

Financial statements press conference for fiscal 2017

WELCOME

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SHAPING MOBILITY

Financial statements press conference for fiscal 2017

AGENDA

- Overview Knorr-Bremse Group 2017
- Financial statement fiscal 2017
- Development of divisions 2017
- Outlook fiscal 2018
- Summary
- Q & A



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OVERVIEW KNORR-BREMSE GROUP 2017
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2017 – a record year for Knorr-Bremse AG

- Sales: **EUR 6.24 billion** (2016: EUR 5.49 billion) +13.5 %
- EBITDA: **EUR 1.06 billion** (2016: EUR 1.01 billion) +5.0 %
- Net income: **EUR 580 million** (2016: EUR 550 million) +5.5%
- R&D expenditure: **EUR 359 million** (2016: EUR 328 million) 9.4%
- Orders on books: **EUR 4.98 billion** (2016: EUR 4.15 billion) +19.8 %

 **Confident start to fiscal 2018**



Development of rail vehicle markets in 2017*



NORTH AMERICA

- Passenger transport increasing
- Freight transport still in cyclical decline

SOUTH AMERICA

- Passenger transport: continued low investment
- Freight transport still in decline at low level

EUROPE

- Positive development in passenger transport
- Freight transport in decline and with shifting, influenced by Russia and South Africa

ASIA

- Passenger transport positive and stabilization in Chinese high-speed market
- Slight recovery in freight segment

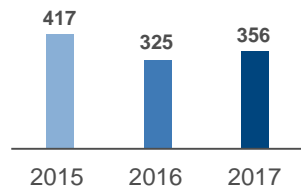
*Source: Estimates, Knorr-Bremse.

Development in commercial vehicle production 2017*

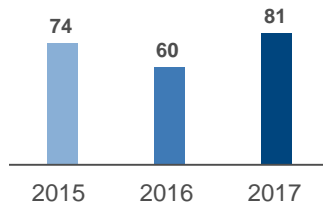
(truck production rate in 1,000 units)



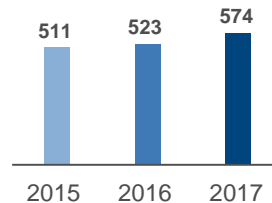
NORTH AMERICA



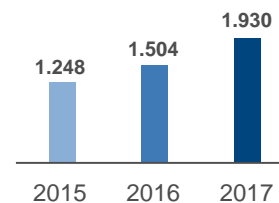
SOUTH AMERICA



EUROPE

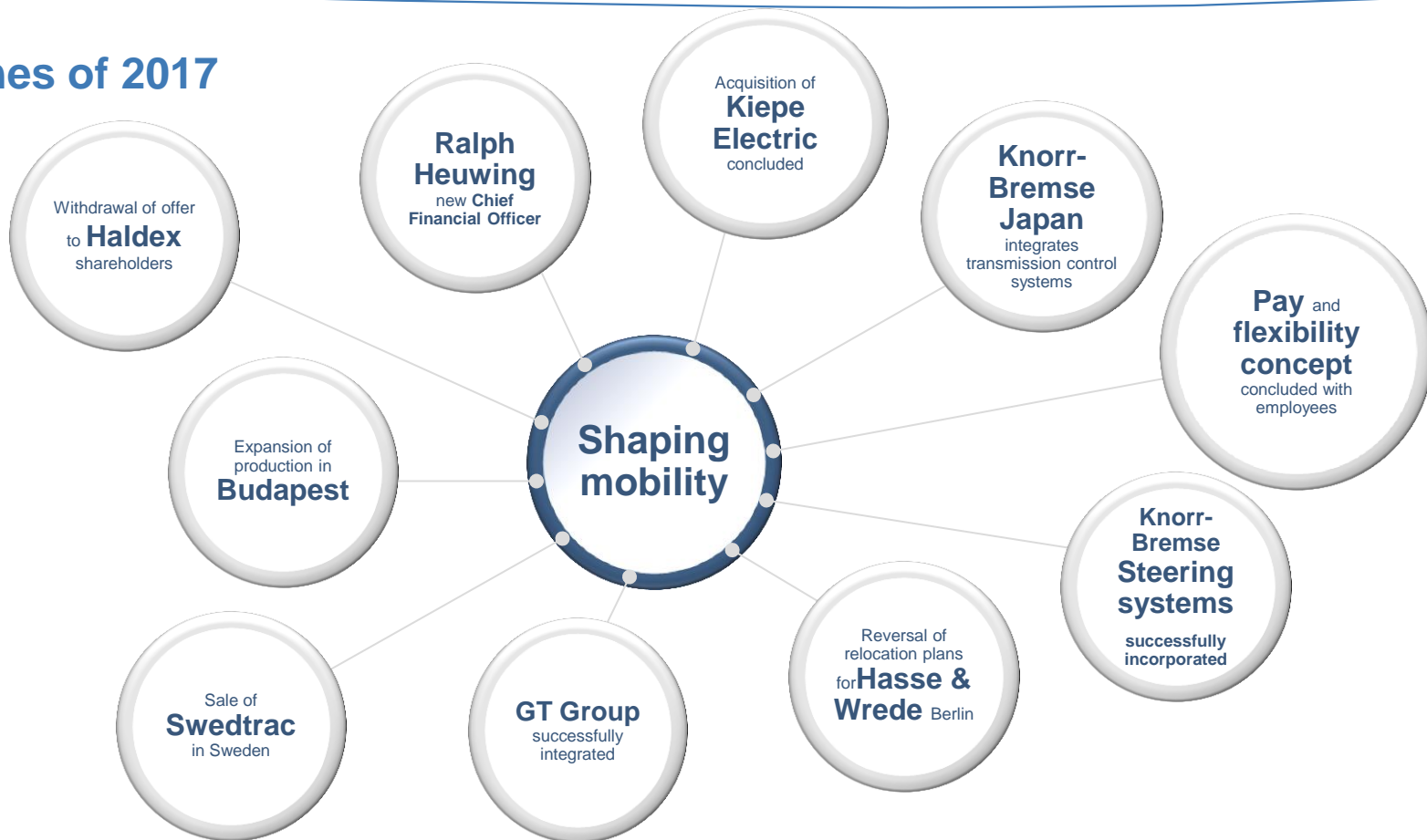


ASIA



*Figures for air-braked trucks >6t; source: Internal market research, Knorr-Bremse

Headlines of 2017



Knorr-Bremse is ideally positioned to shape the trends of the future

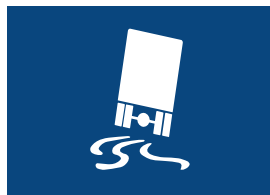
Knorr-Bremse's DNA:

SAFE

CLEAN

ECONOMICAL

MEGATREND
URBANIZATION



Traffic safety



Electrification



Life-cycle cost

MEGATREND
DIGITALIZATION



Automated driving

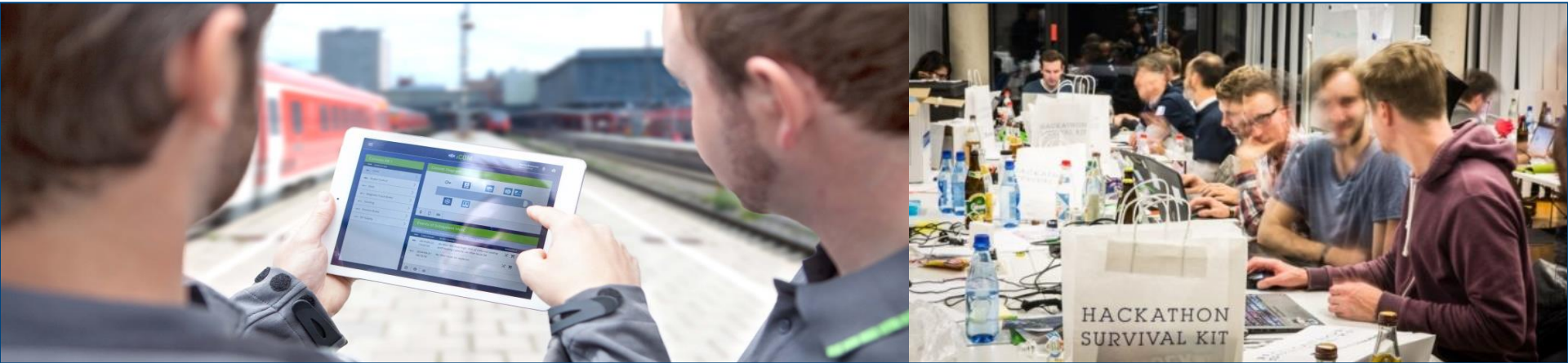


Emission reduction
+ e-mobility



Connectivity

Megatrend Digitalization at Knorr-Bremse means building networks



- iCOM and ProFleet Connect are examples of digital services based on highly interconnected Knorr-Bremse systems
- Digital Days in February 2017, involving 120 staff from all regions, from Executive Board level to junior employees, promote development of internal networks
- Knorr-Bremse strengthens cooperation with start-ups at various levels e.g. participation in the TechFounders accelerator program
- Digital Board steers and accelerates selected Group digitalization activities

Megatrend autonomous driving – Knorr-Bremse as a development partner



- Autonomous driving as next technological step towards reducing accident numbers, transport costs and emissions
- Automated driving functions are based on Knorr-Bremse's many years of experience with driver assistance systems: Autonomous Yard Maneuvering
- Detailed roadmap for gradual implementation of associated function with long-term goal of a highway pilot
- The acquisition of Knorr-Bremse Steering Systems enables Knorr-Bremse to respond more quickly and more actively on the path to autonomous driving

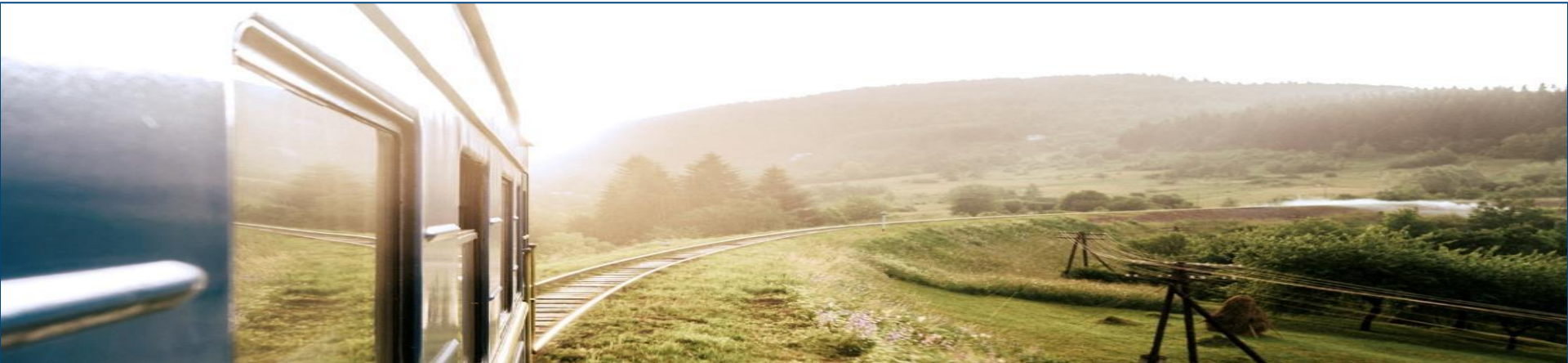
Megatrend electrification – Kiepe Electric as a key player



- E-mobility as a new market opportunity: Kiepe Electric (formerly Vossloh Kiepe) has more than 100 years of experience with electric drive systems for rail vehicles.
- Through this acquisition, Knorr-Bremse's portfolio now includes advanced drive technologies for low-emission

- public transport, particularly for metros, light rail vehicles, and regional rail networks, but also for electrically powered commercial vehicles.
- In Motion Charging (IMC): Electric hybrid buses for full-time service in regions without overhead lines

Sustainable corporate governance



- Product remanufacturing: Sales of remanufactured products account for 7.5 % of total sales:
 - Rail vehicles:** 45,000 products reconditioned at the Service Center in Berlin in 2017, for example
 - Commercial vehicles:** 1,400 tonnes of CO₂, 416 tonnes of materials, 5,069 MWh of energy saved through remanufacturing
- Development of a code of behavior for suppliers and evaluation of 437 suppliers
- International expansion of the new compliance organisation
- Certification of 132 business units and production sites worldwide

Prospects for people



- Knorr-Bremse Global Care More than 36,000 people were reached in 2017 with EUR 2 million of aid
- Local Care involvement of staff at Knorr-Bremse plants worldwide: Support for 600 projects
- Support for volunteers: Staff of Knorr-Bremse are involved in social activities worldwide

Employees share in the company's success

- Attractive agreement results from **agreement with employee representatives**
- Scope of application: for approx. 4,500 employees at **almost all Group companies** in Germany not covered by a collective agreement
- In total, **10% more pay** over the next three years
- **Flexible working time arrangements:**
 - **Working time autonomy** for white-collar workers
 - Reduction / increase of the **weekly working hours** on a temporary / permanent basis (provided that this is compatible with operational requirements)
 - One-time opportunity to **convert a pay rise** into a reduction of the working week

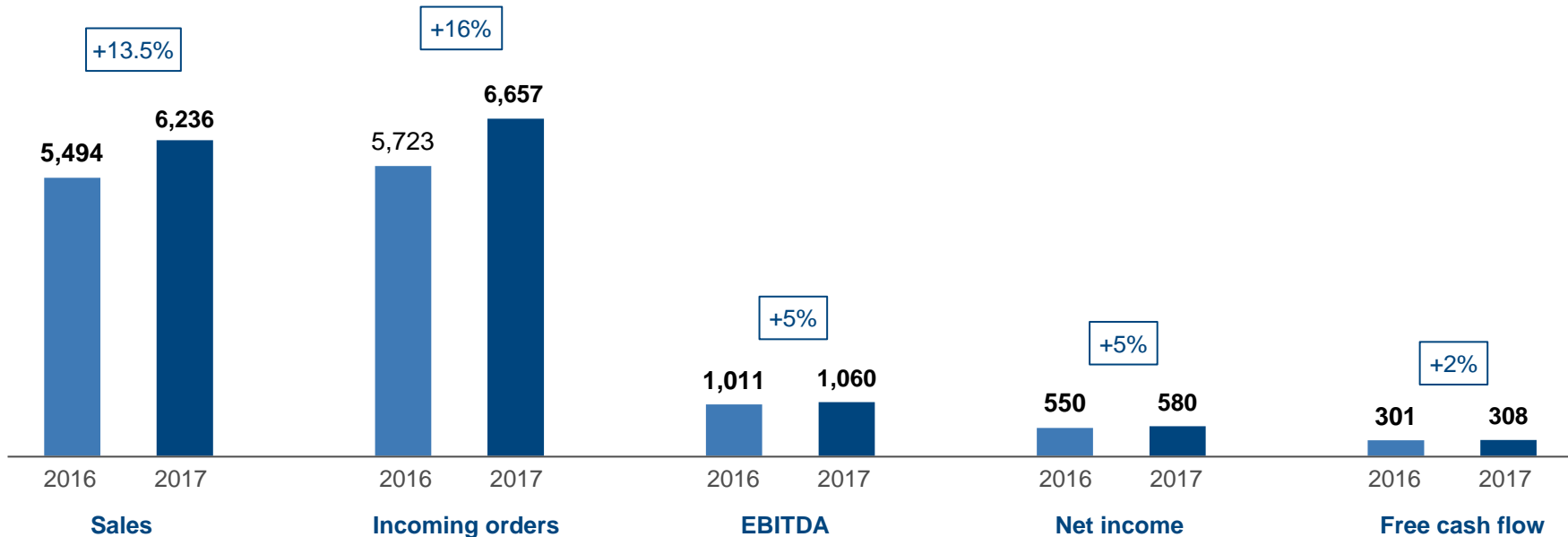
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FINANCIAL STATEMENT
FISCAL 2017

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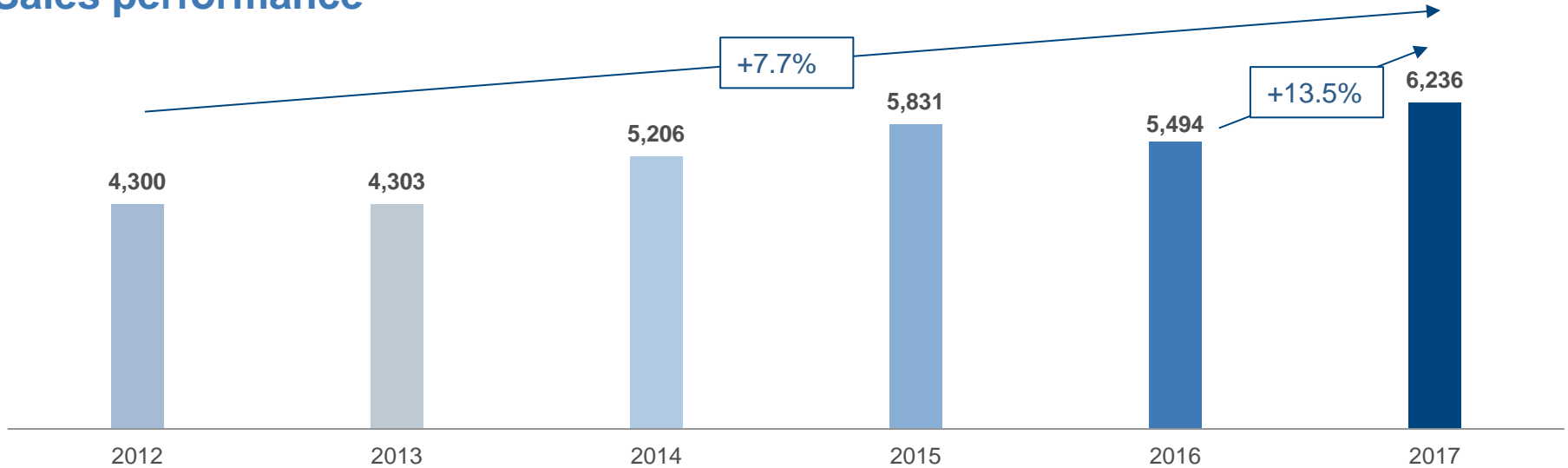
Development of key financial indicators*



- Knorr-Bremse achieved gains in all key financial indicators in 2017 and is set to maintain a sustainable growth trajectory
- EBITDA amounted to EUR 1,135 million (+12%) before extraordinary expenses (EUR 75 million)

*In EUR millions.

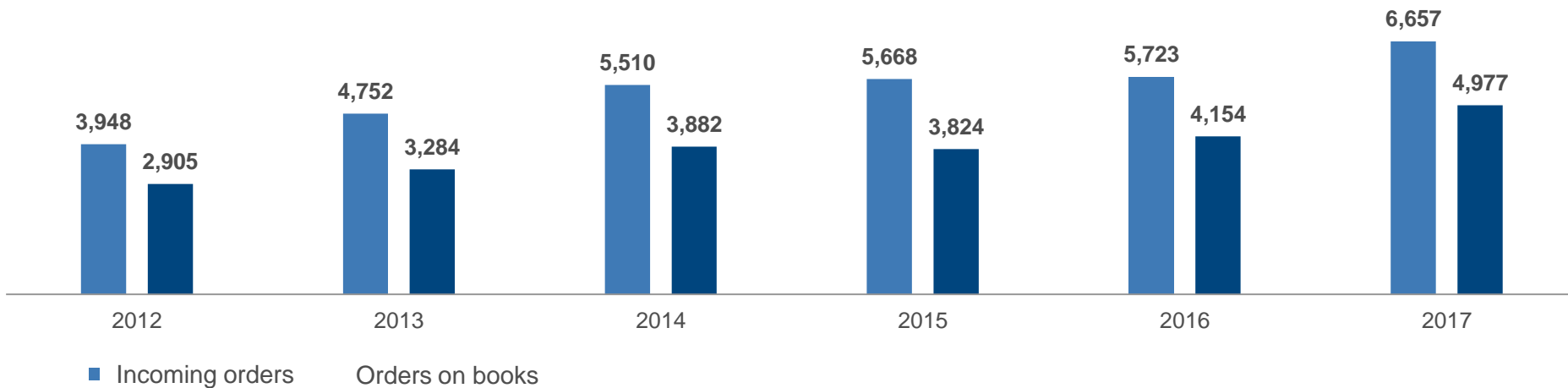
Sales performance*



- Knorr-Bremse achieved sales growth of 13.5% in 2017 compared with the previous year, attributable to both divisions, Rail Vehicle Systems and Commercial Vehicle Systems; around EUR 240 million, or 4%, of this non-organic growth at Group level
- Annual sales growth of around 8% p.a. on average has been achieved in the last five years

*In EUR millions.

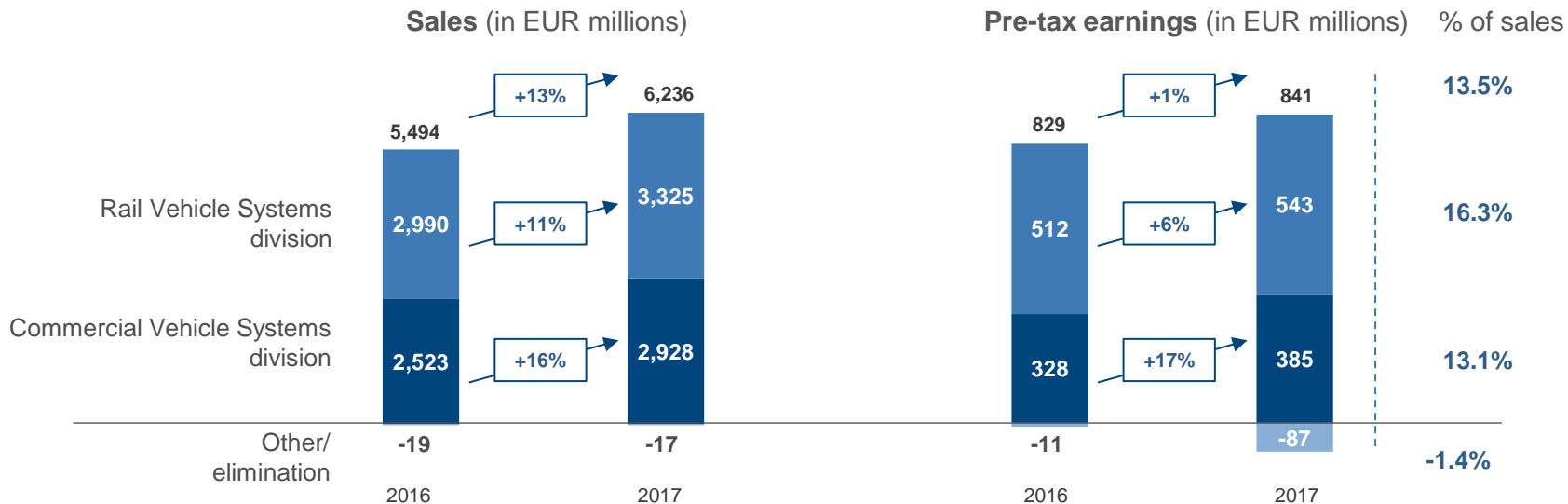
Incoming orders and orders on books*



- Steady growth in orders continues throughout 2017
- Robust book-to-bill ratio** of 1.07 as basis for continued future growth
- Orders on books guarantee almost 10 months of 2018 sales

*In EUR millions. **Incoming orders/sales.

Sales and pre-tax earnings by division



- Double-digit growth rates in sales for both divisions
- Pre-tax earnings in 2017 impacted by non-operating extraordinary effects (totaling EUR 75 million); adjusted for this, earnings growth of 10% in the Group

Earnings performance*

	2016	2017	Δ		2016	2017	Δ
EBITDA	1,011	1,060	+5%	EBITDA margin	18.4%	17.1%	-1.4pp
EBIT	832	853	+2%	ROCE	43.7%	39.1%	-4.6pp
EBT	829	841	+1%				
Net income	550	580	+5%				

- All earnings ratios of the Knorr-Bremse Group were up compared with the previous year
- EBITDA margin below figure for previous year on account of non-operational extraordinary expenses
- The high level for the previous year was confirmed in operational terms

*In EUR millions.

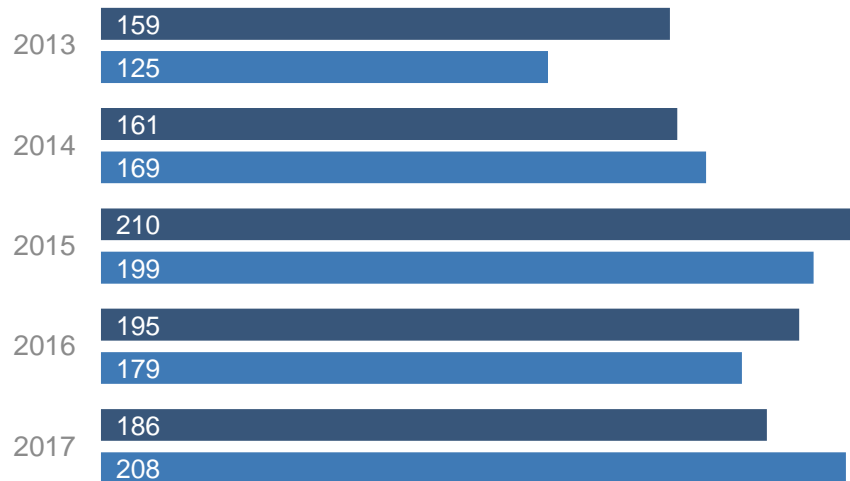
Cash flow*

	2016	2017
Gross cash flow	732	793
% of sales	13.3%	12.7%
Change in working capital	3	-93
Investments	-195	-186
Change in accruals	10	-23
Miscellaneous	-249	-183
Free cash flow	301	308
% of sales	5.5%	4.9%

- Solid earnings performance results in increase in **gross cash flow of 8%** compared with previous year
- **Working capital growth** proportional to volume growth
- Investments remain **at high level in 2017** as basis for further worldwide growth
- Acquisitions totaling EUR 145 million in 2017
- Free cash flow **2% above previous year's level**

*In EUR millions.

Investments*



■ Investments

■ Depreciation

- At **3.0% of sales**, investments continue to grow at a high level and underscore the Group's growth and innovation priorities

■ Highlights 2017:

- Extension of **Guo Tong joint venture in China** and the new **Business Services Center at Liberec in Czech Republic**
- Machinery and equipment for **new product generations**
- Increased **growth-related investment** for supplier tooling

*In EUR millions.

Expenditure for Research & Development*



- **Increase in R&D expenditure of 9%** over previous year to further consolidate product development
- **3,720 employees** engaged in R&D
- Newly operational in 2016: **ATLAS (Advanced Test Laboratory for Adhesion-based Systems)** test rig for rail vehicles
- **Patented braking distance optimization system** for wide range of weather conditions
- Own Center of Competence (CoC) for **Automated Driving** in the Commercial Vehicle Systems division for further development of **driver assistance functions**
- Concepts for **truck motion control** during automated driving, stabilization with braking and steering in critical situations

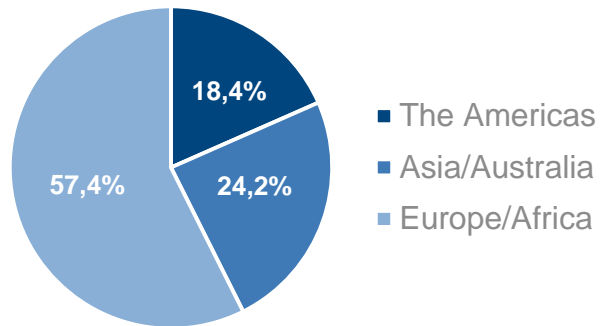
*In EUR millions.

Employees by division and region

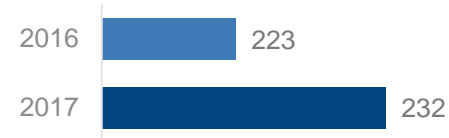
(as at: 31.12.; incl. temporary workers)



Employee distribution 2017 (in %)



Sales per employee (in EUR thousands)



	2016	2017	Δ
Knorr-Bremse Group	24,565	27,705	+13%
Rail Vehicle Systems division	14,440	16,051	+11%
Commercial Vehicle Systems division	9,674	11,082	+15%

- Growth-related headcount increase in both divisions; sales per employee increase from EUR 223,000 in 2016 to EUR 232,000 in 2017
- Agreement with employee representatives on attractive pay increase and flexibilization of working hours

A-category ratings from Moody's and S&P for 2017 confirmed



MOODY'S

Jan 2017	A2	Stable	Published
Jul 2016	A2	Stable	Published
Jun 2015	A3	Positive	Published
Jun 2014	A3	Stable	Published
Jun 2013	A3	Stable	Published
Jun 2012	A3	Stable	Published
Aug 2011	A3	Stable	Published
May 2010	Baa1	Positive	Published
Jun 2009	Baa1	Stable	Published
Jun 2008	Baa1	Positive	Published
May 2007	Baa1	Stable	Published
Jan 2006	Baa1	Stable	Published
Sep 2004	Baa2	Positive	Published
Feb 2004	Baa2	Stable	Published
Jan/Apr 2003	Baa2	Stable	Published
Feb 2002	Baa2	Negative	Published
Jan 2001	Baa2	Stable	Indicative

S&P Global

Jun 2017	A	Stable	Published
Jun 2016	A	Stable	Published
Aug 2015	A-	Positive	Published
Nov 2014	A-	Stable	Published
Oct 2013	A-	Stable	Published
Oct 2012	A-	Stable	Published
Aug 2011	A-	Stable	Published
May 2010	A-	Stable	Published
Jun 2009	BBB+	Positive	Published
Jun 2008	BBB+	Positive	Published
May 2007	BBB+	Stable	Published
Mar 2006	BBB+	Stable	Published
Jan 2006	BBB	Positive	Published
Feb 2004	BBB	Positive	Published
Jan/Apr 2003	BBB	Stable	Published
Jul 2002	BBB	Stable	Published
Jan 2001	BBB	Stable	Indicative

- Moody's once again confirms rating of "A2 Outlook stable" in 2017
- Standard & Poor's also leaves rating unchanged from previous year at "A/Outlook stable"
- Knorr-Bremse has been rated in the investment grade every year since first rating 17 years ago
- Agencies acknowledge stable performance, strong liquidity, and sound financial policy
- With these ratings, Knorr-Bremse is one of the world leaders among suppliers to the automobile and commercial vehicle industries

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OUTLOOK ON FISCAL 2018
SHAPING TOMORROW'S TRANSPORTATION. TOGETHER

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Development of the rail vehicles markets in 2018*



NORTH AMERICA

- Passenger transport increasing
- Freight transport bottoming out

SOUTH AMERICA

- Passenger transport: still in decline
- Freight transport bottoming out at very low level

EUROPE

- Passenger & freight transport showing positive signs
- Continued stabilization in the Russian market

ASIA

- Passenger transport growing and stabilization in the Chinese high-speed market
- Stabilization at slightly lower volume

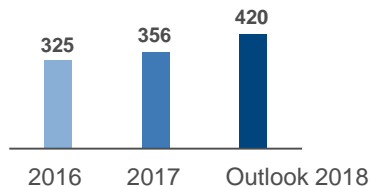
*Source: Estimates, Knorr-Bremse.

Development of commercial vehicle production in 2018*

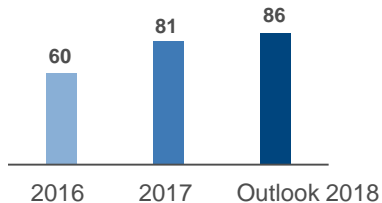
(truck production rate in 1,000 units)



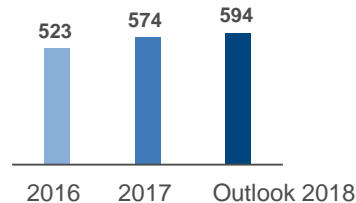
NORTH AMERICA



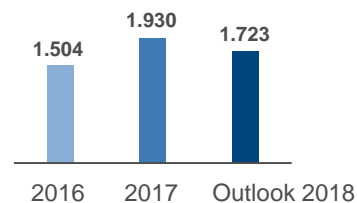
SOUTH AMERICA



EUROPE



ASIA



*Figures for air-braked trucks >6t; source: Internal market research, Knorr-Bremse

Knorr-Bremse makes successful start to 2018



- Participation in the growing commercial vehicles market in China: Expansion of joint venture with Chinese commercial vehicle manufacturer Dongfeng and framework agreement signed with FAW Jiefang Automotive Company
- Knorr-Bremse expects moderate growth in sales to EUR 6.4 to 6.6 billion and is targeting EBITDA between 17% and 19% for 2018
- Optimization of business portfolio and strict cost management
- Optimization of capital structure
- The company is being made fit for the capital markets, in particular with the switch to IFRS

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SUMMARY

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Knorr-Bremse is ideally positioned to shape the trends of the future

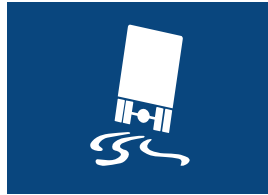
Knorr-Bremse's DNA:

SAFE

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Traffic safety



Electrification



Life-cycle cost

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DIGITALIZATION



Automated driving



Emission reduction
+ e-mobility



Connectivity

Global market leader in two attractive fields



Rail Vehicle Systems

- Complete braking systems and integrated sub-systems for OEMs
- Comprehensive aftermarket and service offering for OEMs and operators
- Global presence in production, sales and service in more than 30 countries

Commercial Vehicle Systems

- Systems for commercial vehicles, trailers and buses (OEMs)
- Comprehensive aftermarket and service offering for OEMs and operators
- Global presence in production, sales and service in more than 20 countries

OEM
business

Braking systems

(e.g. air supply, brake control)



On-board systems

(e.g. door systems, air-conditioning systems, and power converters)



On-board systems

(e.g. signaling equipment, simulation)



Braking systems & air management

(e.g. disc and drum brakes, brake control units, compressors, air management)



Powertrain

(e.g. drive control systems, dampers)



Steering systems

(e.g. steering and driver assistance systems)



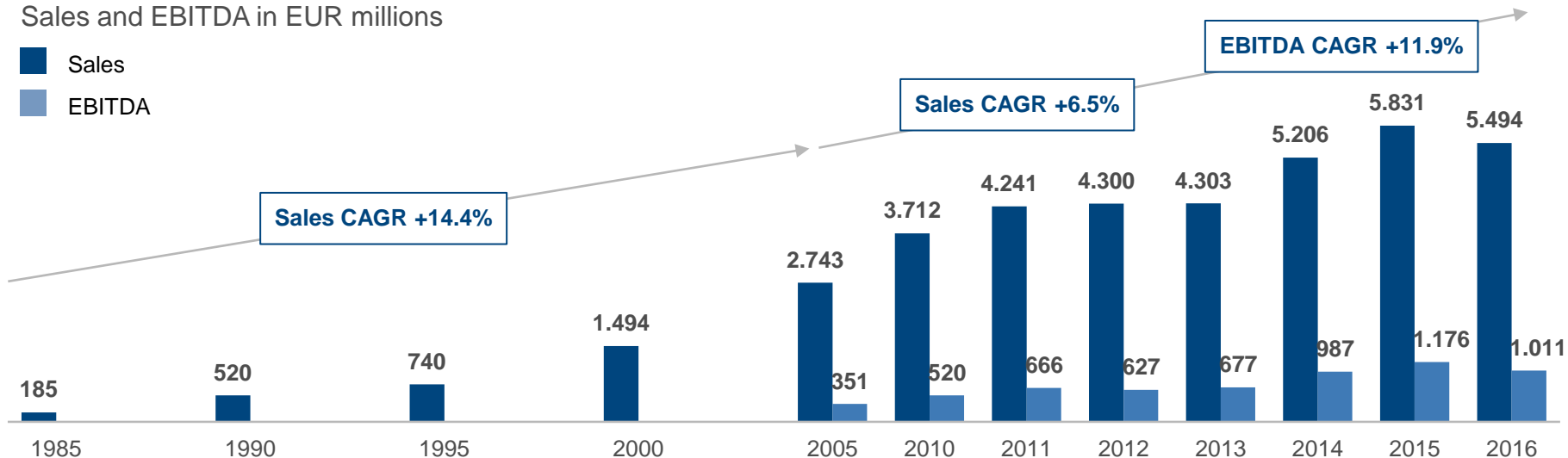
Aftermarket
& Service



Exceptional growth dynamic for decades

Sales and EBITDA in EUR millions

- Sales
- EBITDA



Long-standing track record in sales and profits growth

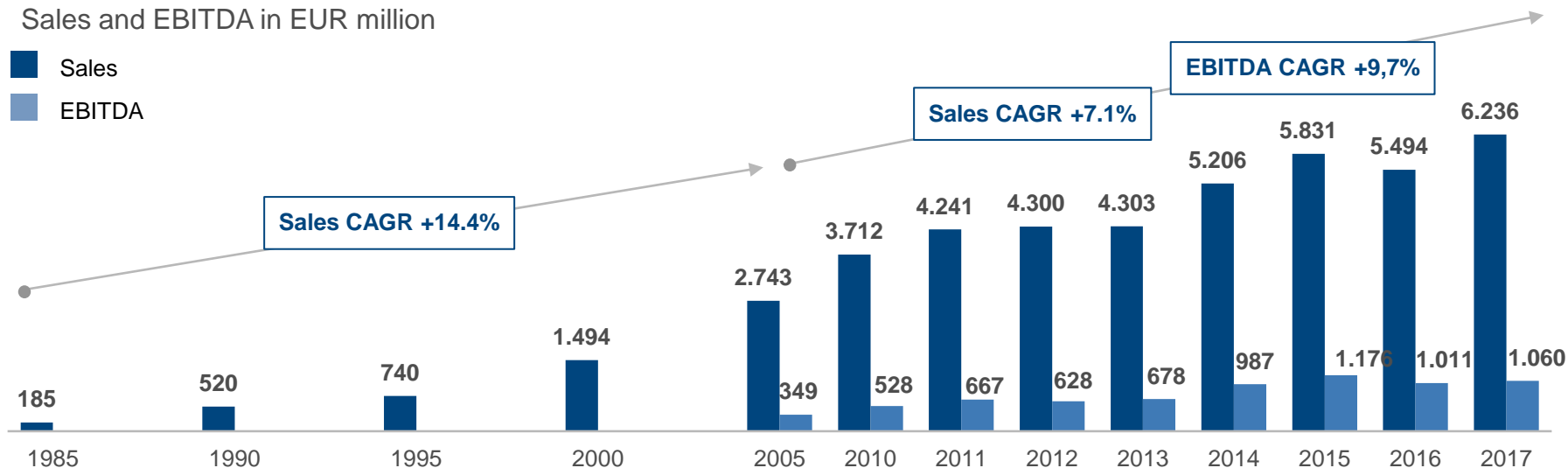
Notes: Sales reported 1985: EUR 254 million. Sales correspond to sales excluding EUR 185 million

Source: Knorr-Bremse Financial Reporting.

Exceptional growth dynamic for decades

Sales and EBITDA in EUR million

■ Sales
■ EBITDA

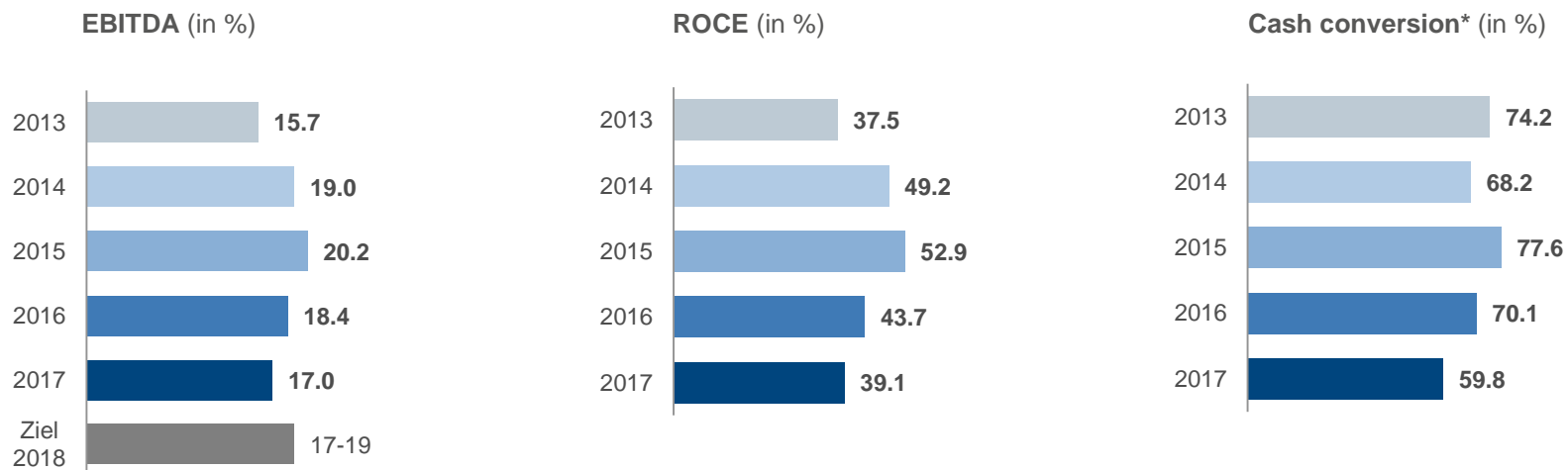


▶ Longstanding track record in sales and profit growth

Notes: Reported sales in 1985: EUR 254m. Sales excluding sales from disposed non-core assets equals EUR 185m; source: Knorr-Bremse financial reporting

Outstanding financial profile - sustainable profitability

Operational indicators 2013–2017



- Remarkable key figures in industry comparison
- Marked efficiency and cost discipline
- Consecutive A-rating for many years: Bond (2021) with 0.5% yield

*Operating cash flow/EBITDA.

Unique portfolio - Stability and synergy

- **Regionally balanced portfolio** (2017: Europe: 51%, Asia: 27%, America: 22%)
- High degree of **local value added**
- **Cycle stability** between rail vehicles and commercial vehicles
- **High aftermarket share** (2017: 35% of sales) with stable sales development
- **Broad product range** and **distinctive systems competence**
- **Low dependence** on individual customers (top 2017 share 2017: 20-25%)
- **High market access barriers:** safety relevance, homologation, regulatory systems
- **Shared basic technologies with potential for synergy:** pneumatic systems, electronics, sensors, software

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Q & A

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