features. This required minor modifications to the production plant, which were previously reported under property, plant and equipment and were capitalized as a finance lease receivable at the start of series production. The existing contract structure is also valid for the production of the renewed Jeep Gladiator model, which runs until December 2026.

A non-current lease receivable of €3.6 million (2023: €14.8 million) and a current lease receivable of €32.1 million (2023: €36.2 million) existed as at the balance sheet date of December 31, 2024. Revenues generated from sales of vehicle bodies are reduced by the fictitious lease payment. The interest component included in the fictitious leasing rate is booked under interest result, while the repayment component of this payment reduces the receivables as per schedule. In the previous year, the default risk of the lease receivable increased significantly based on the currently planned purchase volume. The value adjustment was therefore adjusted accordingly and led to a reduction in the net value of the long-term lease receivable. In fiscal 2024, there was no significant change in the default risk based on the planned purchase volume.

Swisslog Australia Pty.Ltd., Sydney, Australia

Swisslog Australia Pty Ltd. is manufacturing the warehouse automation and robot system, including the software required for operation, for a customer in Australia. A financing partner is also involved, who is financing production during the construction phase and then becoming the legal owner of the system once it is ready for use by the customer. Only the customer has control over the use of the system. Consequently, despite the fact that the financing partner is becoming the legal owner of the system, it has no control over the production plant or decisions regarding its use. This transaction is therefore purely a financing agreement. All amounts received or paid in connection with this are recognized as other liabilities.

By contrast, the contract with the customer, to whom the right to control the use of the system for five years is transferred in return for a consideration, constitutes a finance lease. The expenses for the construction of the system are capitalized until it is put into operation and are not recognized until the customer starts production. The minimum payments stipulated in the contract are recognized as a finance lease receivable. All payments in excess of this are recognized directly in sales.

The scope of the project was expanded considerably by extending the contract in 2023. A non-current lease receivable of €3.7 million (2023: €4.5 million) and a current lease receivable of €2.2 million (2023: €1.5 million) existed as at the balance sheet date of December 31, 2024. The interest component included in the leasing rate is booked under interest result, while the repayment component of payments reduces the receivables as per schedule.

The other leases, which are classified as finance leases, were of minor significance for the KUKA Group as at the balance sheet date.

At the end of the fiscal year, non-current lease receivables totaled €7.8 million (2023: €19.5 million) and current lease receivables totaled €20.6 million (2023: €38.4 million). Impairment losses on lease receivables in accordance with IFRS 9 were up €0.8 million to €15.3 million as at the balance sheet date (2023: €14.5 million). Accordingly, the gross value of non-current lease receivables amounted to €8.6 million (2023: €32.9 million) and current lease receivables to €35.0 million (2023: €39.5 million). For the reconciliation of the impairment losses, please refer to note 28 d).

The fair value of long-term lease receivables in accordance with IFRS 7, which was determined by discounting the long-term cash flows using the Group's incremental borrowing rate, amounted to €8.6 million in fiscal 2024 (2023: €21.6 million).

There was no capital gain or loss in either the year under review or the previous year. Financial income on the net investment in the leases amounted to €5.0 million in fiscal 2024 after €7.6 million in the previous year.

The reconciliation to the total present value of the outstanding total minimum lease payments for the existing leases is shown below:

in € millions	2023	2024
Finance lease gross investments	**63.3**	**30.2**
(of which, not later than one year)	(42.6)	(21.9)
(of which, later than one year and not later than five years)	(20.7)	(8.3)
(of which, later than five years)	(0.0)	(0.0)
Unrealized financial income	**5.4**	**1.9**
Present value of outstanding minimum lease payments	**57.9**	**28.3**
(of which, not later than one year)	(38.4)	(20.6)
(of which, later than one year and not later than five years)	(19.5)	(7.8)
(of which, later than five years)	(0.0)	(0.0)

The rental of robots is classified at KUKA Group as an operating lease, as it does not transfer substantially all the opportunities and risks incidental to ownership to the lessee. KUKA recognized rental income of €0.9 million in the income statement in fiscal 2024 (2023: €0.9 million). The following table shows the maturity analysis of the expected future rental income for operating leases. These figures are based on current contract terms and historical renewal patterns for rolling leases.

in € millions	2023 [1]	2024
Not later than 1 year	0.5	1.2
1 – 2 years	0.5	0.6
2 – 3 years	0.5	0.6
3 – 4 years	0.5	0.6
4 – 5 years	0.5	0.6
More than 5 years	0.5	0.5

[1] Previous year's figures have been adjusted

KUKA as a lessee

As a lessee, KUKA Group reports buildings, technical equipment, cars and IT hardware, among other items, in its balance sheet. As at the balance sheet date, right-of-use assets valued at €135.2 million (2023: €127.9 million) were capitalized and reported separately in the balance sheet. Additions to right-of-use assets amounted to €52.3 million in the year under review (2023: €63.3 million). This resulted, among other things, from the conclusion of new rental contracts in Europe and the USA and the extension of existing rental agreements for land and buildings worldwide. The right-of-use assets per existing asset class are shown below:

in € millions	2023	2024
Right-of-use assets for land and buildings	110.7	112.3
Right-of-use assets for technical equipment	15.9	21.1
Right-of-use assets for other factory and office equipment	0.4	1.1
Other right-of-use assets	0.9	0.7
Total	**127.9**	**135.2**

The right-of-use assets are depreciated over the shorter of the lease term and the useful economic life. The prevailing period within KUKA Group is between one and 23 years, with an average of around four years. The depreciation recognized in the respective functional areas totaled €41.8 million in the 2024 fiscal year (2023: €40.5 million). The depreciation amount per asset class is shown below.

in € millions	2023	2024
Depreciation of land and buildings	30.7	30.8
Depreciation of technical equipment	8.8	10.3
Depreciation of other factory and office equipment	0.5	0.3
Other depreciation	0.5	0.4
Total	**40.5**	**41.8**

Total cash outflows from leases recognized in the balance sheet amounted to €49.9 million in fiscal 2024 (2023: €47.2 million). Expenses for short-term leases with a term of less than one year totaled €2.3 million in fiscal 2024 (2023: €1.7 million). The amount incurred for leases for assets with an original price of less than €5,000 each amounted to €1.1 million (2023: €0.7 million).

Expenses for variable lease payments amounting to €23.3 million (2023: €23.7 million) were not included in the valuation of lease liabilities.

In fiscal year 2024, a sale and leaseback transaction was concluded in Germany, which was of minor significance for KUKA Group.

KUKA Group expects a future cash outflow of €2.2 million (2023: €0.8 million) from contracts that have already been concluded but have not yet started, of which €0.4 million will fall due within one year and €1.7 million between 2026 and 2029. For further details on lease liabilities, please refer to note 25.

The Group has several lease agreements that contain renewal and termination options. These options are negotiated by management in order to manage the portfolio of leased assets flexibly and in line with the Group's respective business requirements.

12. Inventories

in € millions	Dec. 31, 2023	Dec. 31, 2024
Raw materials and supplies	241.0	214.6
Work in process	94.3	84.3
Finished goods	150.8	183.9
Advances paid	52.9	50.8
Inventories	**539.0**	**533.6**

Write-downs relative to gross value increased by €1.7 million to €103.0 million (2023: €101.3 million). Total reversals of impairment losses amounted to €14.1 million in the year under review (2023: €6.0 million).

13. Trade receivables

Trade receivables decreased from €843.5 million in 2023 to €843.1 million in the year under review. These receivables have a residual term of less than one year.

The trade receivables subject to IFRS 9 are shown below:

in € millions	Not overdue	Less than 31 days	31 to 60 days	61 to 90 days	91 to 180 days	More than 180 days	Gross carrying amount of receivables	Value adjustments for credit-impaired receivables	Value adjustments for non-credit-impaired receivables	Net carrying amount of the receivables
As at Dec. 31, 2023	777.0	47.2	21.1	6.3	6.9	3.2	**861.7**	-13.6	-4.6	**843.5**
As at Dec. 31, 2024	775.2	50.5	17.6	9.2	6.8	6.9	**866.2**	-18.5	-4.6	**843.1**

An expected default rate was determined for each segment depending on the period overdue. Each company in the Group has the option of making additional write-downs based on empirical values.

The development of the impairment losses on credit-impaired receivables and non-credit-impaired receivables is shown separately and can be found in note 28 d).

As at December 31, 2024, there were no trade receivables from factoring agreements with banks with continuing involvement.

14. Contract assets and contract liabilities

As at the end of fiscal year 2024, contract assets amounting to €435.4 million have been capitalized (December 31, 2023: €431.9 million), representing an increase of €3.5 million. Contract liabilities rose by €12.9 million in the reporting period, from €548.0 million in 2023 to €560.9 million in the year under review. Depending on whether KUKA Group has performed the service or whether it has been rendered by the customer, the contract is recognized in the balance sheet as either an asset or a contract liability. The services provided by KUKA Group and the payments made by the customer during the contract term may differ. Accordingly, the change in contractual assets and liabilities is mainly attributable to the fulfillment of performance obligations.

Due to the close link in terms of content as well as the clearer form of presentation, this chapter deals with both the asset and liability items. The significant changes to the contract assets and contract liabilities for the year under review and the previous year are shown below:

	Dec. 31, 2023		Dec. 31, 2024	
in € millions	Contract assets	Contract liabilities	Contract assets	Contract liabilities
Sales revenues included in contractual liabilities at the beginning of the period	–	33.1	–	405.1
Increase due to customer payments received	–	506.5	–	1,089.5
Reclassification from contractual assets to trade receivables	-999.5		-790.5	
Changes due to adjustment of the progress	397.9	32.2	1.4	3.2

Contract costs of €0.9 million were capitalized in fiscal 2024 (2023: €3.1 million), which were written off on an unscheduled basis at the end of the fiscal year. In accordance with IFRS 9, an impairment loss (risk provision) of -€5.3 million (2023: -€13.7 million) was recognized for contract assets. As a result, the gross carrying amount of contract assets was €440.7 million (2023: €445.6 million). For the reconciliation of the risk provision for expected default risks on contractual assets, please refer to note 28 d). Contract assets fall into the same risk category as receivables that are not overdue.

15. Other receivables and other assets

in € millions	2023	2024
Residual term over 1 year		
Other financial receivables	0.9	3.3
Other non-financial receivables	0.9	–
Assets from overfunded pension plans	4.6	4.4
Total	**6.4**	**7.7**
Residual term to 1st year		
Receivables from tax authorities	57.6	58.7
Other financial receivables	76.6	68.5
Other non-financial receivables	50.7	38.9
Total	**184.9**	**166.1**
Other receivables and other assets	**191.3**	**173.7**

Current other assets decreased from €184.9 million in 2023 to €166.1 million in the year under review. Receivables from tax authorities were up by €1.1 million to €58.7 million in 2024 (2023: €57.6 million) and mainly included sales tax receivables.

Investments in current securities with an overall term of significantly less than one year are reported under other current financial receivables. These are classified as amortized cost (AC) and impaired using the credit default swap of the respective bank and the historical default rate of the respective segment. The impairment loss for this amounted to €0.0 million (2023: €0.1 million). The gross carrying amount amounted to €34.7 million (2023: €45.0 million). Based on the external rating, KUKA Group has categorized the issuers of these short-term securities in internal default risk rating class 1.

Furthermore, other current financial receivables include derivatives with a positive fair value, rental deposits and other lendings. Additionally, the category “other non-financial receivables” includes other assets as deferred income in the amount of €23.2 million (2023: €34.4 million).

16. Cash and cash equivalents

KUKA Group maintains bank balances exclusively at financial institutions with an excellent credit rating. Furthermore, funds to be invested are distributed across several financial institutions and the parent company in order to diversify risk.

For further details please refer to note 26.

The impairment loss on cash and cash equivalents was calculated on the basis of expected losses. As in the previous year, no default risk was recognized in the year under review.

in € millions	Dec. 31, 2023	Dec. 31, 2024
Cash on hand	0.4	0.3
Cash and bank balances	531.0	655.7
Total	**531.4**	**656.0**

Regulatory requirements or local company law provisions in certain countries may restrict the Group’s ability to transfer assets to or from other companies within the Group. Cash and cash equivalents are subject to local exchange restrictions in certain countries (for example, China). There, the export of capital from the respective country is generally only possible in compliance with applicable foreign exchange controls. Beyond that, there are no significant restrictions. Bank balances in China totaled €511.5 million in fiscal 2024 (2023: €411.2 million).

Notes to the Group balance sheet: Equity and liabilities

17. Equity

The consolidated statement of changes in equity and the statement of comprehensive income show the changes in equity including those not affecting net income.

18. Subscribed capital

As in the previous year, the company's share capital amounts to €103,416,222.00 (December 31, 2023: €103,416,222.00) and is subdivided into 39,775,470 outstanding no-par-value registered shares (December 31, 2023: 39,775,470 no-par-value bearer shares). Each share is entitled to one vote. The no-par-value registered shares have a theoretical portion of the share capital amounting to €2.60.

19. Capital reserve

The capital reserve applies to KUKA Aktiengesellschaft.

20. Revenue reserves

The revenue reserves include the accumulated retained earnings of KUKA Aktiengesellschaft and its consolidated subsidiaries.

No dividend was distributed. In addition, the share-based compensation under the employee share program of Midea Group is included in the revenue reserves.

21. Minority interests

Minority interests relate to Swisslog Healthcare Trading MEA LLC, Dubai (United Arab Emirates), Swisslog Middle East LLC, Dubai (United Arab Emirates), Swisslog Healthcare Shanghai Co., Ltd., Shanghai (China), KUKA Robotics China Co., Ltd., Shanghai (China), KUKA Robotics Guangdong Co., Ltd, Foshan (China), KUKA Robotics Manufacturing China Co., Ltd., Shanghai (China) and, since this year, Guangdong Swisslog Technology Co., Ltd., Shunde (China) and Shanghai Swisslog Technology Co., Ltd., Shanghai (China). The adjustment item for minority interests in equity, which also includes foreign currency effects and the pro rata minority earnings, increased by €40.2 million from €327.4 million in 2023 to €367.6 million in 2024.

The table below shows information on non-controlling interests in total assets and total comprehensive income. The amounts are before intra-Group eliminations.

in € millions	2023	2024
Percentage of non-controlling interests (%)	**50.0**	**50.0**
Non-current assets	544.6	548.6
Current assets	1,034.8	1,307.0
Non-current liabilities	-1.3	-0.1
Current liabilities	-511.6	-759.2
Net assets	**1,066.5**	**1,096.2**
Net assets of non-controlling interests	533.4	548.1
Sales revenues	1,068.4	1,120.5
Net income	29.3	4.8
Other income	2.2	22.4
Total comprehensive income	**31.6**	**73.3**
Profit attributable to non-controlling interests	15.8	4.4
Other comprehensive income attributable to non-controlling interests	-21.9	11.2
Cash flow from operating activities	43.4	33.7
Cash flow from investment activities	-17.9	-7.5
Cash flow from financing activities	18.1	25.2
Foreign currency effects	-20.7	-10.9
Net increase in cash and cash equivalents	**22.9**	**40.4**

22. Other reserves

Other reserves increased by €44.1 million to €88.8 million as at the balance sheet date (2023: €44.7 million). On the one hand, exchange rate effects of €52.2 million had a positive impact on equity (2023: -€38.3 million). On the other hand, there was an increase in actuarial losses on pension provisions amounting to -€6.4 million and in the deferred taxes on these provisions amounting to -€1.7 million.

23. Pension provisions and similar obligations

Appropriate pension provisions were established for liabilities from vested benefits and current benefits paid to vested and former employees of KUKA Group as well as their surviving dependents. Depending on the legal, economic and tax situation in each of the countries concerned, various retirement benefit systems are in place that are as a rule based on employees' length of service and compensation.

Company retirement benefit coverage in the Group is provided through both defined contribution and defined benefit plans.

Defined benefit plans

Defined benefit plans in KUKA Group primarily concern plans in Germany, the United States, Switzerland, the United Kingdom and Sweden. The country-specific characteristics and legal regulations relating to defined benefit plans are presented in the following. Under defined benefit plans, the company incurs an obligation to provide the benefits promised by the plan to current and former employees.

Germany

Obligations in Germany arise from agreements on company pension schemes concluded with various insurance institutions. The prerequisites regarding the type and amount of the entitlement depend on the employee's age and number of years with the company. The benefits include the components old-age pension, disability pension, widow's/widower's pension, death benefits and emergency assistance. New biometric actuarial assumptions (RT 2018G) were published in the 2018 fiscal year, which remain valid for the 2024 fiscal year. The average life expectancy continued to rise in Germany in the last few years, but not by as much as recently. It has not yet been possible to derive any long-term decline in the trend, but this circumstance has been taken into account in the new tables. Research results relating to observed mortality were also taken into account for the first time with a flat-rate discount. These indicate that employees with a higher income also have a greater life expectancy. Finally, the long-term decline in the probability of invalidity in the age range from 58 years onwards was taken into account in the new tables.

USA

The Systems division makes pension payments to its former employees during their retirement. Employees who entered the worker's union before September 14, 2004 are eligible to participate in the pension plan. The benefits are calculated on the basis of the rate applicable on the date they retire. This rate is composed of the years of service credited to the employee. Eligible employees are also provided with medical care. Owing to their benefit character, the obligations for post-employment medical benefits are also disclosed in this item according to IAS 19. These post-employment benefit provisions represent €0.3 million (2023: €0.4 million) of the total provisions and accruals. The Employee Retirement Income Security Act (ERISA) in the United States provides the legal and regulatory framework for these plans.

The defined benefit plan of the Swisslog division exists for both salaried and wage-earning employees. Both plans are managed by an insurance company and are legally independent. Both are closed to new participants and are financed entirely by the employer. Swisslog Group is able to determine the distribution of the assets. The plans are designed to avoid the necessity to provision for the expenses of additional benefits. However, each individual savings basket bears a fixed percentage of interest (guaranteed minimum return).

Switzerland

The plan is affiliated to a foundation (established in 2019), which is legally independent and exceeds the statutory minimum requirements in Switzerland (Occupational Old Age, Survivors' and Invalidity Pension Provision, BVG). All employees in this are insured for the financial consequences of age, invalidity and death. Contributions are made by the employer and employees. Responsibility for investing the assets is borne by the respective foundation board, which also sets the interest rate on the individual age tranches – subject to the statutory rules. In the event of a deficit for the Swisslog pension fund, various measures can be taken such as a reduced interest rate or additional pension contributions. The level of cover pursuant to BVG exceeds 100% as at the balance sheet date, as was the case at the balance sheet date of the previous year. The Swiss pension plans were valued using the projected unit credit method (PUC) and BVG 2020 generation tables (without risk sharing).

UK

The British defined benefit plan is also independent and has been closed to new participants since 2001. The assets are invested in an insurance fund. The plan is financed by the employer with the employees. Based on the statutory requirements a valuation is undertaken by an actuary every three years. In the event a deficit is calculated, it is necessary to establish a restructuring plan which also sets the future amortization payments to make good the deficit.

Sweden

The Swedish defined benefit plan is legally mandatory and is based on a collective agreement (agreement between the trade union and the Swedish employers). The plan cannot be changed by the company. The plan is available to all employees born before 1979. It covers the financial consequences of age, invalidity and illness. There is a defined contribution plan for those employees born after 1979. The defined benefit plan is financed by the employer. The liability is covered by plan assets in a pension institution administered by an external insurance company. As of 2021, this plan was closed.

Defined contribution plans

For the defined contribution plans, the company pays contributions to a public or private pension insurance carrier. Upon payment of the contributions, the company has no further obligations. Total payments for pensions under defined contribution plans in the amount of €66.8 million compared to €61.5 million in 2023 are disclosed as expenses for the respective years.

Deferred compensation

Pension provisions of €2.6 million (2023: €2.5 million) were recognized for fiscal 2024 for salary components converted into pension commitments by employees under the deferred compensation model. These provisions were netted against the asset values from the surrender values of the reinsurance. This resulted in a balance sheet amount after netting of €0.0 million (2023: €0.0 million).

Disclosures on actuarial assumptions

The amount of pension obligations (defined benefit obligation) was calculated by actuarial methods for which estimates are unavoidable. In addition to assumptions related to life expectancy, this involves assumptions detailed below, which are dependent on the economic environment for each country in question:

Dec. 31, 2024	Germany	Switzerland	UK	Sweden	USA	Other
Demographic assumptions	RT 2018G	BVG 2020 GT	S3PxA CMI 2023	DUS23 White Collar	PRI2012 with MP2021	diverse
Discount factor in %	3.25	0.90	5.35	2.90	4.99 – 5.35	2.80 – 10.00
Wage dynamics in %	0.00 – 0.50	1.25	3.55	2.30	n/a	0.00 – 6.00
Pension dynamics in %	0.00 – 2.50	n/a	3.70	1.80	n/a	n/a
Changes in cost of medical services in %	n/a	n/a	n/a	n/a	0.00 – 10	n/a

Dec. 31, 2023	Germany	Switzerland	UK	Sweden	USA	Other
Demographic assumptions	RT 2018G	BVG 2020 GT	S3PxA CMI 2022	DUS14 White Collar	PRI 2012 with MP 2021	diverse
Discount factor in %	3.15/3.80	1.50	4.35	3.70	4.65/4.76	2.80 – 10.00
Wage dynamics in %	n/a	2.00	3.25	2.20	n/a	2.00 – 6.00
Pension dynamics in %	1.1/2.0/2.5	n/a	1.70	1.70	n/a	n/a
Changes in cost of medical services in %	n/a	n/a	n/a	n/a	8.25	n/a

The discount factor is determined based on the returns from high-quality, fixed-rate corporate bonds.

Wage dynamics encompass future increases in wages and salaries that are estimated annually by reference to factors such as inflation and economic conditions, among others.

The expected returns are derived from consensus forecasts for the respective asset classes. The forecasts are based on empirical values, economic data, interest forecasts and stock market expectations.

For funded plans, the pension obligations are reduced by an amount equal to the fund assets. If the fund assets exceed the defined benefit obligation, an asset is recognized according to IAS 19 and disclosed under other assets. If the fund assets do not cover the commitment, the net obligation is recognized as a liability under pension provisions.

Increases or decreases in either the present value of the defined benefit obligation or the fair value of the plan assets may give rise to actuarial gains or losses. This may be caused by factors such as changes in actuarial parameters, changes to estimates for the risk profile of the pension obligations and differences between the actual and expected returns on the fund assets.

The sensitivity analysis illustrates the extent to which changes in actuarial assumptions would impact defined benefit obligations recognized as at December 31, 2024:

Sensitivity analysis

Nature and degree of change in actuarial assumptions in € millions		Defined benefit obligation after the change in 2023	Change 2023[1]	Defined benefit obligation after the change in 2024	Change 2024[1]
Increase in the discount rate	by +0.25%	225.6	-7.2	227.0	-7.4
Decrease in the discount rate	by –0.25%	240.4	7.6	242.5	8.1
Pension increase	by +0.25%	233.5	0.7	239.3	4.9
Pension reduction	by –0.25%	232.1	-0.7	232.8	-1.7
Increase in life expectancy	by +1 year	237.1	4.3	237.7	3.3
Decrease in life expectancy	by –1 year	231.1	-1.7	231.2	-3.2
Increase in wages and salaries	by +0.25%	236.9	4.1	235.2	0.8
Decrease in wages and salaries	by –0.25%	229.0	-3.8	233.8	-0.7

[1] The changes in the actuarial assumptions have no linear impact on the calculation of the present value of the defined benefit obligation due to specific effects such as compound interest. Changing multiple assumptions simultaneously does not always correspond to the cumulative effect because there are interdependencies between factors. New calculations of the defined benefit obligation must be made for each case.

Funding status of defined benefit pension obligations

	Germany		Switzerland		UK		Sweden		USA		Other		Total	
in € millions	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024
Present value of pension benefits covered by provisions	50.4	47.5	–	–	–	–	–	–	0.4	0.3	5.0	5.1	55.8	52.9
Present value of pension benefits based on plan assets	2.5	2.6	116.6	131.6	16.4	15.3	15.2	16.4	23.1	13.1	3.2	2.5	177.0	181.5
Defined benefit obligation	**52.9**	**50.1**	**116.6**	**131.6**	**16.4**	**15.3**	**15.2**	**16.4**	**23.5**	**13.4**	**8.2**	**7.6**	**232.8**	**234.4**
Fair value of plan assets	2.5	2.6	108.1	115.0	18.3	18.1	13.4	13.8	25.8	14.6	2.5	2.3	170.6	166.4
Net obligation/assets as at Dec. 31	**50.4**	**47.5**	**8.5**	**16.6**	**-1.9**	**-2.8**	**1.8**	**2.6**	**-2.3**	**-1.2**	**5.7**	**5.3**	**62.2**	**68.0**

	Germany		Switzerland		UK		Sweden		USA		Other		Total	
in € millions	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024
Other receivables and other assets; plan assets (note 15)	–	–	–	–	-2.3	-2.8	–	–	-2.3	-1.6	–	–	-4.6	-4.4
Pension provisions and similar obligations (note 23)	50.4	47.5	8.5	16.6	0.4	–	1.8	2.6	–	0.4	5.7	5.3	66.8	72.4
Net obligation/assets as at Dec. 31	**50.4**	**47.5**	**8.5**	**16.6**	**-1.9**	**-2.8**	**1.8**	**2.6**	**-2.3**	**-1.2**	**5.7**	**5.3**	**62.2**	**68.0**

Reconciliation / Development of the defined benefit obligation

The reconciliation of the obligation for key items from the beginning to the end of the fiscal year breaks down as follows:

	Germany		Switzerland		UK		Sweden		USA		Other		Total	
in € millions	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024
1.1.	**52.5**	**52.9**	**93.7**	**116.6**	**15.9**	**16.4**	**15.5**	**15.2**	**24.3**	**23.5**	**7.7**	**8.2**	**209.6**	**232.8**
Other changes	-0.5	–	–	–	–	–	–	–	–	–	–	–	-0.5	–
Current service costs	0.2	0.2	3.1	4.2	0.1	–	–	–	–	–	0.6	0.4	4.0	4.8
Interest expense (+) / interest income (–)	1.8	1.5	2.2	1.7	0.8	0.7	0.5	0.5	1.1	0.8	0.3	0.4	6.7	5.6
Actuarial gains (–) / losses (+)	3.3	-0.4	12.1	14.2	0.2	-2.1	-0.3	1.8	0.8	-0.9	-0.1	-0.8	16.0	11.8
(of which, changes from experience)	(1.8)	(–)	(0.3)	(4.0)	(-0.4)	(-0.1)	(0.6)	(-0.1)	(0.2)	(-0.5)	(-0.2)	(-0.6)	(2.3)	(2.7)
(of which, changes in financial assumptions)	(1.5)	(-0.4)	(11.7)	(10.2)	(1.0)	(-2.0)	(-0.9)	(1.9)	(0.6)	(-0.4)	(0.1)	(0.0)	(14.0)	(9.3)
(of which, changes in demographic assumptions)	(–)	(–)	(0.1)	(–)	(-0.4)	(–)	(–)	(–)	(–)	(–)	(–)	(-0.2)	(-0.3)	(-0.2)
Gains (–) / losses (+) on settlement	–	–	–	–	–	–	–	–	–	2.4	–	–	–	2.4
Past service cost and plan curtailments and amendments	–	–	–	-0.1	–	–	–	–	–	–	–	–	–	-0.1
Payments made	-4.2	-4.1	-1.2	-3.4	-0.8	-0.6	-0.5	-0.6	-1.8	-13.6	-0.4	-0.6	-9.1	-22.9
(of which, employee contributions)	(0.1)	(0.2)	(3.1)	(3.1)	(–)	(–)	(-0.5)	(–)	(–)	(–)	(–)	(–)	(3.2)	(3.3)
(of which, benefits paid)	(-4.3)	(-4.3)	(-4.3)	(-6.5)	(-0.8)	(-0.6)	(–)	(-0.6)	(-1.8)	(-0.4)	(-0.4)	(-0.6)	(-12.3)	(-13.0)
(of which payments on settlement)	–	–	–	–	–	–	–	–	–	(-13.2)	–	–	–	(-13.2)
Currency translation	–	–	6.7	-1.6	0.2	0.9	–	-0.5	-0.9	1.2	0.1	–	6.1	–
31.12.	**52.9**	**50.1**	**116.6**	**131.6**	**16.4**	**15.3**	**15.2**	**16.4**	**23.5**	**13.4**	**8.2**	**7.6**	**232.8**	**234.4**
(of which, funded by provisions)	(50.4)	(47.5)	(–)	(–)	(–)	(–)	(–)	(–)	(0.4)	(0.3)	(5.0)	(5.1)	(55.8)	(52.9)
(of which, based on plan assets)	(2.5)	(2.6)	(116.6)	(131.6)	(16.4)	(15.3)	(15.2)	(16.4)	(23.1)	(13.1)	(3.2)	(2.5)	(177.0)	(181.5)

Current service costs and interest expenses totaling €10.4 million (2023: €10.7 million) compared to benefit payments of €22.9 million during the fiscal year (2023: €9.1 million). The exchange rate effects, mainly relating to the Swiss franc, US dollar and pound sterling, which had led to an increase in the defined benefit obligation of €6.1 million in the previous year, canceled each other out in fiscal 2024. In 2024, a significant proportion of the pension plans of a subsidiary in the USA were settled by transferring them to an external insurance company. On the one hand, this resulted in a settlement loss of €2.4 million; on the other hand, it also led to a significant reduction in the existing defined benefit obligation in the USA (2024: €13.4 million; 2023: €23.5 million). As in the previous year, the change in interest rates had a significant impact on actuarial gains and losses, which particularly affected the Swiss pension plans. Overall, the defined benefit obligation increased by €1.6 million year on year (2024: €234.4 million; 2023: €232.8 million).

Reconciliation/development of plan assets

The reconciliation of plan assets and asset classes for the 2023 and 2024 fiscal years broke down as follows:

in € millions	2023	2024
1.1.	**154.6**	**170.6**
Interest income (+)	4.9	4.0
Other changes	-0.3	-0.3
Actuarial gains (+)/losses (–)	4.3	5.7
Employer/employee contributions	9.0	8.2
Payments	-7.7	-21.8
Currency translation	5.8	0.0
Fair value of plan assets as of Dec. 31	**170.6**	**166.4**
Cash and cash equivalents	10.3	12.7
Shares	48.9	40.2
Bonds	74.2	72.5
Fixed-interest securities	–	–
Other (real estate, insurance, other)	37.2	41.0
Total [1]	**170.6**	**166.4**
(of which, active market)	(128.7)	(125.4)
(of which, non-active market)	(41.9)	(41.0)

[1] **Breakdown of the data of the active/non-active market:**

	2023		2024	
in € millions	Of which, active market	Of which, non-active market	Of which, active market	Of which, non-active market
Cash and cash equivalents	5.6	4.7	12.7	–
Shares	48.9	–	40.2	–
Bonds	74.2	–	72.5	–
Fixed-interest securities	–	–	–	–
Other (real estate, insurance, other)	–	37.2	–	41.0
Total	**128.7**	**41.9**	**125.4**	**41.0**

Investment and risk strategy

The allocation of plan assets to the various asset classes is determined taking potential returns and risks into account. Ratings and forecasts are used as the basis for selecting high-quality stocks and bonds. An optimal portfolio is achieved by ensuring a good balance of risky and risk-free investments. The company has identified the deterioration of the funded status due to the unfavorable development of plan assets and/or defined benefit obligations as a risk. KUKA monitors its financial assets and defined benefit obligations to identify this risk. In the case of the Swisslog Group pension plans, the plan assets are managed by an independent entity as a rule. It provides a regular report so that by this means risk management is possible.

Maturity profile of the defined benefit pension plans

An overview of the expected benefit payments over the next ten years is presented below:

in € millions	2023	2024
Not later than one year	12.8	14.1
Later than one year and not later than five years	56.1	53.2
Later than five years and not later than ten years	69.6	67.4

24. Other provisions

in € millions	As at Jan. 1, 2024	Exchange rate differences	Change in scope of consolida-tion	Consump-tion	Reversals	Additions	Interest	As at Dec. 31, 2024
Warranty commitments and risks from pending transactions		–	–	–	–	17.9	0.1	18.0
Total non-current	**–**	**–**	**–**	**–**	**–**	**17.9**	**0.1**	**18.0**
Warranty commitments and risks from pending transactions	75.4	0.7	1.5	-37.1	-5.9	56.0	–	90.6
Provisions for restructuring obligations	1.7	–	–	-1.0	-0.7	0.5	–	0.5
Miscellaneous provisions	53.6	0.5	0.2	-30.7	-2.7	40.0	–	60.8
Total current	**130.7**	**1.2**	**1.7**	**-68.8**	**-9.3**	**96.5**	**–**	**152.0**
Total other provisions	**130.7**	**1.2**	**1.7**	**-68.8**	**-9.3**	**114.4**	**0.1**	**170.0**

Provisions for warranty risks increased in 2024 to €59.8 million (2023: €57.6 million). The risks from pending transactions increased from €17.8 million in the previous year to a total of €48.8 million (of which: current €30.8 million, non-current €18.0 million) in the year under review. The increase is related to project deteriorations. Both provisions are reported within provisions for warranty commitments and risks from pending transactions.

As at the end of the fiscal year, provisions for restructuring obligations had decreased from €1.7 million in the previous year to €0.5 million in 2024.

Other provisions include provisions for costs still to be incurred for orders already invoiced (2024: €11.5 million; 2023: €11.3 million) and litigation risks (2024: €5.0 million; 2023: €4.8 million). The increase in litigation risks is due to an increase in pending legal disputes.

The expected remaining term of the other provisions is generally up to one year.

25. Liabilities

Please refer to note 14 for the detailed development of contract liabilities for the year under review and the previous year. Further information on financial liabilities can be found in note 26 and details on other liabilities in note 27.

Trade payables

Trade payables include liabilities to suppliers arising from deliveries received or services used. Supplier invoices that have not yet been received at the time of the financial statements are also reported here. Liabilities increased by €30.2 million from €594.9 million as at December 31, 2023 to €625.1 million as at December 31, 2024.

Reverse factoring agreements are concluded to assist certain KUKA Group suppliers with their liquidity management. Under such an agreement, a bank acquires the rights to selected trade receivables of the supplier. Following this acquisition, however, the terms of the trade payables, including payment terms, remain substantially unchanged. It is therefore appropriate to continue to recognize the corresponding amounts under trade payables in the balance sheet. For the purposes of the cash flow statement, the figures are also reported under operating activities as previously. The reverse factoring agreements were concluded with Deutsche Bank and Citibank.

As at the relevant reporting dates, the carrying amounts of the reverse factoring agreements included in trade payables amounted to:

in € millions	Dec. 31, 2023	Dec. 31, 2024
Reported under trade payables	58.8	37.3
(of which shares already paid to suppliers) [1]	(13.2)	(9.5)

[1] For data protection reasons, not all banks provided complete information.

Income tax provisions

Provisions for current taxes are divided into income tax provisions and other tax provisions. They include provisions for all types of taxes for the current year and previous years for which the company itself is liable for tax. The reduction of €9.4 million in income tax provisions by from €44.7 million as at December 31, 2023 to €35.3 million as at December 31, 2024 results from the revaluation of tax risks, which is expected to result in lower utilization.

Lease liabilities

Lease liabilities are recognized at the present value of the expected lease payments. This takes into account fixed and variable payments linked to an index or interest rate and quasi-fixed payments, residual value guarantees, call option strike prices and prepayment penalties (if early termination is expected). Lease liabilities are measured in subsequent periods using the effective interest method. In this context, interest and redemption payments are treated as separate items. Interest is recognized periodically over the term, irrespective of the actual incidence of payments. Further details on interest payments can be found in note 4. Adjustments due to reassessments of the present value of lease payments or contract modifications are reviewed and made on an ongoing basis, unless the modification must be treated as a separate lease. Such changes to a lease liability also result in an adjustment to the carrying amount of the corresponding right-of-use asset. For further details on right-of-use assets, please refer to note 11.

Lease liabilities amounted to €148.8 million as at December 31, 2024 (December 31, 2023: €139.0 million). Of this amount, €44.7 million (December 31, 2023: €41.4 million) was accounted for by current lease liabilities and €104.1 million (December 31, 2023: €97.6 million) by non-current lease liabilities.

26. Financial liabilities incl. inter-company loan

The existing financial liabilities are mainly inter-company loans and short-term drawings on the working capital line of the syndicated loan agreement.

The current and non-current financial liabilities as at December 31, 2024 and December 31, 2023 are presented below:

Please refer to the management report for information on Group financing.

Syndicated loan for KUKA Aktiengesellschaft
As at the balance sheet date the utilization of the guarantee facility and cash credit line from the syndicated loan agreement of KUKA AG amounted to a total of €360.3 million (2023: €431.3 million).

Guarantee facility lines from banks and surety companies
At the end of the year under review, the company had utilized €77.6 million (2023: €58.5 million).

in € millions	Dec. 31, 2023	Change	Dec. 31, 2024
Non-current financial liabilities including financial liabilities to affiliated companies	**198.4**	**-198.3**	**0.1**
Inter-company loan	198.0	-198.0	0.0
Other	0.4	-0.3	0.1
Current financial liabilities including financial liabilities to affiliated companies	**344.1**	**101.8**	**445.9**
Inter-company loan	90.2	109.3	199.5
Liabilities due to banks	253.9	-7.5	246.4
Total financial liabilities	**542.5**	**-96.5**	**446.0**

27. Other liabilities

The other taxes included in the other current liabilities primarily consist of sales, wage and church tax liabilities. Personnel liabilities are reported within the other liabilities and mainly include obligations arising from vacation entitlements (2024: €27.5 million; 2023: €28.4 million), flex-time credits (2024: €19.8 million; 2023: €21.4 million), variable compensation components (2024: €66.5 million; 2023: €76.3 million) and pre-retirement (“Altersteilzeit”) (2024: €17.1 million; 2023: €13.2 million).

Pre-retirement obligations were reduced by the fair value of the corresponding fund assets (2024: €13.5 million; 2023: €11.6 million). The present value of entitlements from pre-retirement obligations (DBO) before offsetting was €30.6 million (2023: €24.8 million). This item also includes special payments, inventor’s compensation, long-service awards and contributions to the employers’ liability insurance association.

Furthermore, other non-current liabilities also include derivative financial instruments with a negative fair value of €0.8 million in the year under review (2023: €0.3 million). The share of derivative financial instruments with negative fair values in current other liabilities amounted to €8.1 million as at December 31, 2024 (2023: €13.6 million).

The carrying amounts of the other liabilities are presented below:

in € millions	Residual term		Dec. 31, 2023 Total	Residual term		Dec. 31, 2024 Total
	Up to one year	More than one year		Up to one year	More than one year	
(of which, for other taxes)	(69.9)	–	(69.9)	(64.9)	–	(64.9)
(of which, for social security payments)	(8.3)	–	(8.3)	(17.0)	–	(17.0)
(of which, liabilities relating to personnel)	(117.6)	(15.2)	(192.8)	(163.0)	(19.4)	(182.4)
(of which, derivatives with a negative fair value)	(13.6)	(0.3)	(13.9)	(8.1)	(0.8)	(8.9)
(of which, other)	(76.5)	(4.6)	(81.1)	(91.3)	(2.6)	(93.9)
Other liabilities	**345.9**	**20.1**	**366.0**	**344.3**	**22.8**	**367.1**

28. Financial risk management and financial derivatives

a) Principles of risk management

As part of its general business activities, KUKA Group is exposed to various financial risks, in particular from movements in exchange rates and interest rates as well as counterparty risk and liquidity risk. The task of financial risk management is to limit the potentially negative effects of these risks on the financial position.

KUKA uses financial derivatives to hedge currency risks arising from its operating business and financing transactions. Transactions in financial derivatives are entered into solely with reference to and for hedging underlying transactions. Whenever possible, KUKA AG is the central hedging partner of the Group companies, and it in turn hedges the Group's risks by concluding appropriate hedging transactions with financial institutions with an excellent credit rating. Hedges are used by KUKA Group exclusively in the form of forward exchange transactions to secure existing balance sheet items as well as to hedge future payment flows. Effects from derivatives used to hedge operational foreign currency risks are reported under cost of sales, while effects from derivatives used to hedge financing transactions are allocated to the financial result. For further details, please refer to notes 2 and 4. The Management Board is informed on a regular basis of the current risk positions and safeguards.

For further details please refer to the opportunity and risk report.

For the presentation of market risks, IFRS 7 requires sensitivity analyses that show the effects of hypothetical changes of relevant risk variables, such as exchange rates, on profit or loss and shareholders' equity. The periodic effects are determined by relating the hypothetical changes in the risk variables to the balance of financial instruments at the reporting date. It is assumed that the balance at the reporting date is representative for the year as a whole.

b) Currency risk

Risks from exchange rate fluctuations that could affect the Group's cash flow are hedged at the time they arise or become known by concluding derivative financial instruments with banks. Future planned transactions may also be hedged. These hedging activities ensured that KUKA was not exposed to any significant exchange rate risks from its operating and financing activities as at the balance sheet date. Currency translation risks – measurement risks associated with subsidiaries' financial statements in foreign currencies – are generally not hedged, but are continuously monitored.

Currency risk as defined by IFRS 7 arises on account of financial instruments that are denominated in a currency other than the functional currency and are of a monetary nature.

Currency sensitivity analyses are based on the following assumptions:

- Major non-derivative monetary financial instruments (cash and cash equivalents, receivables, liabilities) are either directly denominated in the functional currency or are transferred as far as possible into the functional currency through the use of derivatives.
- Major interest income and interest expense from financial instruments are also either recorded directly in the functional currency or transferred into the functional currency by using derivatives. For this reason, there can be no material effect on the variables considered in this connection.
- Despite their minor effects, primary and derivative instruments were included in the determination of currency sensitivities.

The currency pairs that are material for KUKA were considered when calculating currency sensitivities. This involved applying a hypothetical upward or downward revaluation of the national currency concerned against the relevant foreign currency and presenting the hypothetical impact on earnings.

The basis for the hypothetical impact on earnings as at the reporting date are the exposures for these major currency pairs. These result from the open items of non-derivative monetary financial instruments that were not converted into the respective functional currencies by derivative financial instruments as at the reporting date. As at the balance sheet date, the exposure underlying the calculation of currency sensitivities amounted to €307.2 million (2023: €226.3 million).

in € millions	Dec. 31, 2023	Dec. 31, 2024
EUR/USD		
EUR +10%	4.8	5.7
EUR −10%	-5.9	-6.9
EUR/JPY		
EUR +10%	-3.7	-3.1
EUR −10%	4.6	3.8
EUR/CNY		
EUR +10%	-0.8	3.2
EUR −10%	0.9	-3.9
EUR/HUF		
EUR +10%	-1.0	-1.0
EUR −10%	1.2	1.2
EUR/CHF		
EUR +10%	7.2	9.2
EUR −10%	-8.8	-11.2
EUR/SEK		
EUR +10%	-1.2	-1.4
EUR −10%	1.5	1.7
EUR/NOK		
EUR +10%	0.1	0.8
EUR −10%	-0.2	-1.0
Other currency pairs:		
Base currency +10%	-1.5	-1.5
Base currency −10%	1.9	1.8

Assumptions concerning the future cannot be derived from this presentation of currency effects.

c) Interest rate risk

Risks from interest rate changes at KUKA are essentially the result of short-term investments/borrowings. These are not hedged at the reporting date.

Interest rate risks are presented by way of sensitivity analyses in accordance with IFRS 7. These show the effects of changes in market interest rates on interest payments, interest income and expense, other income components and shareholders' equity.

Interest rate sensitivity analyses are based on the following assumptions:

- Changes in the market interest rates of non-derivative financial instruments with fixed interest rates only affect income if these are measured at their fair value. As such, all financial instruments with fixed interest rates that are carried at amortized cost are not subject to interest rate risk as defined in IFRS 7.
- Changes in market interest rates affect the interest result of non-derivative variable-interest financial instruments, as hedge accounting is not applied.
- An increase in market interest rates by 100 basis points across all currencies would have a positive effect on results of €4.1 million based on positions at December 31, 2024 (2023: +€2.9 million). A decrease in market interest rates by 100 basis points across all currencies would have a negative effect on earnings of -€4.1 million (2023: -€2.9 million). The hypothetical impact on earnings as at the balance sheet date results exclusively from short-term investments of €656.0 million (2023: €540.2 million) and short-term borrowings of €246.4 million (2023: €253.9 million).

d) Credit risk

KUKA Group is exposed to credit risks from its operating activities and certain financing activities. A default can occur if individual business partners do not meet their contractual obligations and KUKA Group thus suffers a financial loss.

At the level of operations, the outstanding debts are continuously monitored in each area locally. There are regular business relations with major customers at multiple KUKA Group companies. The associated credit risks are subject to separate quarterly credit rating monitoring as part of the risk management system at the Group's Management Board level for early detection of an accumulation of individual risks. Added to these measures are comprehensive routine checks implemented at segment level as early as the order initiation process (submission of offers and acceptance of orders) to verify the credit rating of potential business partners. Where necessary, appropriate allowance is made for default risks relating to potentially credit-impaired receivables.

The maximum exposure to credit risk is represented by the carrying amounts of the financial assets that are carried in the balance sheet (including derivatives with positive market values). No agreements reducing the maximum exposure to credit risk had been concluded as of the reporting date.

The following table shows the impairment losses on trade receivables, contract assets, lease receivables, other assets (including securities and loans) and bank balances:

in € millions	Trade receivables – Credit-impaired	Trade receivables – Not credit-impaired	Trade receivables – Total	Contract assets	Lease receivables	Other assets
Impairment losses as of Jan. 1, 2023	**13.2**	**4.7**	**18.0**	**9.6**	**1.2**	**–**
Additions	5.1	0.2	5.3	5.9	13.5	0.1
Consumption, foreign currency effects and change in scope of consolidation	-2.5	–	-2.5	-1.4	-0.1	–
Reversals	-2.2	-0.3	-2.5	-0.4	-0.1	–
Impairment losses as of Dec. 31, 2023 / Jan. 1, 2024	**13.6**	**4.6**	**18.2**	**13.7**	**14.5**	**0.1**
Additions	5.0	0.3	5.3	0.8	0.4	–
Consumption, foreign currency effects and change in scope of consolidation	-2.8	–	-2.8	0.9	-0.7	–
Reversals	-2.3	-0.3	-2.6	-5.1	-0.3	–
Reclassifications	5.0	–	5.0	-5.0	–	–
Impairment losses as of Dec. 31, 2024	**18.5**	**4.6**	**23.1**	**5.3**	**15.3**	**0.1**

The increase in impairment losses on lease receivables in 2023 was mainly due to the recognition of risk provisions for expected losses on receivables in connection with the operator leasing model for Chrysler at KTPO, USA.

e) Liquidity risk

One of KUKA AG's primary tasks is to coordinate and control the Group's financing requirements and to ensure the financial independence of KUKA Group and its payment capability at all times. With this goal in mind, KUKA AG optimizes and coordinates the Group's financing and limits its liquidity risk. The treasury management system employed throughout the Group is used to identify and illustrate these risks. Close support for the Group companies in managing their cash flows also serves to reduce liquidity risk for the Group as a whole.

In order to ensure the payment capability at all times and the financial flexibility of KUKA Group, KUKA AG keeps a liquidity reserve in the form of credit lines and cash funds. For this purpose, KUKA has, among other measures, taken out an inter-company loan, concluded a syndicated facilities agreement with a consortium of banks and arranged for surety companies and banks to commit guarantee facility lines. The funding and guarantee requirements for business operations are ensured to a large extent internally by transferring cash funds (inter-company loans) and providing guarantees from the banks and the Group itself.

The following figures show the commitments for undiscounted cash outflows for the financial instruments subsumed under IFRS 7:

Dec. 31, 2024 in € millions	Cash flows 2025	Cash flows 2026	Cash flows 2027 – 2029	Cash flows 2030 ff.
Financial liabilities	246.4	–	–	–
Accounts payable to affiliated companies	200.8	––	–	–
FX derivatives (gross settlement)	292.7	28.8	15.4	9.2
Trade payables	625.1	–	–	–
Liabilities from leases	46.0	37.8	60.9	27.2
Other liabilities	6.0	–	2.9	–

Dec. 31, 2023 in € millions	Cash flows 2024	Cash flows 2025	Cash flows 2026 – 2028	Cash flows 2029 ff.
Financial liabilities	253.9	–	–	–
Accounts payable to affiliated companies	97.7	200.8	–	–
FX derivatives (gross settlement)	641.5	26.1	2.4	–
Trade payables	594.9	–	–	–
Liabilities from leases	42.2	33.5	60.0	22.4
Other liabilities	3.6	–	4.7	–

All financial instruments are included which were held at the balance sheet dates and for which payments have already been contractually agreed. Foreign currency amounts are expressed at the spot rate on the key date. Financial liabilities repayable at any time are always allocated to the earliest period.

29. Other disclosures on financial instruments

KUKA Group classifies its financial instruments at amortized cost, at fair value through profit or loss and at fair value through other comprehensive income.

Carrying amounts and fair values by measurement categories for 2024

The carrying amounts and the fair values according to IFRS 9 are presented in the following table:

Assets

	Carrying amount as at Dec. 31, 2024	Balance sheet valuation according to IFRS 9			Balance sheet valuation according to IFRS 16	Not within the scope of IFRS 7	Fair value as at Dec. 31, 2024	Assessment hierarchy level
in € millions		At amortized cost	At fair value through other comprehensive income	At fair value through profit or loss				
Financial investments	1.4	–		1.4	–	–	1.4	
of which, participations	(1.4)	(–)	(–)	(1.4)	(–)	(–)	(1.4)	3
Investment property	8.3	–	–	–	–	8.3	10.3	3
Finance lease receivables – non-current	7.8	–	–	–	7.8	–	n/a	
Other receivables and other assets – non-current	7.7	2.9	–	0.4	–	4.4	0.9	
of which, derivatives	(0.4)	(–)	(–)	(0.4)	(–)	(–)	(0.4)	2
of which, deposits	(0.5)	(0.5)	(–)	(–)	(–)	(–)	(0.5)	
of which, others	(6.8)	(2.4)	(–)	(–)	(–)	(4.4)	n/a	
Trade receivables	843.1	834.4	8.8	–	–	–	8.8	2
Finance lease receivables – current	20.6	–	–		20.6	–	n/a[1]	
Other receivables and other assets – current	166.1	62.2	–	5.7	–	98.3	5.6	
of which, derivatives	(5.6)	(–)	(–)	(5.6)	(–)	(–)	(5.6)	2
of which, securities	(34.7)	(34.7)	(–)	(–)	(–)	(–)	n/a[1]	
of which, deposits	(26.6)	(26.6)	(–)	(–)	(–)	(–)	n/a[1]	
of which, others	(99.2)	(0.9)	(–)	(0.1)	(–)	(98.3)	n/a	
Cash and cash equivalents	656.0	656.0	–	–	–	–	n/a	
Total financial instruments (assets)	**1,711.0**	**1,555.5**	**8.8**	**7.5**	**28.4**	**111.0**		

Liabilities

in € millions	Carrying amount as at Dec. 31, 2024	Balance sheet valuation according to IFRS 9			Balance sheet valuation according to IFRS 16	Not within the scope of IFRS 7	Fair value as at Dec. 31, 2024	Assessment hierarchy level
		At amortized cost	At fair value through other comprehensive income	At fair value through profit or loss				
Financial liabilities – non-current	0.1	0.1	–	–	–	–	0.3	3
Finance lease liabilities – non-current	104.1	–	–		104.1	–	n/a²	
Other liabilities – non-current	22.8	2.6	–	0.8	–	19.4	0.8	
of which, derivatives	(0.8)	(–)	(–)	(0.8)	(–)	(–)	(0.8)	2
of which, others	(22.0)	(2.6)	(–)	(–)	(–)	(19.4)	n/a	
Financial liabilities – current	246.4	246.4	–	–	–	–	n/a¹	
Accounts payable to affiliated companies – current	199.6	199.6	–	–	–	–	n/a¹	
Trade payables	625.1	459.2	–	–	–	165.9	n/a¹	
Finance lease liabilities – current	44.7	–	–	–	44.7	–	n/a²	
Other liabilities – current	344.3	6.0	–	8.1	–	330.2	8.1	
of which, derivatives	(8.1)	(–)	(–)	(8.1)	(–)	(–)	(8.1)	2
of which, others	(336.2)	(6.0)	(–)	(–)	(–)	(330.2)	n/a	
Total financial instruments (liabilities)	**1,587.1**	**913,9**	**(–)**	**8.9**	**148.8**	**515.5**		

n/a = no disclosure required, as not in scope of IFRS 7/13

n/a¹ = the carrying amount approximates the fair value

n/a² = waiver of fair value disclosure in accordance with IFRS 7.29(d)

Carrying amounts and fair values by measurement categories for 2023

The carrying amounts and the fair values according to IFRS 9 are presented in the following table:

Assets

in € millions	Carrying amount as at Dec. 31, 2023	Balance sheet valuation according to IFRS 9 – At amortized cost	Balance sheet valuation according to IFRS 9 – At fair value through profit or loss	Balance sheet valuation according to IFRS 16	Not within the scope of IFRS 7	Fair value as at Dec. 31, 2023	Assessment hierarchy level
Financial investments	3.6	–	3.6	–	–	3.6	
of which, participations	(3.6)	(–)	(3.6)	(–)	(–)	(3.6)	3
Investment property	8.4	–	–	–	8.4	10.5	3
Finance lease receivables – non-current	19.5	–	–	19.5	–	n/a	
Other receivables and other assets – non-current	6.4	0.6	0.3	–	5.5	0.9	
of which, derivatives	(0.3)	(–)	(0.3)	(–)	(–)	(0.3)	2
of which, deposits	(0.6)	(0.6)	(–)	(–)	(–)	(0.6)	
of which, others	(5.5)	(–)	(–)	(–)	(5.5)	n/a	
Trade receivables	843.5	697.7	145.8	–	–	145.8	2
Finance lease receivables – current	38.4	–	–	38.4	–	n/a[1]	
Other receivables and other assets – current	184.9	72.6	4.4	–	108.0	4.4	
of which, derivatives	(4.4)	(–)	(4.4)	(–)	(–)	(4.4)	2
of which, securities	(44.9)	(44.9)	(–)	(–)	(–)	n/a[1]	
of which, deposits	(18.5)	(18.5)	(–)	(–)	(–)	n/a[1]	
of which, loans	(8.8)	(8.8)	(–)	(–)	(–)	n/a[1]	
of which, others	(108.3)	(0.4)	(–)	(–)	(108.0)	n/a	
Cash and cash equivalents	531.4	531.4	(–)	(–)	(–)	n/a	
Total financial instruments (assets)	**1,636.1**	**1,302.3**	**154.1**	**57.9**	**121.9**		

Equity and liabilities

in € millions	Carrying amount as at Dec. 31, 2023	Balance sheet valuation according to IFRS 9		Balance sheet valuation according to IFRS 16	Not within the scope of IFRS 7	Fair value as at Dec. 31, 2023	Assessment hierarchy level
		At amortized cost	At fair value through profit or loss				
Financial liabilities – non-current	0.4	0.4	–	–	–	0.3	3
Accounts payable to affiliated companies – non-current	198.0	198.0	–	–	–	189.9	3
Finance lease liabilities – non-current	97.6	–	–	97.6	–	n/a²	
Other liabilities – non-current	20.1	4.6	0.3	–	15.2	0.3	
of which, derivatives	(0.3)	(–)	(0.3)	(–)	(–)	(0.3)	2
of which, others	(19.8)	(4.6)	(–)	(–)	(15.2)	n/a	
Financial liabilities – current	253.9	253.9	–	–	–	n/a¹	
Accounts payable to affiliated companies – current	90.3	90.3	–	–	–	n/a¹	
Trade payables	594.9	445.0	–	–	149.9	n/a¹	
Finance lease liabilities – current	41.4	–	–	41.4	–	n/a²	
Other liabilities – current	345.9	3.6	13.6	–	328.7	13.6	
of which, derivatives	(13.6)	(–)	(13.6)	(–)	(–)	(13.6)	2
of which, others	(332.3)	(3.6)	(–)	(–)	(328.7)	n/a	
Liabilities directly associated with assets held for sale	–	–	–	–	–	n/a¹	
Total financial instruments (liabilities)	**1,642.5**	**995.8**	**13.9**	**139.0**	**493.8**		

n/a = no disclosure required, as not in scope of IFRS 7/13
n/a¹ = the carrying amount approximates the fair value
n/a² = waiver of fair value disclosure in accordance with IFRS 7.29(d)

Fair value is defined as the price that would be paid by independent market participants in an arm's length transaction at the evaluation date if an asset were sold or a liability transferred. In accordance with IFRS 13, assets and liabilities are to be attributed to one of the three levels of the fair value hierarchy. The individual levels of the fair value hierarchy are defined as follows on the basis of the input factors:

Level 1
Level 1 inputs are (unadjusted) quoted prices in active markets for identical assets or liabilities that are accessible to the entity at the measurement date.

Level 2
Level 2 inputs are quoted market prices other than those in level 1 that are either directly or indirectly observable for the asset or liability.

Level 3
Level 3 inputs are inputs that are unobservable for the asset or liability.

As a rule, financial assets have short remaining terms to maturity. The carrying amount approximately corresponds to the fair value. Financial investments, long-term derivatives and investment property are an exception. For financial investments measured at fair value through profit or loss (FVtPL), cost is the best estimate of fair value. These are recognized at fair value as at the balance sheet date. All financial investments are allocated to fair value hierarchy level 3. Shares from equity holdings not traded on the market are assigned to level 3. The fair value of investment property is determined by external, independent and qualified valuation experts.

The financial liabilities recognized at amortized cost using the effective interest method are inter-company loans and short-term drawings on the working capital line of the syndicated loan agreement. All non-current financial liabilities are allocated to fair value hierarchy level 3. They are calculated as a present value by discounting future cash flows using term-specific, risk-adjusted market interest rates. No fair value needs to be determined for the lease liabilities.

The derivative financial instruments recognized at the balance sheet date are forward exchange transactions to hedge exchange rate risks. They are recognized in the balance sheet at fair value, which is determined using standardized actuarial methods based on current market parameters such as exchange rates (mark-to-market method). They are allocated to fair value hierarchy level 2.

No reclassifications between the levels were made either in the year under review or in the previous year.

Gains and losses from financial instruments

Net results and total interest results, broken down by measurement category, are thus represented as follows:

Net gains/losses and total interest results by IFRS 9 measurement categories for the 2024 fiscal year

in € millions	Net income	Total interest income	Total interest expenses
Financial Assets Measured at Amortized Cost (AC)	-31.6	11.8	–
Financial Assets and Liabilities Measured at Fair Value Through Profit and Loss (FVtPL)	5.1	n/a	n/a
Financial Liabilities Measured at Amortized Cost (FLAC)	6.3	–	-9.6
Total	**-20.2**	**11.8**	**-9.6**

Net gains/losses and total interest results by IFRS 9 measurement categories for the 2023 fiscal year

in € millions	Net income	Total interest income	Total interest expenses
Financial Assets Measured at Amortized Cost (AC)	-1.4	9.5	–
Financial Assets and Liabilities Measured at Fair Value Through Profit and Loss (FVtPL)	-6.5	n/a	n/a
Financial Liabilities Measured at Amortized Cost (FLAC)	1.8	–	-11.8
Total	**6.1**	**9.5**	**-11.8**

The net gains and losses in the Amortized Cost (AC) category comprise foreign exchange effects and the results of additions and releases of valuation allowances. Currency effects from financing activities in particular had a significant negative impact on earnings in the fiscal year. Total interest income and expenses include interest income on bank balances, which developed advantageously for KUKA Group in fiscal 2024 compared to fiscal 2023.

The result of the Fair Value through Profit and Loss (FVtPL) category is composed of fair value changes. The fair value changes result, among other things, from changes in interest rates and exchange rates. As in the previous year, the net gains and losses in the Financial Liabilities measured at Amortized Cost (FLAC) category comprise the net profit originating from the release of liabilities.

Across all categories, the net results fell from €6.1 million in fiscal 2023 to -€20.2 million in fiscal 2024.

Total interest expenses mainly relate to interest expenses for banks, which decreased in fiscal 2024.

Offsetting of financial instruments

KUKA Group concludes derivative transactions with banks on the basis of framework agreements. These contain legally enforceable netting agreements. However, these agreements do not meet the criteria for offsetting in the Group balance sheet. The right to offset exists only in the event of future events, such as the default or insolvency of counterparties or the Group.

Offsetting the derivative financial instruments subject to netting agreements would have the following effect on the balance sheet values of the derivatives:

	2023			2024		
in € millions	Balance sheet values	Amounts subject to netting agreements	Net amounts after offsetting	Balance sheet values	Amounts subject to netting agreements	Net amounts after offsetting
Financial assets – derivatives	4.7	-4.7	–	5.9	-4.5	1.5
Financial liabilities – derivatives	13.9	-4.7	9.2	8.9	-4.5	4.4

30. Contingent liabilities and other financial commitments

At the end of the fiscal year, obligations from guarantees amounted to €0.8 million (2023: €0.0 million). Obligations from warranty agreements amounted to €1.6 million in the year under review (2023: €3.4 million), obligations from bank guarantees totaled €9.9 million (2023: €3.1 million) and other contingent liabilities in the current fiscal year remained unchanged from the previous year at €1.5 million. The previous year's figures have been adjusted for better comparability.

in € millions	2023	2024
Purchase commitments	84.0	59.1
Rent/lease liabilities	1.8	2.2
Other financial commitments	4.5	4.0
Total	**90.3**	**65.3**

The decrease in purchase commitments is primarily due to the fulfillment of order obligations for the processing of customer projects. The purchase commitments at the end of 2024 relate to orders for intangible assets, among other things. In the year under review, obligations arising from rental and lease agreements increased to €2.2 million (2023: €1.8 million).

31. Management of capital

The primary objectives of KUKA Group's capital management are to increase shareholder value and to support ongoing business operations by providing adequate financial resources.

To achieve the objectives, it is necessary to have appropriate and sufficient equity (equity ratio) and liquidity (net liquidity/debt). These indicators are shown below:

		2023	2024
Equity	€ millions	1,516.4	1,552.6
/Total equity	€ millions	3,971.7	3,998.1
Equity ratio	**%**	**38.2**	**38.8**
EBIT	€ millions	158.2	76.5
Cash and cash equivalents	€ millions	531.4	656.0
Non-current financial liabilities incl. accounts payable to affiliated companies	€ millions	198.4	0.1
Current financial liabilities incl. accounts payable to affiliated companies	€ millions	344.1	445.9
Net debt/liquidity	**€ millions**	**-11.1**	**210.0**

As a result of the expansion of the balance sheet total and equity, the equity ratio rose from 38.2% at the end of fiscal 2023 to 38.8% at the end of fiscal 2024. The current earnings had a positive impact on equity.

Net debt/liquidity improved significantly from -€11.1 million in 2023 to €210.0 million in 2024. Cash and cash equivalents also increased by €124.6 million to €656.0 million in the year under review.

Notes to the Group cash flow statement

In accordance with IAS 7, KUKA Group presents the development of cash flows in the cash flow statement separately for incoming and outgoing funds from operating, investing and financing activities. The cash flow from operating activities is determined using the indirect method.

Cash and cash equivalents in the cash flow statement include all cash and cash equivalents disclosed in the balance sheet, namely cash on hand, checks and cash with banks provided they are available within three months.

The starting point for determining the cash flow from operating activities is earnings after taxes and after losses from discontinued operations. The changes to the balance sheet items associated with operating activities are adjusted for currency translation effects and changes to the scope of consolidation.

Income taxes include current tax expenses. The change in deferred taxes is included in other non-cash expenses or income.

The payments from grants received related to income, which were previously reported under cash flow from financing activities, have been reported under cash flow from operating activities since this year. By contrast, payments from grants related to assets, which were previously reported under cash flow from operating activities, are now allocated to cash flow from investing activities. The previous year's figures have been adapted accordingly to allow comparison. This change in reporting was made in order to offer a better reflection of the nature of the grants related to income and grants related to assets.

Detailed information can be found in the management report under "Financial position" and in the Group cash flow statement.

Presented below is the reconciliation of the liabilities from financing activities for fiscal years 2024 and 2023:

in € millions	Financial liabilities	Accounts payable to affiliated companies	Lease liabilities	Total
As at Jan. 1, 2023	**277.6**	**294.3**	**123.7**	**695.6**
Changes affecting payments	-23.3	-12.4	-35.3	-71.0
New leases			55.9	55.9
Other changes		6.3	-5.3	1.0
As at Dec. 31, 2023 / Jan. 1, 2024	**254.3**	**288.2**	**139.0**	**681.5**
Changes affecting payments	-7.8	-88.8	-48.3	-144.9
New leases	–	–	47.4	47.4
Other changes	–	0.2	10.7	10.9
As at Dec. 31, 2024	**246.5**	**199.6**	**148.8**	**594.9**

The discrepancy between changes affecting payments and cash flow from financing activities is mainly due to interest payments, payments from grants received and dividend payments. The interest payments reported in the cash flow statement also include payments that do not relate to liabilities from financing activities.

Other notes

Related party disclosures

In accordance with IAS 24, persons or companies that may be influenced by or have influence on the reporting company must be disclosed separately, provided they have not already been included as consolidated companies in the financial statements.

Parties related to KUKA Group include mainly members of the Management and Supervisory Boards, including their close family members, as well as non-consolidated KUKA Group companies in which KUKA Aktiengesellschaft directly or indirectly holds a significant proportion of the voting rights or companies that hold a significant proportion of the voting rights in KUKA Aktiengesellschaft.

Controlled related parties that are not consolidated include:

» IWK Unterstützungseinrichtung GmbH, Karlsruhe
» KUKA Unterstützungskasse GmbH, Augsburg

Related parties that are associates include:

» ME Industrial Simulation Software Corporation, Nagoya, Japan

Related parties over which significant influence is exercised and which are accounted for as other investments include:

» RoboCeption GmbH, Munich, Germany

Direct shareholders in KUKA Aktiengesellschaft – Midea Electrics Netherlands (I) B.V. with a shareholding of 85.7240% and Midea Electrics Netherlands (II) B.V. with a shareholding of 14.2760%, which are wholly owned subsidiaries of Guangdong Midea Electric Company Limited, which in turn is wholly owned by Midea Group Co., Ltd. – are also related parties, as are Mr. Xiangjian He as the ultimate controlling party and his close family members.

The following table shows the receivables from and liabilities to related parties for the 2024 and 2023 fiscal years:

in € millions	Shares of KUKA AG in %	Group receivables from related parties		Group liabilities to related parties	
		Dec. 31, 2023	Dec. 31, 2024	Dec. 31, 2023	Dec. 31, 2024
Midea Group	–	14.9	18.8	311.3	239.2
Other		0.5	0.5	0.1	0.1
Total		**15.4**	**19.3**	**311.4**	**239.3**

The following table shows the goods and services provided to and received from related parties:

in € millions	Shares of KUKA AG in %	Goods and services provided by the Group to related parties		Goods and services provided to the Group by related parties	
		Dec. 31, 2023	Dec. 31, 2024	Dec. 31, 2023	Dec. 31, 2024
Midea Group	–	59.0	47.5	43.4	48.6
Other		0.7	1.7	0.1	1.2
Total		**59.7**	**49.2**	**43.5**	**49.8**

Deliveries and services provided and received break down into the following transaction types:

in € millions	Goods and services provided by the Group to related parties		Goods and services provided to the Group by related parties	
	Dec. 31, 2023	Dec. 31, 2024	Dec. 31, 2023	Dec. 31, 2024
Purchases or sales of finished/unfinished goods	47.7	41.2	33.3	34.3
Services rendered or received	0.7	4.7	3.0	9.1
Service transfers in research and development	9.7	–	0.5	0.3
Transfers under financing agreements	0.1	1.6	8.3	6.1
Other	1.5	1.7	-1.6	–
Total	**59.7**	**49.2**	**43.5**	**49.8**

The supply and service relationships with all related parties are conducted under the “dealing at arm’s length” principle in accordance with usual market practice.

Share-based compensation

A small number of people participate in the employee share program of Midea Group. The share-based payment transactions of KUKA Group, which are settled by equity instruments of Midea Group, comprise the so-called Share Option Incentive Plan and the so-called Restricted Share Plan. These plans are measured at the fair value of the equity instruments at the grant date. The equity instruments are tradable or exercisable if the specified services are rendered in the vesting period or certain performance conditions are met.

Share Option Incentive Plan

The following table shows the development of share options during the year:

	Number of share options in million		Weighted average of exercise prices in €	
	Dec. 31, 2023	Dec. 31, 2024	Dec. 31, 2023	Dec. 31, 2024
Options outstanding at the beginning of the reporting period	4.6	2.4	7.87	7.81
Options granted in the reporting period	–	–	–	–
Options exercised in the reporting period	-0.8	-0.8	5.74	7.57
Options that expired in the reporting period	-0.7	-1.1	9.39	7.20
Changes in the reporting period due to job rotation	-0.7	0.7	7.42	8.59
Options outstanding at the end of the reporting period	**2.4**	**1.2**	**7.65**	**7.46**

The share options outstanding at the end of the year have the following expiration dates and exercise prices:

	Expiration date	Exercise price in €	Number of shares in million	
			Dec. 31, 2023	Dec. 31, 2024
Fifth Share Option Incentive Plan	May 6, 2024	6.29	–	–
Sixth Share Option Incentive Plan	May 29, 2025	5.61	0.1	–
Seventh Share Option Incentive Plan	Jun. 4, 2024	5.50	–	–
Eighth Share Option Incentive Plan	Jun. 3, 2026	9.79	0.8	0.4
Ninth Share Option Incentive Plan	Jun. 7, 2027	6.484	1.5	0.8

The total expense recognized in 2024 from the Share Option Incentive Plan amounted to €0.8 million (2023: €1.5 million).

Restricted Share Incentive Plan

The following table shows the development of restricted share options during the year:

	Number of share options in million		Weighted average of exercise prices in €	
	Dec. 31, 2023	Dec. 31, 2024	Dec. 31, 2023	Dec. 31, 2024
Options outstanding at the beginning of the reporting period	1.4	0.8	3.63	3.65
Options granted in the reporting period	–	–	–	–
Options enabled in the reporting period	-0.3	-0.3	2.38	3.15
Options that expired in the reporting period	-0.4	-0.1	3.79	3.41
Changes in the reporting period due to job rotation	–	–	–	–
Options outstanding at the end of the reporting period	**0.7**	**0.4**	**3.50**	**3.28**

The share options outstanding at the end of the year have the following expiration dates and exercise prices:

	Expiration date	Exercise price in €	Number of shares in million	
			Dec. 31, 2023	Dec. 31, 2024
2019 Restricted Share Incentive Plan	May 29, 2025	2.35	0.1	–
2020 Restricted Share Incentive Plan	Jun. 4, 2024	2.38	–	–
2021 Restricted Share Incentive Plan	Jun. 3, 2026	4.55	0.3	0.1
2022 Restricted Share Incentive Plan	Jun. 7, 2027	3.05	0.4	0.3

The total expense recognized in 2024 from the Restricted Share Plan amounted to €0.6 million (2023: €1.1 million).

Compensation of the active Management Board and Supervisory Board

The total compensation of active members of the Management Board pursuant to section 314 para. 1 no. 6a of the German Commercial Code (HGB) for fiscal 2024 amounted to €1.7 million (2023: €5.9 million). Of this, €1.7 million was attributable to short-term benefits (2023: €4.1 million) and €0.0 million to long-term variable compensation components (2023: €1.8 million). Up until fiscal 2022, the long-term variable compensation was granted annually in the form of the Long-Term Performance Plan (LTPP) with a performance period of four years. At the beginning of each fiscal year, the Management Board members were assigned a target amount determined in their individual contracts for the respective tranche of the LTPP. At the end of the performance period, this target amount is multiplied by the target achievement for the financial performance target “relative earnings per share” (relative EPS). The EPS performance achieved by KUKA is compared with the EPS performance of relevant competitors. Relative EPS performance is measured by means of an annual comparison of KUKA’s percentage EPS development with the percentage EPS development of relevant competitors. The payout amount determined is capped at 200% of the target amount. Payment is made in cash at the end of the performance period.

Since 2023, the company may, at its discretion, allow members of the Management Board to participate in a profit share plan. The company is represented here by the Supervisory Board, which decides on the compensation of the Management Board. Payments are made by the company. In this case, a so-called profit pool is formed for the members of the Management Board, into which 10% of the amount by which the actual EBIT for the fiscal year in question exceeds the planned EBIT is deposited. The prerequisite for a payout from the profit pool is that at least 90% of the free cash flow target is achieved; if the target is achieved by less than 90%, no payout is made from the profit pool. No entitlement was earned for the current fiscal year (2023: € 1.8 million).

As at December 31, 2024, liabilities of €0.9 million were recognized in respect of short-term compensation components (2023: €1.8 million). The entitlement for this was fully earned in the year under review, but the actual payment is measured on the basis of the target achievement determined by the Supervisory Board on the basis of the currently valid compensation system and will be made in 2025.

The compensation of key management personnel of KUKA Group to be disclosed in accordance with IAS 24 includes the compensation of the active Management Board and the Supervisory Board.

The active members of the Management Board were compensated as follows:

in € millions	2023	2024
Short-term benefits (excluding share-based compensation)	4.1	1.7
Long-term benefits	1.5	1.0
Total	**5.6**	**2.7**

There are no post-employment benefits. The disclosure of share-based compensation relates to the expense recognized in the respective fiscal year.

No loans or advances were granted to members of the Management Board in the year under review or in the previous year; moreover, no contingent liabilities were entered into in favor of Management Board members.

The active members of the Supervisory Board were compensated as follows:

in € millions	2023	2024
Total compensation (including attendance fees)	1.1	1.1

The compensation of members of the Supervisory Board comprises an annual fixed compensation. In addition, there is compensation for committee work and an attendance fee. Employee representatives on the Supervisory Board also receive a regular salary from the respective employment relationship, with the amount corresponding to appropriate compensation for the work performed in the Group.

As at the end of the year under review, as in the previous year, no loans or advances were granted to members of the Supervisory Board; no contingent liabilities were entered into in favor of Supervisory Board members.

Compensation of former Management Board members

Apart from a few exceptions, former Management Board members whose terms of office ended no later than 2008 were granted company pension benefits that included old age, professional and employment disability, widows'/widowers' and orphans' pensions. The amount of accruals included for this group of persons in 2024 for current pensions and vested pension benefits totals €9.0 million (2023: €9.5 million). Pensions and surviving dependents' benefits for this group of persons amounted to €0.9 million (2023: €0.9 million).

Events after the balance sheet date

On January 15, 2025, Visual Components Japan K.K., Tokyo, Japan, was founded as a wholly owned subsidiary of Visual Components Oy, Espoo, Finland.

The latest developments in US economic policy have far-reaching consequences for the global economy and require careful planning and strategy adaptations. The introduction of increased tariffs on imports has not only led to transatlantic trade disputes, but also to higher costs, supply chain disruptions and reduced competitiveness. KUKA is closely monitoring the latest events in order to be able to implement the necessary measures early, such as short-term cost reductions, adjustments to the value chains, etc.

Audit fees

The fee for the auditors, PricewaterhouseCoopers GmbH, Wirtschaftsprüfungsgesellschaft, Munich, recognized as an expense in fiscal 2024 totaled €1.0 million (2023: €1.1 million) for services provided in Germany. €1.0 million (2023: €1.0 million) was recognized for financial statement auditing services. No expenses were incurred in the year under review for tax consultancy services (2023: € 0.0 million) or for other services provided by the auditor (2023: € 0.1 million).

€1.5 million (2023: €1.1 million) was recognized as an expense for financial statement auditing services performed for foreign subsidiaries. Expenses of €0.1 million (2023: €0.1 million) were recognized for tax advisory services and €0.0 million (2023: €0.1 million) for other services performed by the auditors.

Information on preparation and release

The Management Board prepared the consolidated financial statements on March 12, 2025 and released them for submission to the Supervisory Board. The Supervisory Board is responsible for examining and approving the consolidated financial statements.

Augsburg, March 12, 2025

KUKA Aktiengesellschaft

The Management Board

Peter Mohnen Alexander Tan

Corporate bodies

Management Board

Name	Year of birth	First appointment	Appointed until	Memberships in statutory supervisory boards and in comparable German and foreign controlling bodies of commercial enterprises As at Dec. 31, 2024
Peter Mohnen CEO	1968	Aug. 1, 2012	Dec. 31, 2025	
Alexander Tan Chief Financial Officer	1970	Jul. 1, 2021	Dec. 31, 2025	

Supervisory Board

Name	Current occupation	Year of birth	First appointment [2]	Appointed until	Memberships in statutory supervisory boards and in comparable German and foreign controlling bodies of commercial enterprises As at Dec. 31, 2024
Dr. Yanmin (Andy) Gu Chairman of the Supervisory Board	Director Vice President Midea Group	1963	Feb. 10, 2017	AGM 2028	**International mandates:** › Beautiland B.V., Amsterdam, Netherlands › Frylands B.V., Amsterdam, Netherlands › South American Holdco III, Amsterdam, Netherlands › South American Holdco II B.V., Amsterdam, Netherlands › Midea Electric Netherlands (I) B.V., Amsterdam, Netherlands › Midea Investment (Asia) Co. Ltd., Hong Kong, China › Guangdong Midea Intelligent Robotics Co. Ltd., Guangdong, China
Armin Kolb [1] Deputy Chairman of the Supervisory Board	Chairman of the Group Works Council of KUKA Aktiengesellschaft Chairman of the Works Council of the KUKA Plants at Augsburg	1963	Jun. 5, 2013	AGM 2028	

Name	Current occupation	Year of birth	First appointment[2]	Appointed until	Memberships in statutory supervisory boards and in comparable German and foreign controlling bodies of commercial enterprises As at Dec. 31, 2024
Larissa Brandis[1]	2nd Deputy Chair of the Works Council of the KUKA Plants at Augsburg Member of the Group Works Council of KUKA Aktiengesellschaft	1985	May 3, 2023	AGM 2028	
Wilfried Eberhardt[1]	Vice President Governmental Affairs KUKA Aktiengesellschaft	1959	May 15, 2008	AGM 2028	
Peter Kippes[1]	Head of Company Policy Department Executive Board of IG Metall	1962	May 3, 2023	Apr. 26, 2024	**German mandate:** › ZF Friedrichshafen AG
Carola Leitmeir[1]	Deputy Chair of the Works Council of the KUKA Plants at Augsburg	1968	Jul. 1, 2009	AGM 2028	
Dr. Myriam Meyer	Managing Director of mmtec	1962	Jun. 6, 2018	AGM 2028	**International mandate:** › Wienerberger AG, Vienna, Austria
Ferdije Rrecaj[1]	2nd authorized representative and Managing Director of IG Metall – Augsburg branch	1976	May 23, 2024	AGM 2028	**German mandate:** › RENK Group AG
Christoph Schell	Chief Commercial Officer Intel Corp.	1971	Jan. 1, 2023	AGM 2028	
Carina Veit[1]	Union Secretary of IG Metall – Regional Management Bavaria	1979	Oct. 18, 2023	AGM 2028	**German mandate:** › Conti Temic microelectronic GmbH
Dr. Chang Wei	Chief Technology Officer of Midea Group Co. Ltd	1963	May 3, 2023	AGM 2028	
Wenxin (Marianna) Zhao	Chief People Officer Midea Group	1982	Jan. 1, 2023	AGM 2028	
Zheng (Lucy) Zhong	VP/CFO of Midea Group Co. Ltd.	1981	Jan. 30, 2025	AGM 2028	
Helmut Zodl	CFO Clarios LLC (since Sept. 1, 2023) CFO GE Healthcare (until Aug. 31, 2023)	1972	Jan. 24, 2020	Dec. 31, 2024	

[1] Employee representative

[2] The specification of first appointment is the date of initial membership of the Supervisory Board, whether by election at an Annual General Meeting, election pursuant to the German Co-Determination Act (MitbestG) or by court appointment.

Schedule of shareholdings of KUKA Aktiengesellschaft

As at Dec. 31, 2024

	Name and registered office of the company	Currency	Method of consolidation	Share of equity in %
Germany				
1	Bopp & Reuther Anlagen-Verwaltungsgesellschaft mbH, Augsburg, Germany	EUR	k	100
2	Device Insight GmbH, Munich, Germany [1]	EUR	k	100
3	KUKA Assembly & Test GmbH, Bremen, Germany [1]	EUR	k	100
4	KUKA Deutschland GmbH, Augsburg, Germany [1]	EUR	k	100
5	KUKA Real Estate GmbH & Co. KG, Augsburg, Germany [1]	EUR	k	100
6	KUKA Real Estate Management GmbH, Augsburg, Germany	EUR	k	100
7	KUKA Systems GmbH, Augsburg, Germany [1]	EUR	k	100
8	Swisslog (Deutschland) GmbH, Dortmund, Germany	EUR	k	100
9	Swisslog Augsburg GmbH, Westerstede, Germany	EUR	k	100
10	Swisslog GmbH, Dortmund, Germany [1]	EUR	k	100
11	Swisslog Healthcare GmbH, Westerstede, Germany	EUR	k	100
12	Visual Components GmbH, Munich, Germany	EUR	k	100
13	WR Vermögensverwaltungs GmbH, Augsburg, Germany	EUR	k	100
14	IWK Unterstützungseinrichtung GmbH, Karlsruhe, Germany	EUR	nk	100
15	KUKA Unterstützungskasse GmbH, Augsburg, Germany	EUR	nk	100
Other Europe				
16	Alema Automation SAS, Le Haillan, Frankreich	EUR	k	100
17	KUKA Automation ČR s.r.o. i.L., Chomutov, Czech Republic	CZK	k	100
18	KUKA Automatisering + Robots N.V., Houthalen, Belgium	EUR	k	100

	Name and registered office of the company	Currency	Method of consolidation	Share of equity in %
19	KUKA AUTOMATISME + ROBOTIQUE S.A.S., Villebon-sur-Yvette, France	EUR	k	100
20	KUKA Automatizare Romania S.r.l., Sibiu, Romania	RON	k	100
21	KUKA Business Service Kft., Taksony, Hungary	EUR	k	100
22	KUKA CEE GmbH, Steyregg, Austria	EUR	k	100
23	KUKA Hungaria Kft., Taksony, Hungary	EUR	k	100
24	KUKA Iberia, S.A.U., Vilanova i la Geltrú, Spain	EUR	k	100
25	KUKA Nordic AB, Västra Frölunda, Sweden	SEK	k	100
26	KUKA Polska sp. z o.o., Tychy, Poland	EUR	k	100
27	KUKA Roboter Italia S.p.A., Grugliasco, Italy	EUR	k	100
28	KUKA Robotics Czech s.r.o., Zdiby, Czech Republic	EUR	k	100
29	KUKA Robotics d.o.o. Beograd, Belgrade, Serbia	EUR	k	100
30	KUKA Robotics Hungary Kft., Taksony, Hungary	EUR	k	100
31	KUKA Robotics Ireland Ltd., Dundalk, Ireland	GBP	k	100
32	KUKA Robotics Romania S.R.L., Dumbrăvița, Romania	EUR	k	100
33	KUKA Robotics Slovakia s.r.o., Bratislava, Slovakia	EUR	k	100
34	KUKA Robotics UK Limited, Wednesbury, UK	GBP	k	100
35	KUKA Slovakia s.r.o., Dubnica nad Váhom, Slovakia	EUR	k	100
36	KUKA Systems France S.A., Montigny, France	EUR	k	99.996
37	KUKA Systems UK Limited, Halesowen, UK	GBP	k	100
38	KUKA TR Robot Teknolojileri Sanayi Ticaret A. Ş., Istanbul, Turkey	EUR	k	100
39	Reis Espana S.L. i.L., Esplugues de Llobregat (Barcelona), Spain	EUR	k	100
40	Swisslog (UK) Ltd., Redditch, UK	GBP	k	100
41	Swisslog A/S, Herlev, Denmark	DKK	k	100
42	Swisslog AB, Partille, Sweden	SEK	k	100
43	Swisslog AG, Buchs, AG, Switzerland	CHF	k	100

Name and registered office of the company		Currency	Method of consolidation	Share of equity in %
44	Swisslog AS, Oslo, Norway	NOK	k	100
45	Swisslog B.V., Culemborg, Netherlands	EUR	k	100
46	Swisslog France SAS, Suresnes, France	EUR	k	100
47	Swisslog France SAS, Lyon, France[3]	EUR	k	100
48	Swisslog Healthcare AG, Buchs, AG, Switzerland	CHF	k	100
49	Swisslog Healthcare Holding AG, Buchs, AG, Switzerland	CHF	k	100
50	Swisslog Healthcare Italy SpA, Cuneo, Italy	EUR	k	100
51	Swisslog Holding AG, Buchs, AG, Switzerland	CHF	k	100
52	Swisslog Italia S.r.l., Milan, Maranello, Italy	EUR	k	100
53	Swisslog Lithuania UAB, Vilnius, Lithuania	EUR	k	100
54	Swisslog N.V., Edegem, Belgium	EUR	k	100
55	Swisslog Oy, Jyväskylä, Finland	EUR	k	100
56	Swisslog Technology Center Austria GmbH, Eberstallzell, Austria	EUR	k	100
57	Swisslog Technology Center Sweden AB, Boxholm, Sweden	SEK	k	100
58	Visual Components Oy, Espoo, Finland	EUR	k	100
North America				
59	KUKA Assembly and Test Corporation, Saginaw, Michigan, USA	USD	k	100
60	KUKA de Mexico S. de R.L.de C.V., Mexico City, Mexico	MXN	k	100
61	KUKA Manufactura S. de R.L.de C.V., Toluca, Mexico	MXN	k	100
62	KUKA Robotics Canada Ltd., Mississauga, Canada	CAD	k	100
63	KUKA Robotics Corp., Shelby Township, Michigan, USA	USD	k	100
64	KUKA Systems de Mexico S. de R.L. de C.V., Toluca, Mexico	MXN	k	100
65	KUKA Systems North America LLC, Sterling Heights, Michigan, USA	USD	k	100
66	KUKA Toledo Production Operations LLC, Toledo, Ohio[2], USA	USD	k	100
67	KUKA U.S. Holdings Company LLC, Sterling Heights, Michigan, USA	USD	k	100

Name and registered office of the company		Currency	Method of consolidation	Share of equity in %
68	Swisslog Logistics Inc., Newport News, USA	USD	k	100
69	Swisslog USA Inc., Dover, Delaware, USA	USD	k	100
70	Translogic Corp., Dover, Delaware, USA	USD	k	100
71	Translogic Ltd. (Canada), Mississauga, Ontario, Canada	CAD	k	100
72	Visual Components North America Corporation, Lake Orion, Michigan, USA	USD	k	100
Latin America				
73	KUKA Roboter do Brasil Ltda., São Bernardo do Campo, São Paulo, Brazil	BRL	k	100
74	KUKA Systems do Brasil Ltda., Diadema, Brazil	BRL	k	100
Asia/Australia				
75	KUKA (Thailand) Co., Ltd., Bangkok, Thailand	THB	k	100
76	KUKA Automation Equipment (Shanghai) Co., Ltd., Shanghai, China	CNY	k	100
77	KUKA Automation Taiwan Ltd., Taipei, Taiwan	TWD	k	99.998
78	KUKA India Pvt. Ltd., Haryana, India	INR	k	100
79	KUKA Industries Automation (China) Co., Ltd., Kunshan, China	CNY	k	100
80	KUKA Industries Singapore Pte. Ltd., Singapore, Singapore	SGD	k	100
81	KUKA Japan K.K., Yokohama, Japan	JPY	k	100
82	KUKA Robot Automation Malaysia Sdn BhD, Puchong, Selangor, Malaysia	MYR	k	100
83	KUKA Robotics Australia Pty. Ltd., Port Melbourne, Australia	AUD	k	100
84	KUKA Robotics China Co. Ltd.[4], Shanghai, China	CNY	k	50
85	KUKA Robotics Guangdong Co., Ltd.[4], Foshan, Shunde, China	CNY	k	50
86	KUKA Robotics Korea Co. Ltd., Ansan, South Korea	KRW	k	100
87	KUKA Robotics Manufacturing China Co. Ltd.[4], Shanghai, China	CNY	k	50
88	KUKA Systems (China) Co. Ltd., Shanghai, China	CNY	k	100
89	KUKA Systems (India) Pvt. Ltd., Maharashtra, Pune, India	INR	k	100
90	KUKA Vietnam Co., Ltd., Hanoi, Vietnam	VND	k	100

Name and registered office of the company		Currency	Method of consolidation	Share of equity in %
91	PT Swisslog Logistics Automation, Karet/Setiabudi/DKI Jakarta, Indonesia	IDR	k	100
92	Swisslog Asia Ltd., Hong Kong, China	HKD	k	100
93	Swisslog Australia Pty Ltd., Sydney, Australia	AUD	k	100
94	Swisslog Healthcare Asia Pacific Pte. Ltd., Singapore, Singapore	SGD	k	100
95	Swisslog Healthcare Korea Co., Ltd., Bucheon si, Gyeonggi-do, South Korea	KRW	k	100
96	Swisslog Healthcare Shanghai Co., Ltd.[4], Shanghai, China	CNY	k	50
97	Swisslog Healthcare Trading MEA LLC, Emirate of Dubai, United Arab Emirates	AED	k	100
98	Swisslog Malaysia Sdn Bhd, Selangor, Malaysia	MYR	k	100
99	Swisslog Middle East LLC[4], Dubai, United Arab Emirates	AED	k	49
100	Swisslog Singapore Pte Ltd., Singapore, Singapore	SGD	k	100
101	Guangdong Swisslog Technology Co., Ltd.[4], Shunde, China	CNY	k	50
102	ME Industrial Simulation Software Corporation, Nagoya, Japan	JPY	at	30
103	Shanghai Swisslog Technology Co., Ltd.[4], Shanghai, China	CNY	k	50

[1] Companies that have made use of the exemption pursuant to section 264 para. 3 or section 264b of the German Commercial Code (HGB)

[2] Principal place of business

[3] Company in pre-formation status

[4] Controlling influence due to rights to appoint, transfer or dismiss members of management in key positions

Method of consolidation

k Fully consolidated companies

nk Non-consolidated companies

at Financial asset accounted for by the equity method

Independent auditor’s report

An die KUKA Aktiengesellschaft, Augsburg

Audit Opinions

We have audited the consolidated financial statements of KUKA Aktiengesellschaft, Augsburg, and its subsidiaries (the Group), which comprise the consolidated statement of financial position as at December 31, 2024, the consolidated statement of comprehensive income, the consolidated statement of profit or loss, the consolidated statement of changes in equity and the consolidated statement of cash flows for the financial year from January 1 to December 31, 2024, and notes to the consolidated financial statements, including a summary of significant accounting policies. In addition, we have audited the group management report of KUKA Aktiengesellschaft, which is combined with the management report of the company, for the financial year from January 1 to December 31, 2024

In our opinion, based on the of our audit

- the accompanying consolidated financial statements comply, in all material respects, with the IFRS Accounting Standards issued by the International Accounting Standards Board (IASB) (hereinafter referred to as “IFRS Accounting Standards”) as adopted by the EU and the additional requirements of German commercial law pursuant to Section 315e (1) HGB and, in compliance with these requirements, give a true and fair view of the assets, liabilities and financial position of the Group as at December 31, 2024 and of its financial performance for the financial year from January 1 to December 31, 2024, and
- the accompanying Group management report as a whole provides a suitable 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 suitably presents the opportunities and risks of future development.

Pursuant to § 322 Abs. 3 Satz 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 audit judgements

We conducted our audit of the consolidated financial statements and of the group management report in accordance with § 317 HGB and German generally accepted standards for the audit of financial statements promulgated by the Institut der Wirtschaftsprüfer [Institute of Public Auditors in Germany] (IDW). We conducted our audit of the consolidated financial statements in accordance with International Standards on Auditing (ISA). Our responsibilities under those provisions, principles and standards are further described in the “Auditor’s responsibilities for the audit of the consolidated financial statements and the Group management report” section of our auditor’s report. We are independent of the Group companies in accordance with the requirements of German commercial and professional law, and we have fulfilled our other German professional responsibilities in accordance with these requirements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions on the consolidated financial statements and on the group management report.

Other information

The legal representatives are responsible for the other information.

The other information includes

- the declaration on corporate governance in accordance with Section 289f (4) HGB (disclosures on the proportion of women) obtained by us prior to the date of this auditor's report
- all other parts of the annual report – excluding cross-references to external information – obtained by us prior to the date of this auditor's report, with the exception of the audited consolidated financial statements, the audited group management report and 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 referred to above and, in doing so, consider whether the other information

- are materially inconsistent with the consolidated financial statements, with the group management report information audited for content or our knowledge obtained in the audit, or
- otherwise appear to be materially misstated.

If, based on the work we have performed on the other information obtained prior to the date of this auditor's report, 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 context.

Responsibility of the legal representatives and the Supervisory Board for the consolidated financial statements and the Group management report

Management is 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 Section 315e (1) HGB and that the consolidated financial statements, in compliance with these requirements, give a true and fair view of the assets, liabilities, financial position and financial performance of the Group. Furthermore, management is 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 (i.e. accounting fraud or error) or error.

In preparing the consolidated financial statements, the legal representatives are responsible for assessing the Group's ability to continue as a going concern. Furthermore, they are responsible 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, management is 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, management is 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 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 section 317 HGB and German generally accepted standards for the audit of financial statements promulgated by the Institut der Wirtschaftsprüfer (IDW) and in supplementary compliance with ISA 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 the Group management report.

During the audit, we exercise professional judgement and maintain professional scepticism. In addition

- 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 the risk of not detecting a material misstatement resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- an understanding of internal control relevant to the audit of the consolidated financial statements and of arrangements and measures relevant to the audit of the 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 the Group's internal control or on the effectiveness of these arrangements and measures.
- Evaluate the appropriateness of accounting policies used by the executive directors and the reasonableness of accounting estimates and related disclosures made by the executive directors.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in the auditor's report to the related disclosures in the consolidated financial statements and in the group management report or, if such disclosures are inadequate, to modify our respective audit opinions. We draw our conclusions on the basis of 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 true and fair view of the assets, liabilities, financial position and financial performance of the Group in compliance with IFRS Accounting Standards as adopted by the EU and the additional requirements of German commercial law pursuant to Section 315e (1) HGB.
- We plan and perform the audit of the consolidated financial statements to obtain sufficient appropriate audit evidence regarding the financial information of the entities or business units 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 review of the audit activities performed for the purpose of the audit of the consolidated financial statements. We bear sole responsibility 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 legal representatives in the group management report. On the basis of sufficient appropriate audit evidence we evaluate, in particular, the significant assumptions used by management 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 forward-looking statements or on the underlying assumptions. There is a significant unavoidable risk that future events will differ materially from the forward-looking statements.

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.

Munich, 12 March 2025

PricewaterhouseCoopers GmbH
Wirtschaftsprüfungsgesellschaft

(sgd. Jürgen Schumann)	(sgd. ppa. Stefan Postenrieder)
Wirtschaftsprüfer	Wirtschaftsprüfer
(German Public Auditor)	(German Public Auditor)

Glossary

AC (At Amortized Cost)
Measurement at amortized cost

AMR
Autonomous Mobile Robots

At equity
Method of accounting for investments in and business relationships with associated companies or joint ventures in the financial statements

CAGR
CAGR is the acronym for Compound Annual Growth Rate, i.e. the average annual growth rate of a key performance indicator over a specified period.

Cash earnings
Cash earnings are a measurement for the inflow or outflow of cash from the operating profits (EBIT). They are the resulting balance from operating profits, interest, taxes, depreciation as well as other non-payment-related expenses and income.

CbCR
Country-by-country reporting contains certain key figures such as tax payments, current tax expense, income and number of employees. It is prepared annually in aggregated form per country and sent to the tax authorities of the country in which the ultimate parent company is domiciled.

Derivatives
Financial instruments whose value is largely derived from a specified price and the price fluctuations/expectations of an underlying base value, e.g. exchange rates.

Employees
Figures for employees in the management report are based on the full-time equivalent (FTE).

Exposure
A key figure used to assess risk. This key figure includes all incoming payments in a 90-day period prior to the record date of the down payments, payments based on percentage of completion or compensation after acceptance of the work carried out. In addition, the key figure also comprises all customer payments made within 90 days and which have not yet been supplied with deliveries/services including the sum of unpaid invoices following delivery or service supplied to the customer, the POC receivables and any purchase commitments.

FLAC (Financial Liabilities Measured at Amortized Cost)
Financial liabilities measured at amortized cost

FVtPL (Fair Value through Profit and Loss)
Financial instruments measured at fair value through profit or loss

FVOCI (Fair Value through Other Comprehensive Income)
Financial instruments measured at fair value through other comprehensive income

General industry
General industrial markets not including the automotive industry

Net liquidity/Net debt
Net liquidity/net debt is a financial control parameter consisting of cash, cash equivalents and securities minus current and non-current financial liabilities.

Purchase commitments
Payment obligation from purchases

Rating
Assessment of a company's creditworthiness (solvency) determined by a rating agency based on analyses of the company. The individual rating agencies use different assessment levels.

SCARA
Selective Compliance Articulated Robot Arm

Trade working capital
Trade working capital is defined as current assets minus current liabilities directly associated with everyday business operations; that is, inventories (minus advance payments) plus trade receivables, contract assets and receivables for manufacturing orders minus liabilities for trade receivables, contract liabilities and manufacturing orders.

Working capital
Working capital consists of the inventories, trade receivables, other receivables and assets, and the balance of receivables from and payables to affiliated companies, as far as these are not allocated to financial transactions, minus other provisions, trade payables, other payables with the exception of liabilities similar to bonds and deferred income.

This Annual Report is available in German and English on KUKA Aktiengesellschaft's website. The German version is legally binding in cases of doubt. The report contains forward-looking statements on expected developments. These statements are based on current expectations and assessments and are naturally subject to risks and uncertainties. Actual results may differ from these statements. The key performance indicators contained in the annual report have been rounded in accordance with standard commercial practice. In individual cases, it is therefore possible that figures in this report do not add up exactly to the total stated and that percentages do not precisely correspond to the values indicated.

Contact and imprint

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