Interim Report
January 1 to June 30, 2024

KNORR-BREMSE

Half-year financial report

JANUARY 1 TO JUNE 30, 2024
KNORR-BREMSE AG

Knorr-Bremse Group Key Indicators

		1st half of 2024	1st half of 2023
Revenues	€ million	3,987.1	3,917.5
EBIT	€ million	475.5	399.3
EBIT margin	%	11.9	10.2
Operating EBIT	€ million	489.7	415.1
Operating EBIT margin	%	12.3	10.6
EBT	€ million	412.2	376.8
EBT margin	%	10.3	9.6
Net income	€ million	312.8	261.1
Return on sales after taxes	%	7.8	6.7
Earnings per share*	€	1.85	1.55
Order intake	€ million	4,239.0	4,235.9
Order book (June 30)	€ million	6,847.9	7,122.0
Free cash flow	€ million	63.8	(165.2)
Cash flow from operating activities	€ million	170.7	(31.7)
Capital expenditure	€ million	136.1	139.4
Capital expenditure as % of revenues	%	3.4	3.6
R & D costs	€ million	286.1	254.3
R & D as % of revenues	%	7.2	6.5

		June 30, 2024	December 31, 2023
Total assets	€ million	8,192.7	8,248.6
Equity	€ million	2,955.4	2,903.5
Equity ratio	%	36.1	35.2
ROCE (annualized)**	%	20.2	19.5
Net working capital	Days' sales	69.8	51.4

* The comparison information was adjusted in connection with the correction of the Cojali purchase price allocation in the 2023 fiscal year (see 2023 Annual Report, Notes to the Consolidated Financial Statements, section C.3.). In this context, € 6.9 million were reclassified from the profit (loss) attributable to non-controlling interests to the profit (loss) attributable to the shareholders of Knorr-Bremse AG.

** Since 2024, ROCE has been calculated as a ratio of operating EBIT (previously EBIT) to capital employed; the comparable value based on operating EBIT as of the financial year 2023, would be 20.0%.

First Half of 2024

- Order intake of € 4,239.0 million stable at the previous year's level (€ 4,235.9 Mio.) thanks to solid demand in the rail vehicle business and despite a moderate decline in the commercial vehicle business
- Order book of € 6,847.9 million remains at a high level; the decline of € 274.1 million includes the disposal of the € 599.8 million order book of the deconsolidated Kiepe-Group
- Revenues of € 3,987.1 million slightly up on the previous year (1.8%); rail business increases by 9.2% to € 1,980.9 million while commercial vehicle business declines by 4.6% to € 2,007.3 million
- Aftermarket revenues up a moderate 7.9% year over year; share of aftermarket revenues in total Group revenues grows from 39.3% to 41.7%
- Profitability: operating EBIT of € 489.7 million up a significant 18.0% on the previous year, resulting in a significantly improved operating EBIT margin of 12.3% (previous year: 10.6%)
- Free cash flow of € 63.8 million significantly greater than the previous year (€ -165.2 million), for reasons including higher earnings contributions and compared with the first half of 2023, a slower buildup of net working capital
- R & D ratio of 7.2% of revenues (previous year: 6.5%) resulting from continued investment in strategic and future-oriented projects for innovation and technology
- Full-year guidance for 2024 raised; this guidance does not take into account the acquisition of the rail signaling technology business of Alstom in North America, which has yet to be completed.
  - Revenue: € 7,700 million to € 8,000 million (2023: € 7,926 million)
  - Operating EBIT margin: 11.5% to 13,0%, previously 11,5% to 12,5% (2023: 11.3%)
  - Free cash flow: € 550 million to € 650 million (2023: € 552 million)

Interim Group Management Report

BUSINESS REPORT

General Economic and Industry-Related Conditions

Economic Activity and Industry Environment

Global economy

Global activity and world trade firmed up at the turn of the year, with Asia's emerging market economies remaining the main engine for the global economy owing to their strong growth. In advanced economies in particular, the differences in economic momentum that were distinct in the previous year are becoming more aligned. While the United States shows increasing signs of cooling after a strong 2023, the euro area, meanwhile, is poised to pick up after a nearly flat performance last year. Services price inflation is holding up progress on disinflation, which is complicating monetary policy normalization. (Source: IMF, July 2024)

Rail vehicle market

The development of the market for rail vehicles during the first half of 2024 performed in line with the expectations that were communicated in the combined management report for the 2023 fiscal year. The rail vehicle market remains a growth market, supported by public and private investment programs.

Commercial vehicle market

Based on the most recent assessment for 2024, the global market for commercial vehicles will shrink year over year. The negative momentum comes from Europe as well as North America. This is reflected in the full-year market forecast for 2024.

Corporate Management Indicators

The most significant financial key performance indicators at Knorr-Bremse are revenues, operating EBIT, operating EBIT margin, and free cash flow. Unless otherwise indicated, all figures in the interim Group management report are commercially rounded. For this reason, rounding differences may occur in absolute values or percentage data in individual cases.

MANAGEMENT INDICATORS

	1st half of 2024	1st half of 2023
Revenues (€ million)	3,987.1	3,917.5
EBIT (€ million)	475.5	399.3
EBIT margin (as % of revenues)	11.9	10.2
Operating EBIT (€ million)	489.7	415.1
Operating EBIT margin (as % of revenues)	12.3	10.6
Free cash flow (in € million)	63.8	(165.2)
ROCE annualized (%)*	20.2	16.6

* The comparison information was adjusted in connection with the correction of the Cojali purchase price allocation in the 2023 fiscal year (see 2023 Annual Report, Notes to the Consolidated Financial Statements, section C.3.). In this context, € 6,9 million were reclassified from the profit (loss) attributable to non-controlling interests to the profit (loss) attributable to the shareholders of Knorr-Bremse AG. In addition, since 2024, ROCE has been calculated as the ratio of operating EBIT (previously EBIT) to capital employed; the comparable value based on operating EBIT for the first half of 2023 would be 17.3%.

DIVISIONAL REVENUES AND (OPERATING) EBIT MARGIN

	1st half of 2024	1st half of 2023
Rail Vehicle Systems		
Revenues (€ million)	1,980.9	1,813.5
EBIT margin (as % of revenues)	15.3	13.8
Operating EBIT margin (as % of revenues)	15.3	14.0
Commercial Vehicle Systems		
Revenues (€ million)	2,007.3	2,105.1
EBIT margin (as % of revenues)	10.4	8.5
Operating EBIT margin (as % of revenues)	11.1	9.2

Annualized return on capital employed (ROCE) has been calculated as a ratio of operating EBIT (previously EBIT) to capital employed since 2024. ROCE (annualized as a percentage) measures the gains on capital that is used, and is calculated for the first half of 2024 as follows:

(Operating EBIT × 2 / capital employed) × 100.

The further definitions of the key figures in this report have not changed since the 2023 combined management report.

Significant Events in and after the Reporting Period

The significant events after the reporting period can be found in the notes to the interim condensed financial statements. Material changes in related parties are explained in the “*Related party disclosures*” section. Significant events after the reporting date can be found in the “*Events after the reporting date*” section.

Special Events during the Reporting Period:

Acquisition of rail signaling technology business from Alstom Signaling North America

Knorr-Bremse signed a purchase agreement for the acquisition of the rail signaling technology business of Alstom Signaling North America in April 2024. All antitrust approvals and other government clearances for the acquisition of the rail signaling technology business from Alstom Signaling North America had been given at the time the interim financial statements were prepared. The transaction is expected to close fully in late August 2024. The agreed purchase price is approximately € 630 million.

Sale of the Kiepe-Group

The disposal of the Kiepe-Group closed in late January 2024. The Kiepe-Group comprises Kiepe Electric GmbH, based in Düsseldorf, Germany, and the subsidiaries Kiepe Electric Schweiz AG, based in Niederbuchsiten, Switzerland; Kiepe Electric S.r.l., based in Cernusco sul Navigilio, Italy; Kiepe Electric Corporation, based in Vancouver, Canada; Kiepe Electric LLC., based in Alpharetta, USA; and Heiterblick Projektgesellschaft mbH, based in Leipzig, Germany. Knorr-Bremse has disposed of an 85% interest in Kiepe Electric GmbH. The buyer of the Kiepe-Group is Heramba GmbH, Düsseldorf, Germany, for Kiepe Electric GmbH, Düsseldorf, and Heramba Holdings, Inc., Newark, USA, for Kiepe Electric LLC., Alpharetta, USA. Further information can be found in chapter 2 of the notes to the interim consolidated financial statements.

Disposal of the Safety Direct business in the USA

In the first quarter of 2024, Knorr-Bremse disposed of the Safety Direct business of Bendix Commercial Vehicle Systems LLC, Avon, Ohio, USA – which had been recognized as assets held for sale and corresponding liabilities as of December 31, 2023 – to RM Acquisition, LLC and US Fleet Holdco, Inc. Further information can be found in chapter 3 of the notes to the interim consolidated financial statements.

Financial Performance

GROUP KEY INDICATORS

in € million	1st half of 2024	1st half of 2023
Order intake	4,239.0	4,235.9
Order book (June 30)	6,847.9	7,122.0
Revenues	3,987.1	3,917.5
EBIT	475.5	399.3
EBIT margin (as % of revenues)	11.9	10.2
Operating EBIT	489.7	415.1
Operating EBIT margin (as % of revenues)	12.3	10.6
Net income	312.8	261.1
Capital expenditure (before IFRS 16 and acquisitions)	136.1	139.4
R & D costs	286.1	254.3

The Group's order intake[1] of € 4,239.0 million in the first half of 2024 (previous year: 4,235.9 million) are at the previous year's level. The increased demand in the rail vehicle business was more than able to offset the shrinking commercial vehicle segments order intake. The robust growth in the order intake for rail vehicle business was attributable to the Europe and Asia regions in particular. In the commercial vehicle segment, it was mainly Europe and China that saw declining order intake after a strong first half in the previous year. The positive order numbers resulted in a continued large Group order book[1] of € 6,847.9 million as at June 30, 2024, which was therefore € 325.7 million more than the previous year's order book of € 6,522.2 million after adjustment for the Kiepe-Group. The book-to-bill ratio[1], showing the ratio of order intakes to sales, ran at 1.06 in the first half of 2024 (previous year: 1.08).

Consolidated revenues in the first half of the fiscal year came to € 3,987.1 million, a slight increase of 1.8% year over year. After adjusting for currency differences (at actual rates in 2023), revenues were up 2.9% compared to the previous year. The consolidated revenues are based on increasing revenues of the Rail Vehicle Systems segment, which offset the reduced revenues of the Commercial Vehicle Systems segment.

The share of aftermarket revenues[1] in the total revenues of the Knorr-Bremse Group expanded further from 39.3% to 41.7% as a result of moderate 7.9% growth in the aftermarket business, with revenues in the OE business[1] falling slightly by 2.2%.

Regional revenues developed as follows:

CONSOLIDATED REVENUES BY GROUP COMPANY LOCATION

in € million	1st half of 2024	%	1st half of 2023	%
Europe/Africa	1,956.8	49.1	1,942.3	49.6
North America	976.1	24.5	1,000.9	25.6
South America	88.8	2.2	71.7	1.8
Asia-Pacific	965.4	24.2	902.6	23.0
	3,987.1	**100.0**	**3,917.5**	**100.0**

The cost of materials, at € 1,972.9 million, was a slight 2.0% below the previous year's level (€ 2,014.0 million). Due to an increase of revenue in the Rail Vehicle Systems segment and a simultaneous decrease of revenue in the Commercial Vehicle Systems segment, the material cost ratio reduced significantly year over year to 49.5% (previous year: 51.4%) because of the lower material cost ratio in the Rail Vehicle Systems segment. Personnel costs saw a moderate increase of € 51.8 million to € 1,038.4 million (previous year: € 986.6 million), which was due to factors such as higher wage and salary deals after the first half of 2023. The personnel costs ratio, at 26.0% of revenues, also rose moderately by 80 base points from the same period of the previous year (25.2%). The balance of other operating income and expenses decreased slightly by € 8.4 million to € -419.8 million (previous year: € -411.4 million).

Operating EBIT in the first half of 2024 was € 489.7 million and therefore increased by a significant 18.0% from the comparable period of the previous year (€ 415.1 million). The operating EBIT margin stood at 12.3%, also a significant increase on the same

[1] None of the disclosures of order intake, order books, book-to-bill ratio, and separation of OE and aftermarket revenues in this report are management report disclosures, and they are not subject of the review by the auditor KPMG.

period of the previous year (10.6%). To present operating EBIT, the recognized EBIT of € 475.5 million was adjusted mainly for € 11.9 million of expenditure in connection with M&A activities in the Commercial Vehicle Systems division. In the first half of the previous year, the recognized EBIT of € 399.3 million was adjusted mainly for expected expenses of € 14.1 million on voluntary non-warranty remedies in Asia in the Rail Vehicle Systems division as well as income of € 4.1 million in connection with the withdrawal from the Russian market (€ 8.0 million of which in write-downs in the Commercial Vehicle Systems division and € 12.1 million in income from the reversal of the previous year's write-downs in the Rail Vehicle Systems division) and € 4.2 million in losses on disposal in North America in the Commercial Vehicle Systems division.

The negative financial result deteriorated very significantly by a total of € 40.8 million to € 63.3 million in the first half of 2024 (previous year: € 22.5 million). The other financial result decreased by € 58.3 million, which was particularly due to increased currency translation expenses, the measurement of a financial liability for a put option on the acquisition of a further 15% in Cojali S.L., and the loss on deconsolidation and related effects of the Kiepe-Group. In contrast, the result from financial investments using the equity method increased by € 13.7 million.

Despite higher pretax earnings, tax expense decreased in absolute terms by € 16.3 million to € 99.4 million in the first half of 2024 (previous year: € 115.7 million). The tax rate, at 24.1%, was very significantly below the previous year's level of 30.7%. This development resulted from factors such as the lowering of the UK tax rate applicable to taxable plan assets and the reduced non-deductible operating expenses.

The € 312.8 million of net income for the period increased significantly by € 51.8 million from the previous year (€ 261.1 million). The return on sales after taxes, at 7.8%, was 1.2 percentage points moderately higher than the previous year's level (previous year: 6.7%). After deduction of non-controlling interests, earnings per share was € 1.85 (previous year: € 1.55[2]).

DIVISIONAL KEY INDICATORS

in € million	Rail Vehicle Systems	Commercial Vehicle Systems	Other segments and consolidation	Group
				1st half of 2024
Key Figures				
Order intake	2,202.5	2,037.7	(1.2)	4,239.0
Order book (June 30)	4,880.5	1,969.3	(1.8)	6,847.9
Capital expenditure (before IFRS 16 and acquisitions)	53.1	77.9	5.1	136.1
R & D costs	138.2	147.8	–	286.1
Condensed Statement of Income				
Revenues	1,980.9	2,007.3	(1.0)	3,987.1
Changes in inventory and own work capitalized	39.2	74.2	1.3	114.8
Cost of materials	(830.8)	(1,139.1)	(2.9)	(1,972.9)
Personnel expenses	(538.1)	(438.2)	(62.2)	(1,038.4)
Other operating income and expenses	(265.1)	(197.2)	42.4	(419.8)
Depreciation, amortization, and impairment	(83.2)	(97.7)	(14.4)	(195.2)
Earnings before interest and taxes (EBIT)	**302.9**	**209.3**	**(36.7)**	**475.5**
M&A activities	–	11.9	–	11.9
Sustainable cost reduction programs	0.7	1.0	–	1.7
Other matters	–	0.6	–	0.6
Operating EBIT	**303.6**	**222.8**	**(36.7)**	**489.7**
Operating EBIT margin (as % of revenues)	15.3	11.1	–	12.3

[2] The comparison information was adjusted in connection with the correction of the Cojali purchase price allocation in the 2023 fiscal year (see 2023 Annual Report, Notes to the Consolidated Financial Statements, section C.3.). In this context, € 6,9 million were reclassified from the profit (loss) attributable to non-controlling interests to the profit (loss) attributable to the shareholders of Knorr-Bremse AG.

in € million	Rail Vehicle Systems	Commercial Vehicle Systems	Other segments and consolidation	Group
				1st half of 2023
Key Figures				
Order intake	2,025.0	2,212.0	(1.1)	4,235.9
Order book (June 30)	5,060.5	2,062.6	(1.2)	7,122.0
Capital expenditure (before IFRS 16 and acquisitions)	45.5	87.8	6.1	139.4
R & D costs	112.4	141.9	0.0	254.3
Condensed Statement of Income				
Revenues	1,813.5	2,105.1	(1.1)	3,917.5
Changes in inventory and own work capitalized	29.5	38.8	2.2	70.5
Cost of materials	(758.6)	(1,252.3)	(3.1)	(2,014.0)
Personnel expenses	(519.3)	(417.5)	(49.9)	(986.6)
Other operating income and expenses	(236.7)	(210.2)	35.5	(411.4)
Depreciation, amortization, and impairment	(77.4)	(84.7)	(14.5)	(176.6)
Earnings before interest and taxes (EBIT)	**251.1**	**179.1**	**(30.9)**	**399.3**
M&A activities	–	4.2	–	4.2
Sustainable cost reduction programs	–	1.6	–	1.6
Other matters	2.0	8.0	–	10.0
Operating EBIT	**253.0**	**192.9**	**(30.9)**	**415.1**
Operating EBIT margin (as % of revenues)	14.0	9.2	–	10.6

Rail Vehicle Systems division

Order intake in the Rail Vehicle Systems division increased year over year by a moderate € 177.4 million to € 2,202.5 million (previous year: € 2,025.0 million). All regions except North America were included in this positive development. Due to the sale of the Kiepe companies, the order book as at June 30, 2024, had shrank to € 4,880.5 million (previous year: € 5,060.5 million). Adjusted for the order book of the Kiepe companies in the first half of 2023, the order book had increased organically by 9.4%.

The Rail Vehicle Systems division's capital expenditure amounted to € 53.1 million in the first half of 2024 (previous year: € 45.5 million) and went toward items such as site optimization, replacement investments, and capacity-expanding automation projects for high-growth product categories. At € 83.2 million, depreciation and amortization was moderately up on the previous year's level of € 77.4 million.

The R & D costs came to € 138.2 million in the first half of 2024 and therefore increased significantly from the previous year (€ 112.4 million). This led to a moderate increase of the R & D ratio to 7.0% of revenue in the first half of 2024 (previous year: 6.2%). The focus in the Rail Vehicle Systems division was on, among other things, the industry trends of digitalization, transit capacity, availability, life cycle management, and eco-friendliness.

In the first half of 2024, the Rail Vehicle Systems division achieved a robust 9.2% revenue increase, bringing it to €1,980.9 million (previous year: € 1,813.5 million), with the previous year's revenue still including the revenue of the Kiepe-Group, which was deconsolidated at the end of January 2024, for the months of February to June 2023 of € 56.1 million. This increase from 2023 resulted from the significantly increased aftermarket business and, additionally, robust growth in OE business revenue. The division's aftermarket as well as OE revenues profited from growth in all regions. In Europe, revenue increases in the locomotive, freight, and high-speed businesses in particular as well as in regional and commuter businesses were more than able to compensate for declining light-rail vehicle business. In the North America region, the metro, passenger, and freight businesses in particular recorded year-over-year increases in OE revenues. The Asia region achieved robust revenue increases, especially in the passenger and high-speed businesses, with metro business declining. Due to the stronger increases in aftermarket revenues, especially in Asia, the share of aftermarket revenues in the division's total revenues, at 53.5% in the first half of 2024, was moderately above the previous year's level (52.6%).

Operating EBIT, at € 303.6 million, rose by a significant 20.0% from the same period of the previous year (€ 253.0 million) for volume and mix reasons and resulted in an operating EBIT margin of 15.3%, which was solidly above the previous year's level (14.0%). Alongside the profitable aftermarket business, there was also initial success from structural measures and improved pricing in new contracts that contributed positively to profitability. In the first half of the previous year, operating EBIT was adjusted for € 12.1 million of income from the reversal of write-downs in the previous year in connection with the withdrawal from the Russian market and, conversely, for € 14.1 million of expected expenses on voluntary non-warranty remedies in Asia.

Commercial Vehicle Systems division

Order intake in the Commercial Vehicle Systems division in the first half of 2024 was € 2,037.7 million, a moderate 7.9% decrease on the previous year (€ 2,212.0 million). The increased order numbers in North and South America were only partly able to compensate for the declining demand in Europe and Asia. This is also reflected in the development of the truck production rate, for which increased production in South America was partly able to counter a decline in other regions. Consequently, the order book as at June 30, 2024, shrank to € 1,969.3 million, 4.5% down on the previous year (€ 2,062.6 million).

In 2024, the Commercial Vehicle Systems division's capital expenditure decreased significantly by € 10.0 million year over year to € 77.9 million in the first half of 2024 (previous year: € 87.8 million). The majority of the capital expenditure continued to go toward the provision of supplier tools in all regions as well as expansion and replacement investments for the production of various generations of products. Depreciation, amortization, and impairment in the Commercial Vehicles Systems division was with an amount of € 97.7 million significantly higher than the previous year's level (€ 84.7 million).

The division's R & D costs increased slightly in the first half of 2024 to € 147.8 million (previous year: € 141.9 million) and resulted in an R & D ratio of 7.4% of revenues, a moderate increase on the previous year's level (6.7%). R & D activities focused on the megatrends of transportation safety, automated driving, emission reduction, and e-mobility as well as connectivity.

The Commercial Vehicle Systems division's revenues went down by a slight 4.6% in the first half of 2024 to € 2,007.3 million (previous year: € 2,105.1 million). This is in particular due to a moderately declining OE business in Europe, North America, and Asia, which a slight increase in aftermarket revenues was able to compensate for. China and South America in particular saw significant rises in aftermarket business. Due to this counteracting development, the share of aftermarket revenues in total revenues rose significantly from 27.9% in the previous year to 30.1%.

Operating EBIT saw a significant 15.5% increase to € 222.8 million in the first half of 2024. The operating EBIT margin also increased significantly from the previous year (9.2%) to its current 11.1%. This development was aided by pricing effects in Europe and North America as well as the effects of cost reduction measures and increased aftermarket profitability. To calculate operating EBIT, the recognized EBIT of € 209.3 million was adjusted in particular for € 11.9 million of expenses in connection with M&A activities relating mainly to the planned disposal of the GT Group. In the same half of the previous year, an adjustment was made mainly for € 8.0 million of write-downs in connection with the withdrawal from the Russian market and € 4.2 million of losses on disposal in North America.

Financing Situation

Financing structure of the Knorr-Bremse Group

Financial and liquidity management is described together with the financing structure of the Knorr-Bremse Group in the 2023 combined management report. The increase in the included current financial liabilities results from the presentation of the € 750 million bond issued on 14 June 2018, which matures in the first half of 2025. Long-term financial liabilities have been reduced by the same amount.

FINANCIAL LIABILITIES

in € million	June 30, 2024	December 31, 2023
Derivatives	(20.2)	(8.1)
Liabilities towards credit institutions	(65.6)	(74.0)
Bonds and debt instruments	(1,464.8)	(1,457.0)
Liabilities resulting from put-options on minority interests	(111.6)	(75.6)
Purchase price liabilities	(42.8)	(63.1)
Lease liabilities	(538.5)	(528.1)
Other financial liabilities	(533.7)	(554.1)
	(2,777.2)	**(2,759.8)**
thereof:		
Current	(1,350.4)	(587.1)
Non-current	(1,426.8)	(2,172.8)

CONDENSED CASH FLOW STATEMENT

in € million	1st half of 2024	1st half of 2023
Cash flow from operating activities	170.7	(31.7)
Cash flow from investing activities	(85.1)	(179.7)
Cash flow from financing activities	(335.3)	(280.7)
Cash flow changes	(249.8)	(492.1)
Change in cash funds resulting from exchange rate and valuation-related movements	12.1	(28.4)
Change in cash funds	(237.6)	(520.5)
Free cash flow	63.8	(165.2)

Cash flow from operating activities

The cash flow from operating activities improved by a very significant € 202.4 million, from € -31.7 million in the first half of 2023 to € 170.7 million in the first six months of 2024. This is mainly due to a significant € 51.8 million increase in the net income for the period to € 312.8 million, as well as non-payable expenses from currency translation.

Cash flow from investing activities

In the first six months of 2024, the cash outflow for investing activities reduced by a significant € 94.6 million from € 179.7 million in the previous year to € 85.1 million. The decline in the cash outflow mainly resulted from increased sales with simultaneously decreased acquisitions through the special fund, as well as the receipt of a purchase price installment for a past real estate sale in the first half of 2024.

Cash flow from financing activities

In the first half of 2024, the cash outflow for financing activities increased by € 54.7 million from € 280.7 million in the previous year's period to € 335.3 million. This increase is chiefly due to a dividend payment of € 264.4 million, which had been increased by € 30.6 million. Furthermore, loans of € 18.0 million (net) were repaid in the first six months of 2024 after borrowings of € 1.4 million (net) in the previous year.

Free cash flow

Free cash flow in the first half of 2024 amounted to € 63.8 million and was therefore a very significant € 229.1 million higher than the previous year's level of € -165.2 million. This development is mainly attributable to the € 202.4 million improvement in the cash flow from operating activities.

Liquidity

The decline in cash and cash equivalents from € 1,283.5 million as at December 31, 2023, to € 1,045.8 million as at June 30, 2024, was mainly comprised of the cash outflow for financing activities (€ 335.3 million), the cash outflow for investing activities (€ 85.1 million), and, in contrast, the cash inflow from operating activities (€ 170.7 million). Net debt consequently rose from € 627.2 million as at December 31, 2023, to € 894.6 million as at June 30, 2024.

Assets and capital structure

The Group's total assets, at € 8,192.7 million, remained almost unchanged from December 31, 2023 (€ 8,248.6 million). The increased net working capital in this context contrasts with a decline in cash and cash equivalents and a decline in assets held for sale and disposal groups.

BALANCE SHEET RATIOS

in € million	June 30, 2024	December 31, 2023
Net working capital (NWC)	1,545.9	1,131.3
Net working capital in days' sales*	69.8	51.4
Equity ratio (%)	36.1	35.2
Total assets	**8,192.7**	**8,248.6**

* annualized

The net working capital as at June 30, 2024, was € 1,545.9 million (December 31, 2023: € 1,131.3 million). Measured in terms of days' sales, this corresponds to a commitment of 69.8 days (December 31, 2023: 51.4 days). This increase was mainly underpinned by seasonal effects. However, a significant improvement in the level of net working capital is expected by the end of the year. Net working capital as at June 30, 2024, was on the level as it was in the first half of 2023.

The equity ratio, at 36.1% as at June 30, 2024, was moderately up on the level as at December 31, 2023 (35.2%).

CURRENT AND NON-CURRENT ASSETS

in € million	June 30, 2024	December 31, 2023
Intangible assets and goodwill	1,459.4	1,466.9
Property, plant, and equipment	1,851.2	1,863.9
Other non-current assets	395.4	398.9
Non-current assets	**3,706.1**	**3,729.8**
Inventories	1,235.4	1,142.3
Trade accounts receivable	1,604.6	1,359.3
Other financial assets	180.9	160.9
Contract assets	79.1	77.4
Cash and cash equivalents	1,075.7	1,291.4
Assets held for sale and disposal groups	27.3	221.1
Other current assets	283.6	266.5
Current assets	**4,486.7**	**4,518.8**

The assets held for sale and disposal groups as at June 30, 2024, include the GT Group, Knorr-Bremse Systems for Commercial Vehicles OOO, and the US portfolio adjustment. The significant reduction of this position results from deconsolidation of the Kiepe-Group in the first quarter of 2024. Further information can be found in the chapter entitled “Assets Held for Sale and Corresponding Liabilities” of the notes to the interim condensed financial statements.

Significant capital expenditure on property, plant, and equipment went primarily toward expansion investments in production plant and equipment, automation projects, site optimization, and replacement investments. Moreover, capital expenditure on intangible assets was incurred for IT projects, among other things.

REPORT ON RISKS, OPPORTUNITIES AND EXPECTED DEVELOPMENTS

Report on Risks and Opportunities

Risks and opportunities specific to the Knorr-Bremse Group and the Group’s associated risk management system are described in detail in the report on risk- and opportunities as part of the 2023 combined management report.

Compared with year-end 2023, the risk portfolio has decreased. In the Compliance category in particular, risk has shifted from “medium” to a low risk corridor; there are no substantive reasons behind this, but rather just timing as the risk pertaining to 2024 now only applies to the second half of the year. The Market & Customer Project Management risk category has also reduced and likewise shifted from the medium risk corridor to the low risk corridor; this was driven by the inclusion of additional risks in the updated planning. This reduces the risk within the risk report, as a risk is defined as a negative deviation from the plan. Apart from that, no material risks have been identified since the combined management report for the 2023 fiscal year that could jeopardize our company’s continued existence.

Report on Expected Developments

Global economy

The July 2024 World Economic Outlook by the analysts at the International Monetary Fund (IMF) reports in particular that the slower than expected decline in the inflation rate as well as escalating trade conflicts and an environment of increased political uncertainty are having effects on the development of economic activities globally. Stable growth rates of 3.2% and 3.3% respectively are expected for 2024 and 2025. For 2024, growth of 0.9% is forecast for the euro area, 2.6% for the USA, and 5.0% for China. The global inflation rate is expected to go down from 6.7% last year to a likely 5.9% this year. However, in several advanced economies

– including the USA in particular – the decline in inflation has slowed down, which results in an increased risk that monetary policy will need to remain restrictive for longer than previously expected. This would then be an overall burden on economic growth.

Global rail vehicle market

The assessment of global rail vehicle market prospects through to the end of 2024 has developed positively since the assessment provided in the 2023 combined management report, an assessment which also incorporated the current risks in the report on risks and opportunities. In addition to a more positive trend in the Chinese aftermarket in particular, the Europe region is developing more pleasingly, both in the production of new vehicles as well as in the aftermarket.

The rail vehicle market will therefore remain a growth market beyond the current fiscal year and will be supported by increasing public and private investment in vehicles and infrastructure.

Global commercial vehicle production

The assessment of the market development of global commercial vehicle production in 2024 has changed in recent months. In comparison with the previous year 2023, Knorr-Bremse expects a slight decrease in global commercial vehicle production for the overall year 2024, but with significant regional differences and significantly increased uncertainty in the commercial vehicle market.

Knorr-Bremse´s outlook for commercial vehicle production in Europe was initially at minus 10% compared to the full year 2023, but the company currently expects that commercial vehicle production in this region to decline significantly, mainly due to the likely significant decline in market demand in the second half of the year.

The original expectation for North America was also based on a similar trend as in Europe.

For the Asia region, the development in China is particularly important for Knorr-Bremse. After a very strong increase in the past fiscal year, Knorr-Bremse now expects a stable year-on-year development in commercial vehicle production in China.

The market statistics relate to the truck production rate in each region as published by various organizations, such as LMC.

Outlook

The guidance for 2024 as a whole is as follows:

FULL-YEAR GUIDANCE FOR THE GROUP

Most significant performance indicators	2024 target	2023 actual
Revenues (€ million)	7,700–8,000	7,926
Operating EBIT margin (as % of revenues)	11.5–13.0	11.3
Free cash flow (in € million)	550–650	552

Knorr-Bremse raised its guidance for the 2024 fiscal year on July 29, 2024. Assuming that exchange rates remain largely stable year over year, that there are no significant setbacks from Russia's war in Ukraine, and that the geopolitical and economic environmental generally remain stable, Knorr-Bremse expects revenues of € 7,700 million to € 8,000 million, an operating EBIT margin of between 11.5% and 13.0%, previously 11.5% to 12.5%, and a free cash flow of between € 550 million and € 650 million. This guidance does not take into account the acquisition of the rail signaling technology business of Alstom in North America, which has yet to be completed.

Interim Consolidated Financial Statements

CONSOLIDATED STATEMENT OF INCOME

CONSOLIDATED STATEMENT OF INCOME

in € thousand	1st half of 2024	1st half of 2023
Revenues	3,987,119	3,917,454
Change in inventory of unfinished/finished products	56,366	17,326
Own work capitalized	58,389	53,174
Total operating performance	**4,101,874**	**3,987,954**
Other operating income	46,123	47,761
Cost of materials	(1,972,870)	(2,013,980)
Personnel expenses	(1,038,420)	(986,640)
Other operating expenses	(465,966)	(459,178)
Earnings before interest, tax, depreciation, and amortization (EBITDA)	**670,741**	**575,917**
Depreciation, amortization, and impairment	(195,242)	(176,640)
Earnings before interest and taxes (EBIT)	**475,499**	**399,277**
Interest income	25,690	14,851
Interest expenses	(48,813)	(41,745)
Result from financial investments using the equity method	121	(13,596)
Other financial result	(40,309)	17,982
Income before taxes	**412,188**	**376,769**
Taxes on income	(99,365)	(115,706)
Net income	**312,823**	**261,063**
Of which attributable to:		
Profit (loss) attributable to non-controlling interests*	14,757	10,401
Profit (loss) attributable to the shareholders of Knorr-Bremse AG*	298,066	250,662
Earnings per share in €*		
Undiluted	1.85	1.55
Diluted	1.85	1.55

* The comparison information was adjusted in connection with the correction of the Cojali purchase price allocation in the 2023 fiscal year (see 2023 Annual Report, Notes to the Consolidated Financial Statements, chapter C.3.). In this context, € 6,862 thousand were reclassified from the profit (loss) attributable to non-controlling interests to the profit (loss) attributable to the shareholders of Knorr-Bremse AG.

CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

in € thousand	1st half of 2024	1st half of 2023
Net income	**312,823**	**261,063**
Actuarial gains and losses	12,510	(7,966)
Deferred taxes	(5,177)	2,761
Items that will not be reclassified to profit or loss	**7,333**	**(5,205)**
Currency translation	8,425	(69,652)
Hedging transactions reserve	(13,531)	27,072
Reserve for costs of hedging	(1,822)	8,292
Deferred taxes	4,733	(11,219)
Items that may be reclassified to profit or loss	**(2,195)**	**(45,506)**
Other comprehensive income after taxes	**5,138**	**(50,711)**
Comprehensive income	**317,961**	**210,352**
Total comprehensive income attributable to non-controlling interests*	15,537	5,239
Total comprehensive income attributable to the shareholders of Knorr-Bremse AG*	302,424	205,113

* The comparison information was adjusted in connection with the correction of the Cojali purchase price allocation in the 2023 fiscal year (see 2023 Annual Report, Notes to the Consolidated Financial Statements, chapter C.3.). In this context, € 6,748 thousand were reclassified from the total comprehensive income attributable to non-controlling interests to the total comprehensive income attributable to the shareholders of Knorr-Bremse AG.

CONSOLIDATED BALANCE SHEET

ASSETS

in € thousand	June 30, 2024	December 31, 2023
Assets		
Intangible assets	770,248	770,569
Goodwill	689,167	696,376
Property, plant, and equipment	1,851,237	1,863,921
Investments accounted for using the equity method	56,907	60,811
Other financial assets	136,178	141,357
Other assets	99,564	94,914
Income tax receivables	176	2,414
Assets from employee benefits	25,507	26,172
Deferred tax assets	77,067	73,236
Non-current assets	**3,706,051**	**3,729,770**
Inventories	1,235,377	1,142,320
Trade accounts receivable	1,604,579	1,359,283
Other financial assets	180,939	160,859
Other assets	182,364	183,027
Contract assets	79,128	77,363
Income tax receivables	101,268	83,461
Cash and cash equivalents	1,075,726	1,291,385
Assets held for sale and disposal groups	27,296	221,094
Current assets	**4,486,677**	**4,518,792**
Total assets	**8,192,728**	**8,248,562**

EQUITY AND LIABILITIES

in € thousand	June 30, 2024	December 31, 2023
Equity		
Subscribed capital	161,200	161,200
Capital reserves	13,884	13,884
Retained earnings	309,407	9,407
Other components of equity	(165,844)	(169,279)
Profit carried forward	2,258,318	2,268,149
Profit attributable to the shareholders of Knorr-Bremse AG	298,066	552,529
Equity attributable to the shareholders of Knorr-Bremse AG	**2,875,031**	**2,835,890**
Equity attributable to non-controlling interests	80,409	67,622
Equity	**2,955,440**	**2,903,512**
Liabilities		
Provisions for pensions	227,363	242,872
Provisions for other employee benefits	28,377	18,416
Other provisions	183,536	186,450
Financial liabilities	1,426,780	2,172,794
Other liabilities	9,645	7,089
Income tax liabilities	12,499	4,039
Deferred tax liabilities	135,229	133,167
Non-current liabilities	**2,023,429**	**2,764,827**
Provisions for other employee benefits	17,508	15,707
Other provisions	187,886	171,200
Trade accounts payable	1,170,037	1,201,516
Financial liabilities	1,350,377	587,056
Other liabilities	148,995	121,481
Contract liabilities	233,197	233,037
Income tax liabilities	93,530	97,235
Liabilities directly associated with assets held for sale	12,329	152,991
Current liabilities	**3,213,859**	**2,580,223**
Liabilities	**5,237,288**	**5,345,050**
Total equity and liabilities	**8,192,728**	**8,248,562**

CONSOLIDATED STATEMENT OF CASH FLOWS

CONSOLIDATED STATEMENT OF CASH FLOWS

in € thousand	1st half of 2024	1st half of 2023
Net income (including minority interests)	312,823	261,063
Adjustments for		
Depreciation, amortization, and impairment losses on intangible assets and property, plant, and equipment	195,243	176,640
Change of impairment on inventories	3,316	(9,309)
Change of impairment on trade accounts receivable and contract assets	8,657	7,628
Loss on the sale of consolidated companies and other business units	4,313	–
(Gain)/loss on the sale of property, plant, and equipment	63	2,262
Additions to, reversals of, and discounting of provisions	58,581	61,974
Non-cash changes in the measurement of derivatives	9,352	(42,101)
Other non-cash expenses and income	27,856	(23,072)
Interest income	23,123	26,894
Investment result	(121)	13,596
Income tax expense	99,365	115,706
Income tax payments	(109,793)	(128,726)
Changes of		
Inventories, trade accounts receivable, and other assets that cannot be allocated to investing or financing activities	(411,526)	(487,234)
Trade accounts payable as well as other liabilities that cannot be allocated to investing or financing activities	642	47,164
Provisions due to utilization	(51,180)	(54,192)
Cash flow from operating activities	**170,714**	**(31,708)**
Proceeds from the sale of intangible assets	4,188	–
Disbursements for investments in intangible assets	(56,384)	(57,342)
Proceeds from the sale of property, plant, and equipment	25,023	5,838
Disbursements for investments in property, plant, and equipment	(79,728)	(82,027)
Proceeds from financial investments and from the sale of investments	83,590	20,684
Disbursements for investments in financial assets	(41,300)	(55,531)
Proceeds from the sale of consolidated companies and other business units after deduction of cash disposed	(17,107)	–
Disbursements for the acquisition of consolidated companies and other business units	(21,663)	(18,332)
Interest received	19,863	9,218
Other disbursements	(1,611)	(2,253)
Cash flow from investing activities	**(85,129)**	**(179,746)**

in € thousand	1st half of 2024	1st half of 2023
Proceeds from borrowings	3,204	20,148
Disbursements from the repayment of borrowings*	(21,267)	(18,716)
Disbursements for lease liabilities	(33,576)	(34,501)
Interest paid	(21,760)	(21,449)
Dividends paid to parent company shareholders	(264,368)	(233,740)
Dividends paid to non-controlling interests*	(877)	(804)
Payments from settlement of derivatives	646	5,807
Proceeds from grants and subsidies	2,655	2,597
Cash flow from financing activities	**(335,343)**	**(280,657)**
Cash flow changes	**(249,758)**	**(492,111)**
Change in cash funds resulting from exchange rate and valuation-related movements	12,125	(28,421)
Change in cash funds	**(237,633)**	**(520,532)**
Cash funds at the beginning of the period	1,283,463	1,210,739
Cash funds at the end of the period	**1,045,830**	**690,207**
Cash and cash equivalents	1,075,726	688,473
Reclassification as assets held for sale and disposal groups	3,069	25,606
Short-term bank debt (less than 3 months)	(32,965)	(23,872)

* The comparison information was adjusted in connection with the correction of the Cojali purchase price allocation in the 2023 fiscal year (see 2023 Annual Report, Notes to the Consolidated Financial Statements, chapter C.3.). In accordance with the disclosure of the contractual dividend liability to the minority shareholders of Cojali S.L., dividend payments of € 7,988 thousand were reclassified within the cash flow from financing activities.

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

in € thousand	Subscribed capital	Capital reserve	Retained earnings	Group earnings
As of January 1, 2024	**161,200**	**13,884**	**9,407**	**2,820,679**
Dividends	–	–	–	(264,368)
Net income	**–**	**–**	**–**	**298,066**
Other comprehensive income after taxes	–	–	–	–
Comprehensive income	**–**	**–**	**–**	**298,066**
Deconsolidation	–	–	–	2,007
Allocation to retained earnings	–	–	300,000	(300,000)
Disposal of non-controlling interests	–	–	–	–
Gains and losses on hedging transactions and costs of hedging reclassified to inventories	–	–	–	–
As of June 31, 2024	**161,200**	**13,884**	**309,407**	**2,556,384**
As of January 1, 2023	**161,200**	**13,884**	**10,320**	**2,501,890**
Dividends*	–	–	–	(233,740)
Net income*	**–**	**–**	**–**	**250,662**
Other comprehensive income after taxes*	–	–	–	–
Comprehensive income*	**–**	**–**	**–**	**250,662**
Gains and losses on hedging transactions and costs of hedging reclassified to inventories	–	–	–	–
As of June 30, 2023	**161,200**	**13,884**	**10,320**	**2,518,812**

* The comparison information was adjusted in connection with the correction of the Cojali purchase price allocation in the 2023 fiscal year (see 2023 Annual Report, Notes to the Consolidated Financial Statement, chapter C.3.). In accordance with the disclosure of the contractual dividend liability to the minority shareholders of Cojali S.L., dividends in the amount of € 7,988 thousand were reclassified. In addition, € 6,862 thousand were reclassified from the profit (loss) attributable to non-controlling interests to the profit (loss) attributable to the shareholders of Knorr-Bremse AG. In the other comprehensive income after taxes, expenses from foreign currency translation in the amount of € 114 thousand were reclassified from the non-controlling interests to the shareholders of Knorr-Bremse AG. As a result, € 6,748 thousand were reclassified from the total comprehensive income attributable to non-controlling interests to the total comprehensive income attributable to the shareholders of Knorr-Bremse AG.

Other components of equity						
Currency translation	Reserve for costs of hedging	Hedging transactions reserve	Revaluations from defined pension benefits (IAS 19)	Equity attributable to the shareholders of Knorr-Bremse AG	Equity attributable to non-controlling interests	Total equity
(155,750)	**9,073**	**1,424**	**(24,027)**	**2,835,890**	**67,622**	**2,903,512**
–	–	–	–	(264,368)	(877)	(265,245)
–	**–**	**–**	**–**	**298,066**	**14,757**	**312,823**
7,645	(1,548)	(9,072)	7,333	4,358	780	5,138
7,645	**(1,548)**	**(9,072)**	**7,333**	**302,424**	**15,537**	**317,961**
–	–	–	(2,007)	–	–	–
–	–	–	–	–	–	–
–	–	–	–	–	(1,873)	(1,873)
–	426	659	–	1,085	–	1,085
(148,105)	**7,951**	**(6,989)**	**(18,701)**	**2,875,031**	**80,409**	**2,955,440**
(95,121)	**(947)**	**(19,634)**	**(8,507)**	**2,563,085**	**64,900**	**2,627,985**
–	–	–	–	(233,740)	(804)	(234,544)
–	**–**	**–**	**–**	**250,662**	**10,401**	**261,063**
(64,489)	5,718	18,427	(5,205)	(45,549)	(5,162)	(50,711)
(64,489)	**5,718**	**18,427**	**(5,205)**	**205,113**	**5,239**	**210,352**
–	256	1,328	–	1,584	–	1,584
(159,610)	**5,027**	**121**	**(13,712)**	**2,536,042**	**69,335**	**2,605,377**

Notes to the Condensed Interim Consolidated Financial Statements of Knorr-Bremse AG

1. Accounting Principles

The Company

Knorr-Bremse AG (the "company") is a joint stock company domiciled in Germany. The company's registered office and headquarters are located in Moosacher Str. 80, 80809 Munich, Germany. The company is registered in the City of Munich commercial register under HRB 42031. The interim consolidated financial statements include the Company and its subsidiaries (jointly referred to as the "Group" or "Knorr-Bremse"). The Group is a global manufacturer of braking systems and other safety-critical systems for rail and commercial vehicles.

The product portfolio of the Rail Vehicles Systems division includes, among other things, braking systems (e.g., systems for air supply, brake control, disk brakes, brake pads/blocks, wheel slide protection, sanding, control units, and comfort functions), entrance and HVAC systems, sanitary systems, coupling systems (passenger and freight transportation), a portfolio of digital solutions (e.g., condition monitoring, energy consumption measurement, driver assistance systems, and environment detection) and smart services for optimizing rail transport, power electrics (e.g., brake resistors, circuit breakers, fans, protection relays, energy meters, etc.), and solutions for rail computing and communication (RCC/TCMS), platform screen doors, signaling systems, stationary and mobile testing equipment, and windscreen wiper and washing systems as well as extensive aftermarket solutions (RailServices).

The product portfolio of the Commercial Vehicles Systems division includes, among other things, pneumatic braking systems (i.e., brake control systems, disk brakes, drum brakes, brake cylinders, valves and pedal units) and steering systems, vehicle dynamics solutions (i.e., anti-lock braking systems and electronic stability programs), driver assistance systems (e.g., emergency braking systems), electronic leveling control, energy supply and distribution systems, including compressors and air treatment, products for boosting fuel efficiency such as engine components and transmission control systems (i.e., vibration dampers, engine air management, transmission control, and gear/clutch actuation) and trailer and aftermarket solutions.

Accounting and measurement methods

The interim consolidated financial statements for the period January 1 to June 30, 2024 are condensed and have been prepared in accordance with IAS 34 Interim Financial Reporting and hence in accordance with the International Financial Reporting Standards (IFRS) as adopted by the European Union (EU). The interim consolidated financial statements are based on and should be read in conjunction with the consolidated financial statements for the period ended December 31, 2023. The accounting and measurement methods that the Group has applied in these interim financial statements are generally in line with those applied in the consolidated financial statements for 2023.

The condensed interim consolidated financial statements and the interim Group management report were released for publication by the Executive Board on August 07, 2024.

Additional disclosures

Knorr-Bremse AG's half-year financial report meets the requirements of the applicable provisions of the German Securities Trading Act (WpHG) and, in accordance with Section 115 WpHG, includes condensed interim consolidated financial statements, an interim Group management report and a responsibility statement.

The applicable nominal tax rate for the Group amounts to 30,8% as of June 30, 2024. The calculation of the Group's income tax expenses for the first six months of 2024 was based on the expected effective Group tax rate for the full fiscal year of 24,1% (prior period: 30,7%).

The interim consolidated financial statements are presented in euros (€), the euro being the functional and reporting currency of Knorr-Bremse AG. Unless otherwise indicated, all figures in the condensed interim consolidated financial statements are commercially rounded to the nearest thousand euros (€ thousand). For this reason, rounding differences may occur in absolute values or percentage data in individual cases.

2. Changes in the Scope of Consolidation

Sale of the Kiepe-Group

The Kiepe-Group companies allocated to the Rail Vehicle Systems division were disposed of as part of a portfolio adjustment which closed in late January 2024. The Kiepe-Group comprises Kiepe Electric GmbH, based in Düsseldorf, Germany, and the subsidiaries Kiepe Electric Schweiz AG, based in Niederbuchsiten, Switzerland; Kiepe Electric S.r.l., based in Cernusco sul Navigilio, Italy; Kiepe Electric Corporation, based in Vancouver, Canada; Kiepe Electric LLC., based in Alpharetta, USA; and Heiterblick Projektgesellschaft mbH, based in Leipzig, Germany. The buyer of the Kiepe-Group is Heramba GmbH, Düsseldorf, Germany, for Kiepe Electric GmbH, Düsseldorf, and Heramba Holdings, Inc., Newark, USA, for Kiepe Electric LLC., Alpharetta, USA.

The Kiepe-Group assets and corresponding liabilities were recognized as assets held for sale and corresponding liabilities as at December 31, 2023.

As part of the deconsolidation by January 31, 2024, the Group disposed of the following assets and liabilities:

in € thousand	January 31, 2024
Assets	
Intangible assets	15,501
Property, plant, and equipment	24,856
Other financial assets	2,528
Deferred tax assets	46,337
Non-current assets	**89,222**
Inventories	54,564
Trade accounts receivable	41,268
Other financial assets	1,427
Other assets	5,257
Contract assets	25,575
Cash and cash equivalents	22,105
Current assets	**150,196**
Liabilities	
Provisions for pensions	3,873
Provisions for other employee benefits	841
Other provisions	17,863
Financial liabilities	1,900
Deferred tax liabilities	47,054
Non-current liabilities	**71,531**
Provisions for other employee benefits	90
Other provisions	23,166
Trade accounts payable	17,912
Financial liabilities	5,657
Other liabilities	2,948
Contract liabilities	60,751
Income tax liabilities	194
Current liabilities	**110,718**
Attributable goodwill	1,802
Total net assets disposed of	**58,971**

The purchase price for an 85% interest amounts to € 54,544 thousand. The remaining interest in Kiepe Electric GmbH, based in Düsseldorf, is measured at fair value. Knorr-Bremse maintains a put option to tender the remaining 15% interest to the buyer until December 31, 2025. Similarly, the buyer maintains a call option to acquire this interest until that same point in time. There was an € 4,727 thousand loss on deconsolidation which was recognized in the other financial result.

The Group received € 1,394 thousand of the purchase price at the end of 2023 and € 3,406 thousand at the beginning of 2024.

Knorr-Bremse AG made a transitional loan commitment of € 20,000 thousand with a contract dated June 19, 2024, of which € 9,500 thousand was disbursed as at June 30, 2024. The transitional loan has a term of less than one year and was granted under market conditions.

The recognized purchase price receivables and loan commitment were adjusted by € 6,765 thousand as at June 30, 2024.

There were no other material changes to consolidated companies in the first half of 2024.

3. Assets Held for Sale and Corresponding Liabilities

The assets held for sale and corresponding liabilities mainly include the GT Group, Knorr-Bremse Systems for Commercial Vehicles OOO, and the US portfolio adjustment.

GT Group

The GT Group companies allocated to the Commercial Vehicle Systems division are planned to be sold as part of a portfolio adjustment and have therefore been reported as assets held for sale and corresponding liabilities since May 1, 2024. The GT Group includes G.T. Group Ltd., Peterlee, United Kingdom, and its subsidiary, G T Emissions Systems Ltd., Peterlee, United Kingdom. Knorr-Bremse is currently in negotiations with potential buyers.

A fair value measurement based on the current negotiations indicated impairment of € 10,197 thousand of the carrying amounts of the assets recognized as at June 30, 2024. The impairment has been recognized in depreciation, amortization, and impairment.

In connection with the GT Group, cumulative income of € 65.4 thousand from the measurement of foreign currency translation in the Group was recognized in other comprehensive income as of June 30, 2024.

The GT Group disposal group comprised the following assets and liabilities at the following carrying amounts after impairment as at June 30, 2024:

OVERVIEW OF GT GROUP ASSETS HELD FOR SALE AND CORRESPONDING LIABILITIES

in € thousand	June 30, 2024
Assets	
Intangible assets	70
Property, plant, and equipment	423
Non-current assets	**493**
Inventories	6,599
Trade accounts receivable	13,000
Other assets	1,128
Cash and cash equivalents	21
Current assets	20,748
Assets held for sale and disposal groups	**21,242**
Liabilities	
Other provisions	45
Financial liabilities	797
Non-current liabilities	**842**
Other provisions	47
Trade accounts payable	6,875
Financial liabilities	774
Other liabilities	249
Current liabilities	**7,945**
Liabilities directly associated with assets held for sale	**8,787**
Assets and liabilities held for sale	**12,455**

Russia-based business

In connection with the Russian invasion of Ukraine, Knorr-Bremse made the decision to dispose of Knorr-Bremse Systems for Commercial Vehicles OOO, Moscow, Russia, which is part of the Commercial Vehicle Systems division. Knorr-Bremse signed a sale agreement for the disposal group on November 29, 2023.

The transaction was successfully closed in early July. Please refer to chapter 10 Events after the Reporting Date for further explanations.

Due to the purchase price set out in the purchase agreement, the recognized assets were impaired by € 661 thousand as at June 30, 2023. This impairment was mainly recognized under allowances on inventories in the cost of materials.

In connection with Knorr-Bremse Systems for Commercial Vehicles OOO, Moscow, Russia, cumulative income of € 723 thousand from the measurement of foreign currency translation in the Group was recognized in other comprehensive income as of June 30, 2024.

The disposal group for the Russian vehicle business comprised the following assets and liabilities valued at their carrying amount as at June 30, 2024, after impairment:

OVERVIEW OF RUSSIA ASSETS HELD FOR SALE AND CORRESPONDING LIABILITIES

in € thousand	June 30, 2024	December 31, 2023
Assets		
Deferred tax assets	–	191
Non-current assets	**–**	**191**
Inventories	–	913
Trade accounts receivable	177	162
Other financial assets	9	35
Other assets	1,235	466
Income tax receivables	73	178
Cash and cash equivalents	3,048	1,180
Current assets	**4,542**	**2,934**
Assets held for sale and disposal groups	**4,542**	**3,124**
Liabilities		
Other provisions	527	71
Financial liabilities	13	12
Non-current liabilities	**540**	**84**
Other provisions	4	3
Trade accounts payable	808	404
Financial liabilities	339	441
Other liabilities	640	245
Contract liabilities	1,207	1,090
Income tax liabilities	5	4
Current liabilities	**3,002**	**2,188**
Liabilities directly associated with assets held for sale	**3,542**	**2,271**
Assets and liabilities held for sale	**1,000**	**853**

US portfolio adjustment

As part of the portfolio adjustments, some assets in the Commercial Vehicle Systems division in the USA are to be sold. As at June 30, 2024, this affected the Ohio campus of Bendix Commercial Vehicle Systems LLC, Elyria, Ohio, USA, and the production building of R.H. Sheppard Co., Inc., Hanover, Pennsylvania, USA. The measurement of assets and liabilities did not indicate any impairment.

The assets and corresponding liabilities of the Safety Direct business, also recognized as at December 31, 2023, were disposed of to RM Acquisition, LLC and US Fleet Holdco, Inc. in the first quarter of 2024. The € 204 thousand gain on disposal was recognized in other operating income.

OVERVIEW OF ASSETS HELD FOR SALE AND CORRESPONDING LIABILITIES UNDER THE US PORTFOLIO ADJUSTMENT

in € thousand	June 30, 2024	December 31, 2023
Assets		
Intangible assets	–	4,416
Property, plant, and equipment	1,512	2,057
Non-current assets	**1,512**	**6,473**
Inventories	–	2,433
Trade accounts receivable	–	3,809
Current assets	–	**6,242**
Assets held for sale and disposal groups	**1,512**	**12,715**
Liabilities		
Trade accounts payable	–	3,900
Current liabilities	–	**3,900**
Liabilities directly associated with assets held for sale	–	**3,900**
Assets and liabilities held for sale	**1,512**	**8,814**

4. Revenues

The table below breaks down consolidated revenues in the first half of 2024 by region and timing and reconciles them to revenues in segment reporting.

CLASSIFICATION OF REVENUE AND RECONCILIATION WITH SEGMENT REVENUES

	Revenue according to segment reporting			
in € thousand	Rail Vehicle Systems	Commercial Vehicle Systems	Other segments and consolidation	Total
				1st half of 2024
Disaggregation of segments				
a) Region (by registered office of the Group company)				
Europe/Africa	1,108,383	849,297	(879)	1,956,801
North America	217,231	758,938	(96)	976,074
South America	20,827	68,051	(73)	88,805
Asia-Pacific	634,462	330,977	0	965,439
	1,980,903	**2,007,264**	**(1,048)**	**3,987,119**
b) Type of time recording				
Recognition over time	497,773	(1,812)	–	495,961
Recognition at a point in time	1,483,130	2,009,076	(1,048)	3,491,158
	1,980,903	**2,007,264**	**(1,048)**	**3,987,119**

in € thousand	Rail Vehicle Systems	Commercial Vehicle Systems	Other segments and consolidation	Total
	Revenue according to segment reporting			
				1st half of 2023
Disaggregation of segments				
a) Region (by registered office of the Group company)				
Europe/Africa	1,038,459	904,826	(1,033)	1,942,252
North America	202,740	798,203	(43)	1,000,900
South America	17,827	53,912	(45)	71,694
Asia-Pacific	554,445	348,163	–	902,608
	1,813,471	**2,105,104**	**(1,121)**	**3,917,454**
b) Type of time recording				
Recognition over time	494,039	–	–	494,039
Recognition at a point in time	1,319,432	2,105,104	(1,121)	3,423,415
	1,813,471	**2,105,104**	**(1,121)**	**3,917,454**

Knorr-Bremse’s business activities are not subject to any material seasonal variations.

5. Cost of Materials

Despite increased revenues, the cost of materials fell from € 2,013,980 thousand to € 1,972,870 thousand in the first half of 2024. This resulted from an increase of revenue in the Rail Vehicle Systems division and a simultaneous decrease of revenue in the Commercial Vehicle Systems division, because of the lower material cost ratio in the Rail Vehicle Systems division.

6. Other Operating Income

The other operating income was € 46,123 thousand in the first half of 2024 (previous year: € 47,761 thousand). Increased income from insurance compensation, up € 6,352 thousand, stood against decreased income from currency translation, down € 9,290 thousand.

7. Other Operating Expenses

The other operating expenses were € 465,966 thousand in the first half of 2024 (previous year: € 459,178 thousand). In particular, increased legal, consultancy and audit fees, up € 17,246 thousand, stood against decreased currency translation expenses, down € 13,998 thousand.

8. Other Financial Result

The other financial result decreased by € 58,291.0 thousand year over year. This resulted in particular from increased currency translation expenses, the measurement of foreign exchange holdings, the measurement for a put option on the acquisition of further 15% in Cojali S.L., and the loss on deconsolidation of the Kiepe-Group and the measurement of the purchase price receivable for it.

9. Financial Instruments

Classification and fair values

The table below shows the non-netted carrying amounts and the fair values of financial assets and liabilities for each category of financial instruments in accordance with IFRS 9. For the classification (hierarchy levels) of fair value in accordance with IFRS 13, please refer to the section on accounting and measurement methods in the consolidated financial statements for the period ended December 31, 2023.

The financial instruments can be classified as financial instruments at fair value through profit or loss (FVTPL), financial instruments at fair value through other comprehensive income (FVOCI) and financial instruments at amortized cost.

INFORMATION IN ACCORDANCE WITH IFRS 9

in € thousand									June 30, 2024
					Carrying amount				Fair value
Category	**FVTPL**	**FVOCI**	**Other**	**At amortized cost**	**Total**	**Level 1**	**Level 2**	**Level 3**	**Total**
Financial assets	**114,778**	**50,270**	**10,690**	**2,821,686**	**2,997,423**	**102,394**	**51,980**	**21,364**	**175,737**
Derivatives using hedge accounting	–	–	10,690	–	10,690	–	10,690	–	10,690
Derivative financial instruments to which hedge accounting is not applied	8,450	–	–	–	8,450	–	8,450	–	8,450
Equity instruments	7,171	21,364	–	–	28,535	3,236	3,935	21,364	28,535
Securities and debt instruments	99,157	–	–	–	99,157	99,157	–	–	99,157
Trade accounts receivable*	–	28,905	–	1,575,673	1,604,579		28,905	–	28,905
Purchase price receivables*	–	–	–	59,527	59,527	–	–	–	–
Other financial receivables*	–	–	–	110,760	110,760	–	–	–	–
Cash and cash equivalents*	–	–	–	1,075,726	1,075,726	–	–	–	–
Financial liabilities	**(32,572)**	**–**	**(549,423)**	**(3,365,200)**	**(3,947,194)**	**(1,425,826)**	**(85,788)**	**(23,254)**	**(1,534,868)**
Derivatives using hedge accounting	–	–	(10,919)	–	(10,919)	–	(10,919)	–	(10,919)
Derivative financial instruments to which hedge accounting is not applied	(9,317)	–	–	–	(9,317)	–	(9,317)	–	(9,317)
Liabilities towards credit institutions	–	–	–	(65,552)	(65,552)	–	(65,552)	–	(65,552)
Liabilities resulting from put options on minority interests	–	–	–	(111,600)	(111,600)	–	–	–	–
Bonds and debt instruments	–	–	–	(1,464,842)	(1,464,842)	(1,425,826)	–	–	(1,425,826)
Lease liabilities	–	–	(538,504)	–	(538,504)	–	–	–	–
Purchase price liabilities*	(23,254)	–	–	(19,518)	(42,772)	–	–	(23,254)	(23,254)
Other financial liabilities*	–	–	–	(533,651)	(533,651)	–	–	–	–
Trade accounts payable*	–	–	–	(1,170,037)	(1,170,037)	–	–	–	–

* No information on fair value as the carrying amount is approximately equal to the fair value.

in € thousand									December 31, 2023
	Carrying amount					Fair value			
Category	FVTPL	FVOCI	Other	At amortized cost	Total	Level 1	Level 2	Level 3	Total
Financial assets	**159,889**	**54,881**	**21,625**	**2,716,489**	**2,952,883**	**143,358**	**71,672**	**21,364**	**236,394**
Derivatives using hedge accounting	–	–	21,625	–	21,625	–	21,625	–	21,625
Derivative financial instruments to which hedge accounting is not applied	16,469	–	–	–	16,469	–	16,469	–	16,469
Equity instruments	2,356	21,364	–	–	23,720	2,294	62	21,364	23,720
Securities and debt instruments	141,064	–	–	–	141,064	141,064	–	–	141,064
Trade accounts receivable*	–	33,516	–	1,325,766	1,359,283	–	33,516	–	33,516
Purchase price receivables from disposal of land*	–	–	–	32,764	32,764	–	–	–	–
Other financial receivables*	–	–	–	66,574	66,574	–	–	–	–
Cash and cash equivalents*	–	–	–	1,291,385	1,291,385	–	–	–	–
Financial liabilities	**(31,144)**	**–**	**(534,766)**	**(3,395,456)**	**(3,961,365)**	**(1,433,842)**	**(82,033)**	**(29,782)**	**(1,545,657)**
Derivatives using hedge accounting	–	–	(6,705)	–	(6,705)	–	(6,705)	–	(6,705)
Derivative financial instruments to which hedge accounting is not applied	(1,362)	–	–	–	(1,362)	–	(1,362)	–	(1,362)
Liabilities towards credit institutions	–	–	–	(73,967)	(73,967)	–	(73,967)	–	(73,967)
Liabilities resulting from put options on minority interests	–	–	–	(75,559)	(75,559)	–	–	–	–
Bonds and debt instruments	–	–	–	(1,456,973)	(1,456,973)	(1,433,842)	–	–	(1,433,842)
Lease liabilities	–	–	(528,061)	–	(528,061)	–	–	–	–
Purchase price liabilities*	(29,782)	–	–	(33,293)	(63,075)	–	–	(29,782)	(29,782)
Other financial liabilities*	–	–	–	(554,149)	(554,149)	–	–	–	–
Trade accounts payable*	–	–	–	(1,201,516)	(1,201,516)	–	–	–	–

* No information on fair value as the carrying amount is approximately equal to the fair value.

Receivables at FVOCI relate to trade receivables in connection with factoring.

Valuation techniques used to measure fair value

The market value of financial derivatives is the price at which a party would take over the rights and/or obligations from another party. The market values are calculated based on the market information available on the reporting date using recognized measurement methods:

Forward exchange contracts and interest rate hedging contracts are valued on the basis of reference rates taking into account forward premiums and discounts. Net present value calculations are performed using yield curves.

Commodity contracts are valued on the basis of quoted prices on active stock exchanges.

In addition, credit default risks are taken into account when measuring financial derivatives at fair value ("credit value adjustments"). The calculation basis for the probabilities of default is the credit default spreads per counterparty and for the company.

The Group measures long-term receivables/loans based on parameters such as interest rates, certain country-specific risk factors, creditworthiness of the individual customers, and the risk characteristics of the financed project.

The fair values of the Group's interest-bearing loans are measured using the discounted cash flow method. This is based on a discount rate, which reflects the issuer's borrowing rate at the end of the reporting period. The Company's own non-performance risk was classified as low over the entire period.

Further information about assets and liabilities classified as Level 3

The purchase price liabilities accounted for at fair value through profit or loss in accordance with IFRS 9 recognize an earnout liability from the purchase of Cojali S.L. The liability is recognized at Level 3 of the fair value hierarchy and is discounted using standard market rates with matching maturities.

The material measurement parameters for the earnout liability are the standard market discount rate with a matching maturity and the measurement-related earnings before interest and tax (EBIT). If the discount rate were to increase or decrease by 1 percentage point, the value of the purchase price liability recognized would decrease by € 562 thousand or increase by € 582 thousand, respectively. The EBIT measurement parameter refers both to annual EBIT up to and including 2026 and to the cumulative EBIT generated in this period. The annual measurement-related EBIT is considered reached when agreed target EBIT has been exceeded. The purchase price increases for cumulative EBIT until it reaches a contractually defined maximum level, with results beyond the maximum level not being accounted for in the purchase price calculation.

The liabilities of € 29,782 thousand as at December 31, 2023, decreased to € 23,254 thousand as at June 30, 2024. This is due to the fact that the expectations regarding the purchase price installment as at December 31, 2023 have been met.

10. Events after the Reporting Date

The sale of Knorr-Bremse Systems for Commercial Vehicles OOO, Moscow, Russia, which was recognized as assets held for sale and corresponding liabilities, was closed in early July 2024. The purchase price amounted to € 1,000 thousand. The transaction is expected to produce a loss in the low single-digit millions as part of the deconsolidation.

A sale agreement was signed for the GT Group at the beginning of August 2024. The sale price is an amount in the low double-digit millions. The transaction is expected to produce a loss in the low single-digit millions as part of the deconsolidation. The transaction is expected to close during the course of the second half of 2024.

All antitrust approvals and other government clearance for the acquisition of the rail signaling technology business from Alstom Signaling North America had been given at the time the interim financial statements were prepared. The transaction is expected to close in late August 2024. The agreed purchase price is approximately € 630 million.

There were no other significant events after the reporting date that require reporting here.

11. Related Party Disclosures

Related parties within the meaning of IAS 24 are natural persons or companies that can be influenced by Knorr-Bremse AG, that can exert an influence on Knorr-Bremse AG, or that are under the influence of another related party of Knorr-Bremse AG. Transactions with related parties were conducted at arm's length.

Except for the events presented in the following, no material changes have arisen relative to the information about transactions and relationships disclosed in the 2023 consolidated financial statements.

Changes in the Supervisory Board

Mr. Michael Jell resigned from his position on the Supervisory Board of Knorr-Bremse AG with effect from June 30, 2024, and has left the Supervisory Board.

Mr. Thomas Mittmann succeeded him as a new member of the Supervisory Board of Knorr-Bremse AG with effect from July 1, 2024.

12. Legal Risks

The Administrative Council for Economic Defense (CADE) in Brazil decided on June 23, 2020, to open formal proceedings for a possible violation of the prohibition of implementation under merger control law by Knorr-Bremse when acquiring the minority stake in Haldex AB in September 2016. On July 12, 2024, the Office of the Superintendent-General of CADE decided to close the proceedings on the grounds that the 2016 acquisition did not require a merger control notification to CADE, thereby exonerating Knorr-Bremse from the allegation.

For all other legal risks described in section H.9 of the 2023 notes to the consolidated financial statements, no new findings or information had arisen by June 30, 2024.

13. Segment Reporting

INFORMATION ON REPORTABLE SEGMENTS

	Reportable Segments			
in € thousand	Rail Vehicle Systems	Commercial Vehicle Systems	Other segments and consolidation	Group
				1st half of 2024
External revenues	1,980,453	2,006,312	353	3,987,119
Intersegment revenues	450	951	(1,401)	–
Segment revenues	**1,980,903**	**2,007,264**	**(1,048)**	**3,987,119**
EBIT	302,938	209,256	(36,696)	475,499
Operating EBIT	**303,638**	**222,804**	**(36,696)**	**489,746**
Share of profit or loss from companies accounted for using the equity method	(2,458)	2,579	0	121
Net working capital	**1,047,452**	**497,384**	**1,034**	**1,545,869**
Capital expenditure (before IFRS 16 and acquisitions)	**53,104**	**77,874**	**5,135**	**136,113**
				1st half of 2023
External revenues	1,813,167	2,104,446	(159)	3,917,454
Intersegment revenues	304	658	(962)	–
Segment revenues	**1,813,471**	**2,105,104**	**(1,121)**	**3,917,454**
EBIT	251,054	179,100	(30,877)	399,277
Operating EBIT	**253,041**	**192,897**	**(30,877)**	**415,062**
Share of profit or loss from companies accounted for using the equity method	(15,767)	2,486	(316)	(13,596)
Net working capital*	**1,043,410**	**501,602**	**(1,308)**	**1,543,703**
Capital expenditure (before IFRS 16 and acquisitions)	**45,475**	**87,835**	**6,059**	**139,369**

* The comparison information was adjusted in connection with the correction of the Cojali purchase price allocation in the 2023 fiscal year (see 2023 Annual Report, Notes to the Consolidated Financial Statements, section C.3.)

Responsibility Statement

To the best of our knowledge, and in accordance with the applicable reporting principles for half-year financial reporting, the interim consolidated financial statements give a true and fair view of the assets, liabilities, financial position and profit or loss of the Group, and the Group's interim management report includes a fair view of the development and performance of the business and the position of the Group, together with a description of the material opportunities and risks associated with the expected development of the Group for the remaining months of the fiscal year.

Munich, August 07, 2024

Knorr-Bremse AG
Executive Board

MARC LLISTOSELLA	DR. NICOLAS LANGE	DR. CLAUDIA MAYFELD	BERND SPIES	FRANK MARKUS WEBER

Review Engagement Certificate

To Knorr-Bremse Aktiengesellschaft, Munich

We have reviewed the condensed interim consolidated financial statements of the Knorr-Bremse AG – comprising consolidated balance sheet, consolidated statement of income, consolidated statement of comprehensive income, consolidated statement of cash flows, consolidated statement of changes in equity and notes to the condensed interim consolidated financial statements – together with the interim group management report of the Knorr-Bremse AG, for the period from January 1 to June 30, 2023 that are part of the semi annual (or quarterly financial report) according to § 115 WpHG ["Wertpapierhandelsgesetz": "German Securities Trading Act"]. The preparation of the condensed interim consolidated financial statements in accordance with International Accounting Standard IAS 34 "Interim Financial Reporting" as adopted by the EU, and of the interim group management report in accordance with the requirements of the WpHG applicable to interim group management reports, is the responsibility of the Company's management. Our responsibility is to issue a report on the condensed interim consolidated financial statements and on the interim group management report based on our review.

We performed our review of the condensed interim consolidated financial statements and the interim group management report in accordance with the German generally accepted standards for the review of financial statements promulgated by the Institut der Wirtschaftsprüfer (IDW). Those standards require that we plan and perform the review so that we can preclude through critical evaluation, with a certain level of assurance, that the condensed interim consolidated financial statements have not been prepared, in material respects, in accordance with IAS 34, "Interim Financial Reporting" as adopted by the EU, and that the interim group management report has not been prepared, in material respects, in accordance with the requirements of the WpHG applicable to interim group management reports. A review is limited primarily to inquiries of company employees and analytical assessments and therefore does not provide the assurance attainable in a financial statement audit. Since, in accordance with our engagement, we have not performed a financial statement audit, we cannot issue an auditor's report.

Based on our review, no matters have come to our attention that cause us to presume that the condensed interim consolidated financial statements have not been prepared, in material respects, in accordance with IAS 34, "Interim Financial Reporting" as adopted by the EU, or that the interim group management report has not been prepared, in material respects, in accordance with the requirements of the WpHG applicable to interim group management reports.

Munich, August 7, 2024

KPMG AG
Wirtschaftsprüfungsgesellschaft

Huber-Straßer
Wirtschaftsprüferin
[German Public Auditor]

Mokler
Wirtschaftsprüfer
[German Public Auditor]