



**KNORR-BREMSE**



**IR Presentation**

December 2018

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# The Knorr-Bremse leadership team



**Klaus Deller**  
CEO

- 2009-present: Knorr-Bremse CEO, previously Head of RVS (3 years) and Head of CVS (6 years)
- 2004-2009: Brose Fahrzeugteile Deputy CEO
- 1991-2003: Robert Bosch Executive Vice President
- Diploma in Mechanical Engineering, Applied Mathematics, Master of Business Administration (MBA)



**Ralph Heuwing**  
CFO

- 2017-present: Knorr-Bremse CFO
- 2007-2017: Dürr (MDAX listed) CFO
- 1990-2007: The Boston Consulting Group Partner and Managing Director
- Diploma in Mechanical Engineering, Master of Business Administration (MBA)



**Dr. Peter Laier**  
Head of CVS

- 2016-present: Knorr-Bremse Head of CVS
- 2014-2015: Benteler International COO
- 2013-2014: Osram Licht CTO
- 2000-2012: Continental Executive Vice President
- PhD and Diploma in Mechanical Engineering



**Dr. Jürgen Wilder**  
Head of RVS

- 2018-present: Knorr-Bremse Head of RVS
- 2015-2017: DB Cargo AG CEO
- 2013-2015: Siemens AG Mainline Transportation Global Business Unit CEO
- 2011-2013: Siemens AG Head of Strategy Infrastructure and Cities Sector
- Doctorate in Physics

Professional Experience

27

Years with Knorr-Bremse

9

Professional Experience

28

Years with Knorr-Bremse

1

Professional Experience

22

Years with Knorr-Bremse

2

Professional Experience

18

Years with Knorr-Bremse

1

Notes: RVS - Rail Vehicle Systems; CVS - Commercial Vehicle Systems



# Knorr-Bremse – One of Germany’s most successful industrial companies



## KNORR-BREMSE



Family-Ownership,  
heritage and unique DNA



Global market leader  
for braking systems



Shared pneumatics  
experience between RVS  
and CVS



Technology leadership

### 2017 key financials

Sales  
€6.2bn  
(>10% CAGR<sup>1)</sup>  
since 1989)

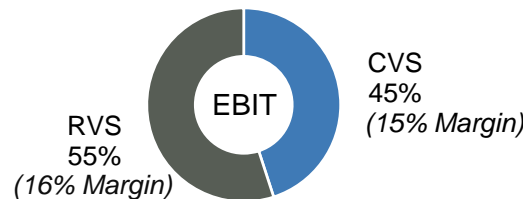
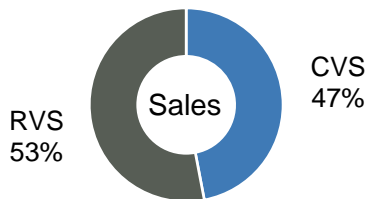
EBITDA  
€1.1bn  
(margin 18.1%)

EBITA  
€947m  
(margin 15.4%)

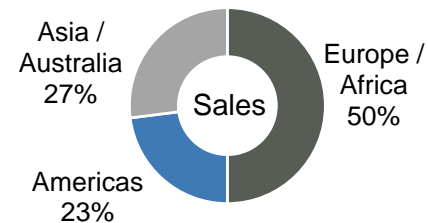
R&D  
€359m  
(~6% of sales)

Aftermarket  
~35% of sales

### Balanced portfolio<sup>2)</sup> ...



### ... and diversified global footprint with high local content



- 30+ countries
- 100+ sites
- c. 28k employees<sup>3)</sup>

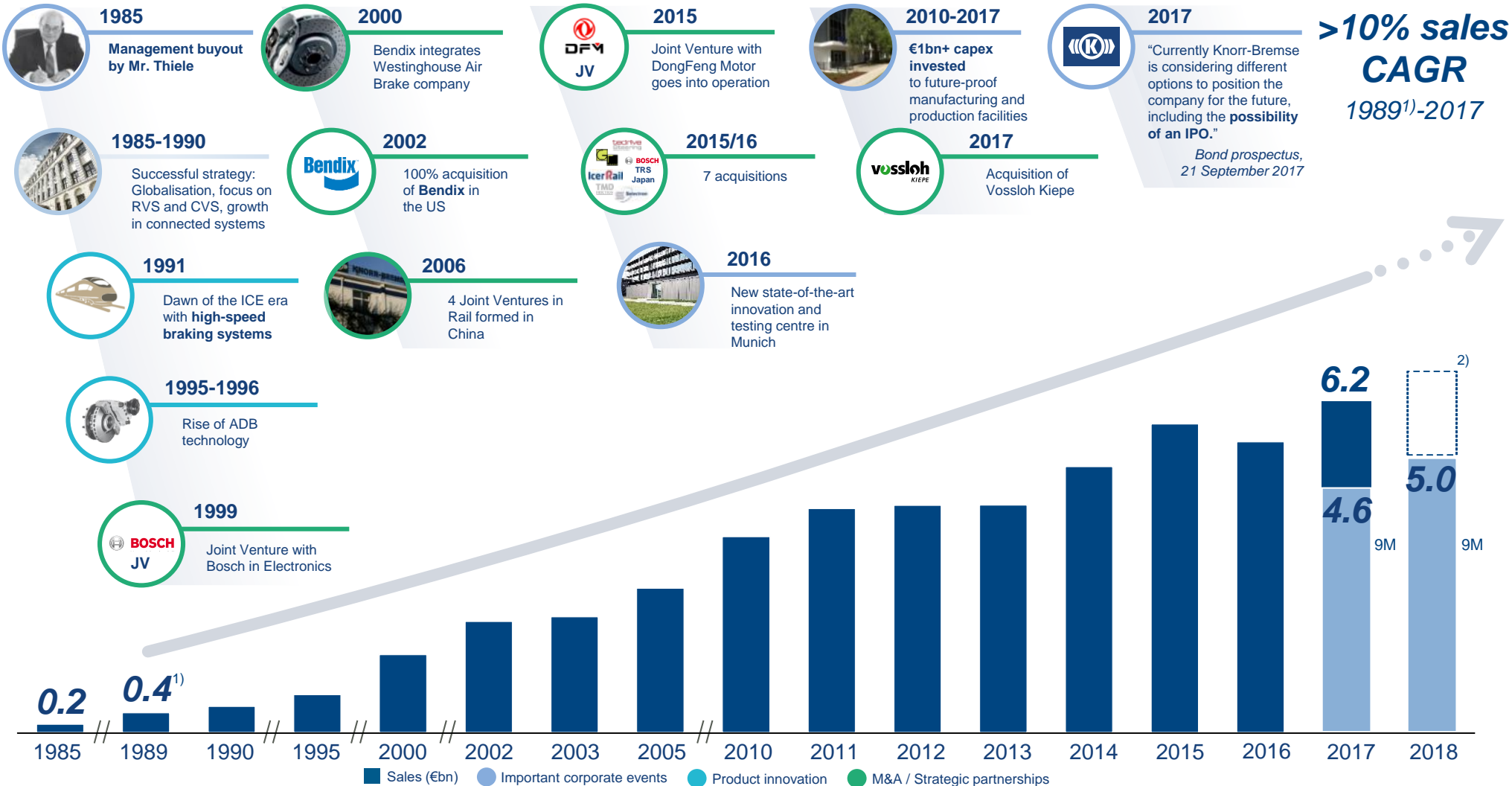
Notes: Sales, EBITDA, EBITA, and EBIT for 2017 based on financial statements prepared in accordance with IFRS, other financial figures for 2017 prepared in accordance with German GAAP (HGB); Aftermarket share based on German GAAP (HGB) where BilRUG sales allocated proportionally between OE and aftermarket; RVS – Rail Vehicle Systems; CVS – Commercial Vehicle Systems;

<sup>1)</sup> CAGR 1989–2017 based on German GAAP (HGB), 1989 – first year when consolidated accounts are available; <sup>2)</sup> Excluding consolidation/other; <sup>3)</sup> Including human resources leased staff;

Source: Knorr-Bremse information



# Over 30 years of consistent strong growth



Notes: 1986-2017 based on financial statements prepared in accordance with German GAAP (HGB) and H1 2017 and H1 2018 based on financial statements prepared in accordance with IFRS. <sup>1)</sup> 1989 – first year when consolidated accounts are available; <sup>2)</sup> Extrapolation of 9M-2018 sales for full 2018; Source: Knorr-Bremse information

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# Knorr-Bremse – A best-in-class industrial company

- 1 Global #1**

Number one supplier for braking systems and a leading supplier of other safety critical rail and commercial vehicle systems protected by high barriers to entry
- 2 Synergistic business**

Technology and scale benefits between rail and commercial vehicles
- 3 Market outperformance**

Consistent outperformance of attractive end-markets driven by megatrends and increasing content per vehicle
- 4 The industry innovator**

Driving innovation in mobility and transportation technologies through R&D, quality excellence and edge in connected systems
- 5 Resilience**

Resilient business model, supported by broad geographical and customer diversification, high aftermarket exposure and strong localisation
- 6 Superior financial profile**

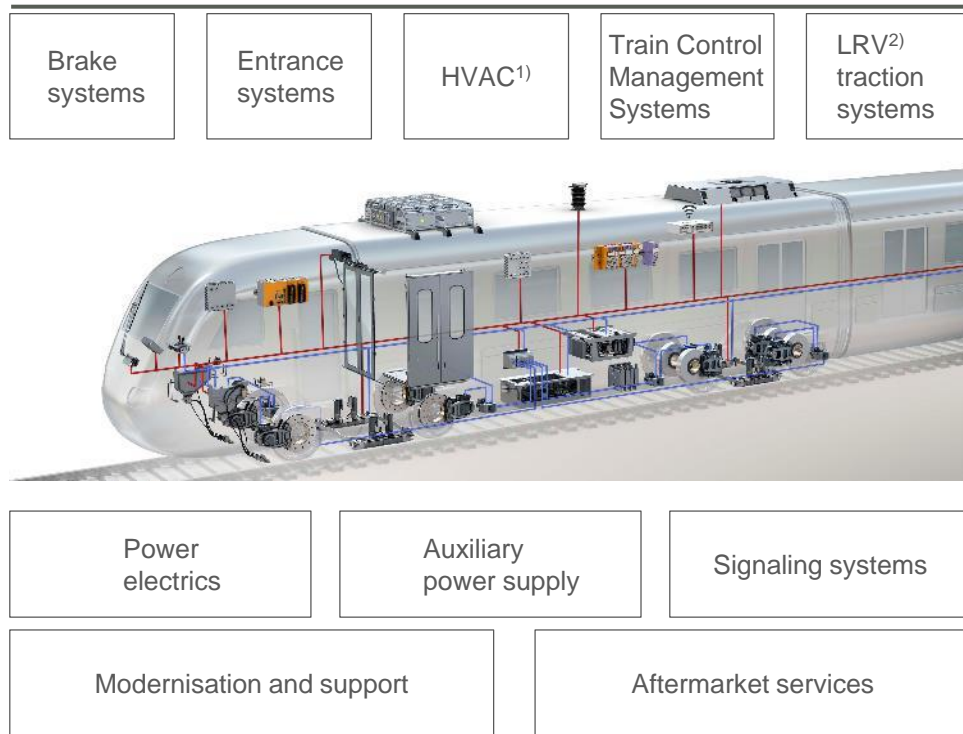
Strong growth, profitability, and cash generation with high earnings visibility
- 7 Leadership excellence**

Highly experienced management team with strong track record and clear vision for future value creation

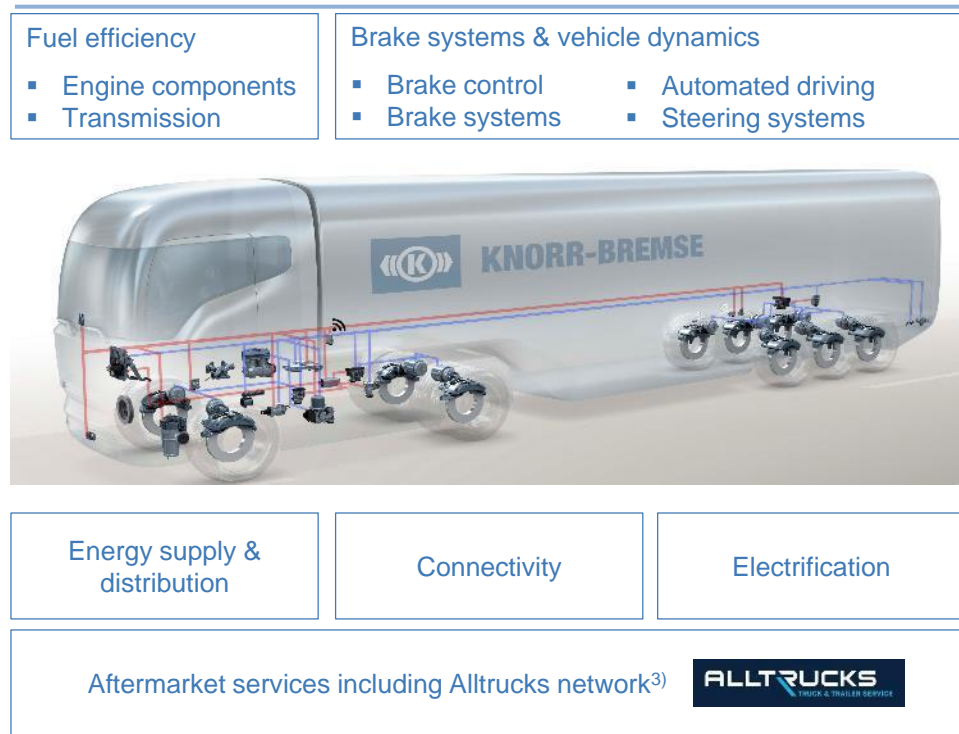


# 1 Global #1 – The world's leading supplier of safety critical rail and commercial vehicle systems

## RVS offering (2017: 53% of sales, 55% of EBIT)



## CVS offering (2017: 47% of sales, 45% of EBIT)



## Preferred partner for all major OEMs<sup>4)</sup> and operators across the globe

<p>Example car builders</p>		<p>Example operators</p>	
<p>HITACHI Inspire the Next</p>			

Notes: 2017 financials based on IFRS excluding consolidation/other; <sup>1)</sup> HVAC – Heating, ventilation and air conditioning; <sup>2)</sup> LRV – Light rail vehicle; <sup>3)</sup> Joint Venture between Bosch, Knorr-Bremse and ZF providing a range of workshop services relating to the repair and maintenance of commercial vehicles across all brands; <sup>4)</sup> OEM – Original Equipment Manufacturer; Source: Knorr-Bremse information

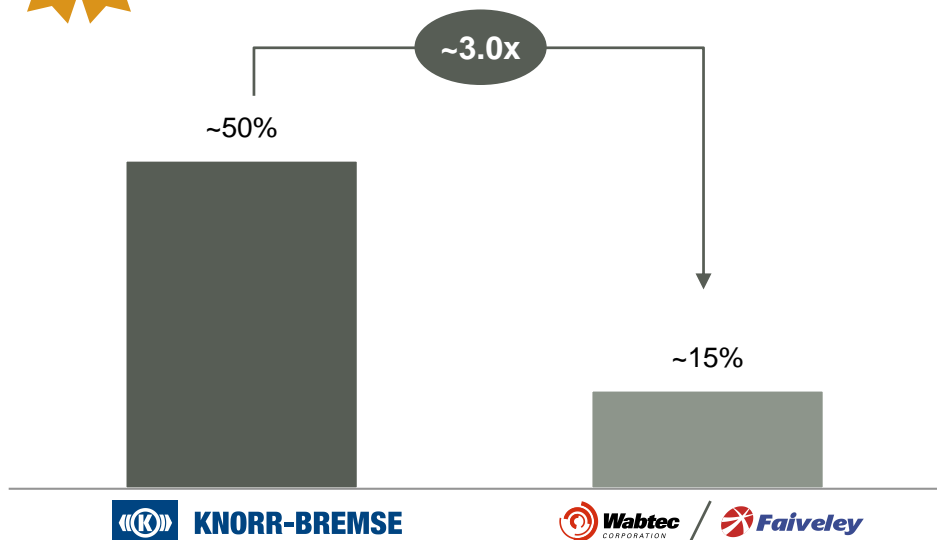
# 1 Global #1 – Number one supplier for braking systems and a leading supplier of other safety critical rail and commercial vehicle systems ...



RVS



Global brakes market share 2017<sup>1)</sup>



Market positions in key product groups (2017)



Brake Systems<sup>1)</sup>



Entrance Systems<sup>1)</sup>



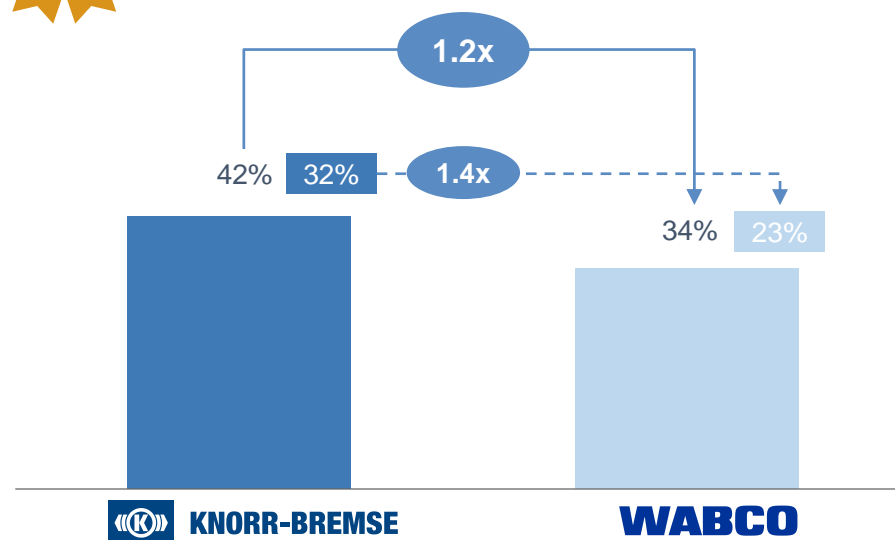
HVAC<sup>1)</sup>



CVS



Global pneumatic brake system market share 2017<sup>2)</sup>



% Including Drum Brakes and Brake Rotors

Market positions in key product groups (2017)<sup>3)</sup>



Brake Systems & Vehicle Dynamics  
(incl. Automated Driving)



Energy Supply & Distribution



Fuel Efficiency  
(Joint)

Notes: <sup>1)</sup> 2017 RVS market share estimates for OE and aftersales without labour; Wabtec includes Faiveley; For the competitor an estimate was used; Market shares rounded to the nearest multiple of 5%; <sup>2)</sup> 2017 Market share estimates for Truck and Bus OEM sales only including Air Disc Brake, Brake Control and Air Supply (excluding Drum Brakes and Brake Rotors; Drum Brakes are mainly produced by the OEMs and Brake Rotors are mainly sourced separately), excluding aftermarket and Trailer; Knorr-Bremse data based on market intelligence and experts estimate in 2017; <sup>3)</sup> For 2017 global addressable Truck, Bus and Trailer OE, excluding aftermarket; Source: Knorr-Bremse information and internal market research



# 1 Global #1 – ... protected by high barriers to entry

## Barriers to entry for RVS and CVS markets

- ✓ Regulation / homologation
- ✓ Low volumes, high number of variants with high level of customisation
- ✓ High initial capital requirements, highly protected IP landscape and economies of scale
- ✓ Highest quality and safety requirements
- ✓ Long lifecycle with resulting customer loyalty, long gestation period for aftermarket
- ✓ Same industry leaders since creation of the industry over 100 years ago

## Market specifics

RVS

**Only supplier worldwide**  
*certified for all global and local standards and norms (GOST, UIC, AAR, ARA)*

**Vast array of product variants to homologate**  
*(e.g. >100k active brake articles by Knorr-Bremse)*

**Homologation time typically 4-8 years**  
*for recent Knorr-Bremse products*

CVS

**One of only two suppliers** *able to offer harmonised products globally*

**Continuously increasing** *safety and emission standards requirements*

## 2 Synergistic business – Technology and scale benefits between Rail and Commercial Vehicles

### Interdependence of RVS and CVS today

- ✓ Same core technologies
- ✓ Shared components and materials
- ✓ Comprehensive research and IP base

### Future technology development

- ✓ Shared research centres
- ✓ ADAS<sup>1)</sup> / HAD<sup>2)</sup> technology transfer
- ✓ Condition monitoring, condition-based and predictive maintenance
- ✓ Electrification and connectivity
- ✓ Electromechanical brake systems

### Unique scale benefits

- ✓ ~2x size of main competitors<sup>3)</sup>
- ✓ Balance sheet strength for M&A
- ✓ Global footprint

RVS

CVS



*Electric compressors  
Friction materials  
Air disc brakes (ADB)*

*Driver assistance  
Trailer control valve  
Electronic air supply*

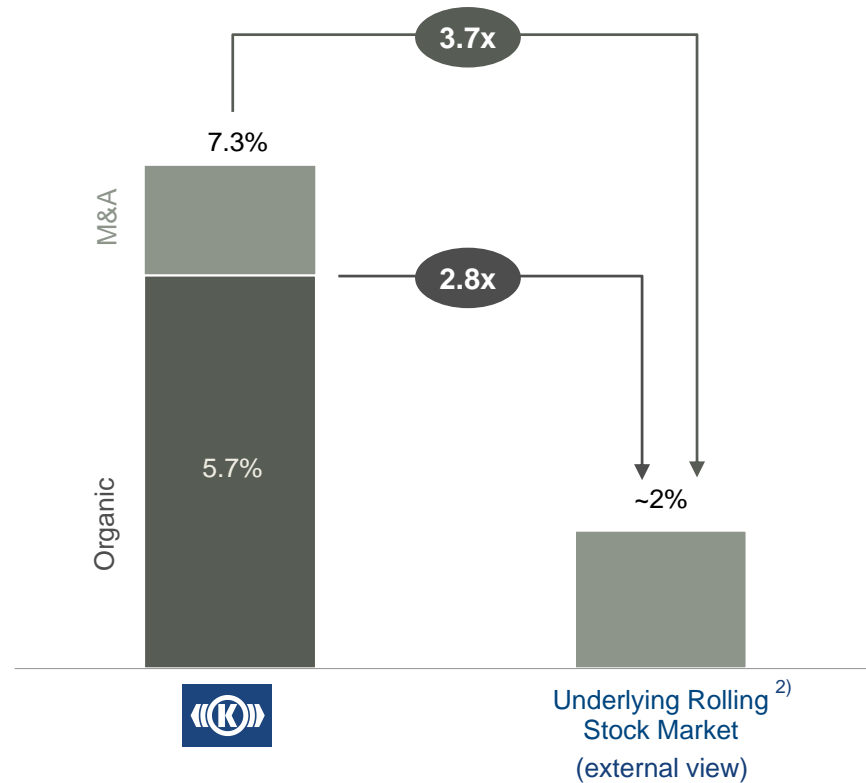
Notes: <sup>1)</sup> ADAS – Advanced driver assistance system; <sup>2)</sup> HAD – Highly automated driving; <sup>3)</sup> Based on 2017 sales and status quo pre-Wabtec merger with GE Transportation; 2017 €/USD FX: 0.83346 used as of 31 December 2017; Source: Knorr-Bremse information; WABCO and Wabtec / Faiveley information based on Annual Report 2017

# 3 Market outperformance – Knorr-Bremse is well positioned to deliver continued growth above rail industry levels



## Knorr-Bremse with strong track record of industry outperformance

CAGR (2010-2017) RVS sales<sup>1)</sup> (HGB) and market



## Key future growth drivers

<b>Asia Growth</b> <ul style="list-style-type: none"> <li>Chinese high-speed</li> <li>Mass urban transport in APAC</li> <li>Expansion and upgrade of Indian rail rolling stock</li> <li>CRRC international expansion</li> </ul>	<b>Outsourcing</b> <ul style="list-style-type: none"> <li>Outsourcing from rail OEM's (trend towards de-verticalisation)</li> </ul>
<b>Digitisation</b> <ul style="list-style-type: none"> <li>Increasing demand for connected systems and other digital solutions</li> </ul>	<b>Aftermarket</b> <ul style="list-style-type: none"> <li>Global rail services and aftermarket for rolling stock</li> </ul>

- ✓ Certification capability for all global core markets
- ✓ Partner of many Chinese OEMs and large installed base
- ✓ Leading control and monitoring technology
- ✓ Excellent engineering and R&D system and a connected systems innovation leader

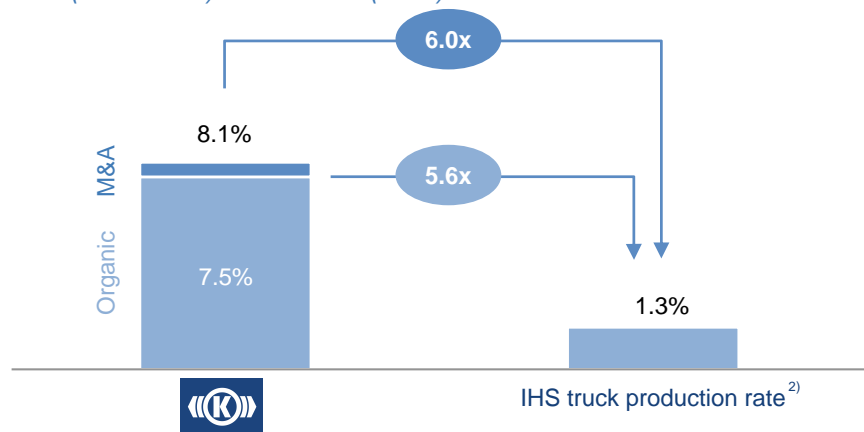
Notes: <sup>1)</sup> Based on German GAAP (HGB); <sup>2)</sup> Underlying OE rolling stock and aftermarket volume as defined by Roland Berger (July 2018). Market CAGR based on 2010 to 2016 market volumes; Source: Knorr-Bremse information, Roland Berger - Analysis of rail vehicle market report (July 2018) for growth rate of underlying rolling stock market

# 3 Market outperformance – Strong growth in content per vehicle expected to result in continued outperformance of global commercial vehicle market



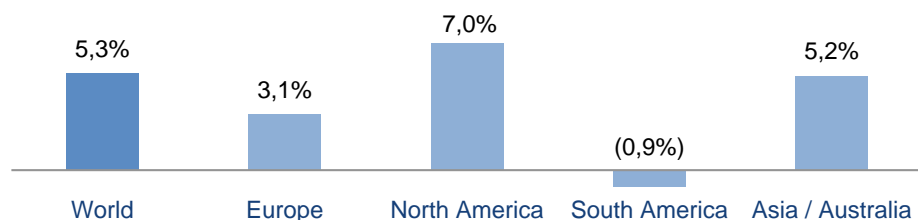
## Knorr-Bremse with strong track record of industry outperformance

CAGR (2010-2017) CVS sales<sup>1)</sup> (HGB) and market



## Significant market content per vehicle (CPV) growth

Market CPV CAGR<sup>3)</sup> (% , 2010-2017)



## Key future growth drivers

### Megatrends and conversion of regulatory standards

- Global megatrends provide attractive growth opportunities
- Convergence of regulatory standards drives global adoption of technologies
- Disc brakes replacing drum brakes

### Content increase

- Traffic Safety
- Fuel efficiency

### Market share gains

- Product upgrading
- Regional expansion strategy

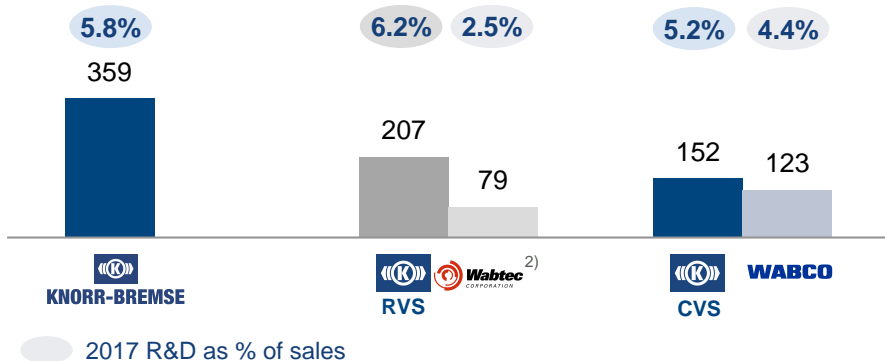
- ✓ Market leader in a consolidated industry with only 2 global players
- ✓ A strong technology innovator shaping the industry
- ✓ Multiple trends driving growth independent of underlying market dynamics
- ✓ Ideally positioned to win in market defining trend towards ADAS/HAD<sup>4)</sup>

Notes: <sup>1)</sup> Based on German GAAP (HGB); <sup>2)</sup> Global Truck and Bus market excluding aftermarket and Trailer; <sup>3)</sup> Addressable Truck, Bus and Trailer OE market for "Brake Systems & Vehicle Dynamics (incl. Automated Driving)", "Energy Supply & Distribution" and "Fuel Efficiency"; <sup>4)</sup> Advanced Driver Assistance Systems/Highly Automated Driving; Source: Knorr-Bremse information; IHS for truck production rate

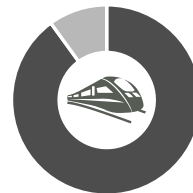


# 4 The industry innovator – Driving innovation in mobility and transportation technologies through R&D leadership and edge in connected systems

## Knorr-Bremse invests more in R&D<sup>1)</sup>



## Consistently pioneering “first to market” innovations...



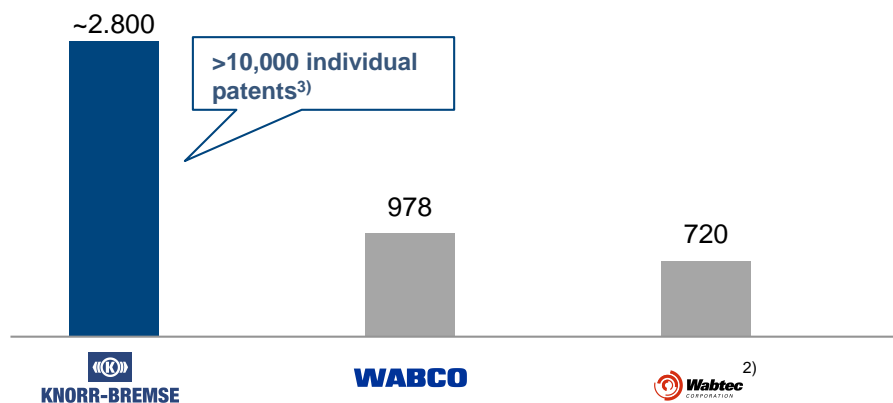
9 out of 10 of most industry-defining innovations<sup>4)</sup> come from Knorr-Bremse



8 out of 10 of most industry-defining innovations<sup>4)</sup> come from Knorr-Bremse

## Knorr-Bremse has a larger patent portfolio than its peers

Portfolio size based on patent families (public)

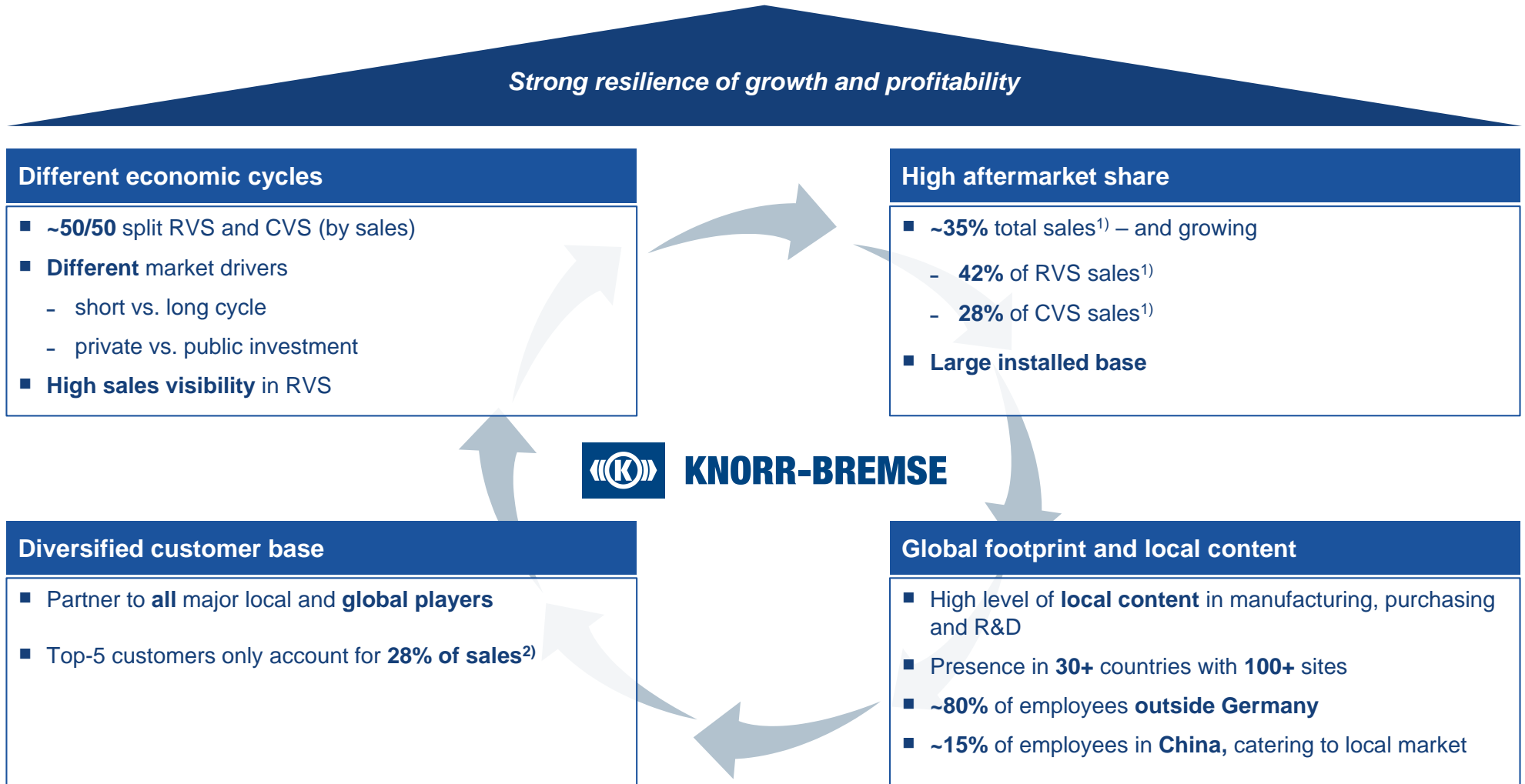


## ... supported by focused M&A and partnerships



Notes: €/USD conversion 0.83; <sup>1)</sup> Knorr-Bremse R&D financial information based on German GAAP (HGB), R&D ratio as reported in annual reports; <sup>2)</sup> PF Faiveley and excl. GE Transportation acquisition; <sup>3)</sup> Granted and applied patents; <sup>4)</sup> Information as per Knorr-Bremse management view; Industry defining are considered to be the top 10 innovations in the past 30 years in the rail and commercial vehicle industry; Source: Knorr-Bremse information; 2017 annual reports of Wabtec / Faiveley and WABCO; PatentSight

# 5 Resilience – Business model supported by high aftermarket exposure, broad geographical and customer diversification and strong localisation



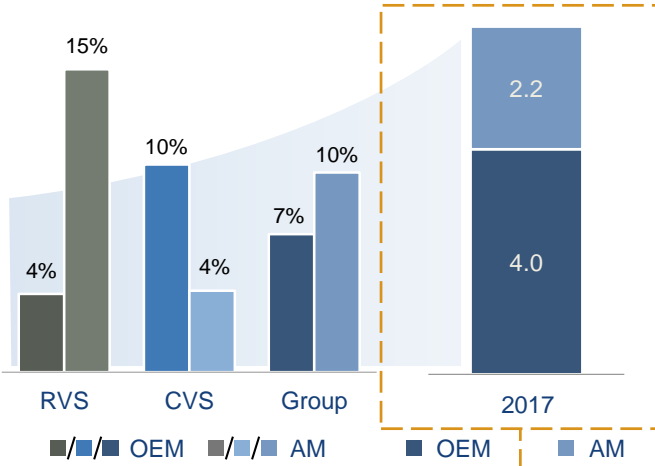
Notes: <sup>1)</sup> Based on German GAAP (HGB) for 2017; BilRUG sales allocated proportionally between OE and aftermarket; <sup>2)</sup> Based on German GAAP (HGB) for 2017; Source: Knorr-Bremse information



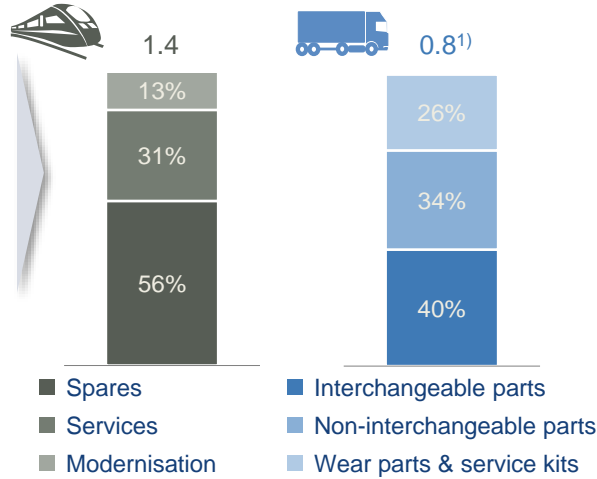
# 5 Resilience – Attractive aftermarket business with comprehensive service offering drives profitability and contains high future potential

## Aftermarket is the growth and resilience backbone

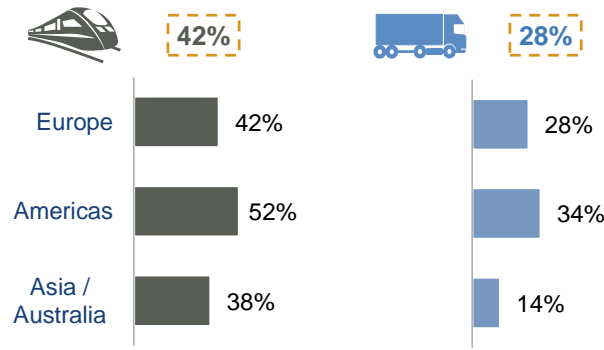
Sales CAGR (2010-2017) HGB (€bn)



Aftermarket sales 2017 (€bn)



Share of aftermarket 2017 (%)



**35%**

share of aftermarket as % of sales 2017

## Key features

### Annuity-like

- Regulated maintenance intervals
- Leverages high installed base
- 20-30 year long relationships

### Close to the customer

- RVS:
  - 36 service centres<sup>2)</sup>
  - 20 service locations at customers' premises
- CVS:
  - >1,600 certified service partners
  - >500 Alltrucks workshops

### Strong customer retention

- High switching costs
- Focus on safety and quality
- IP protection

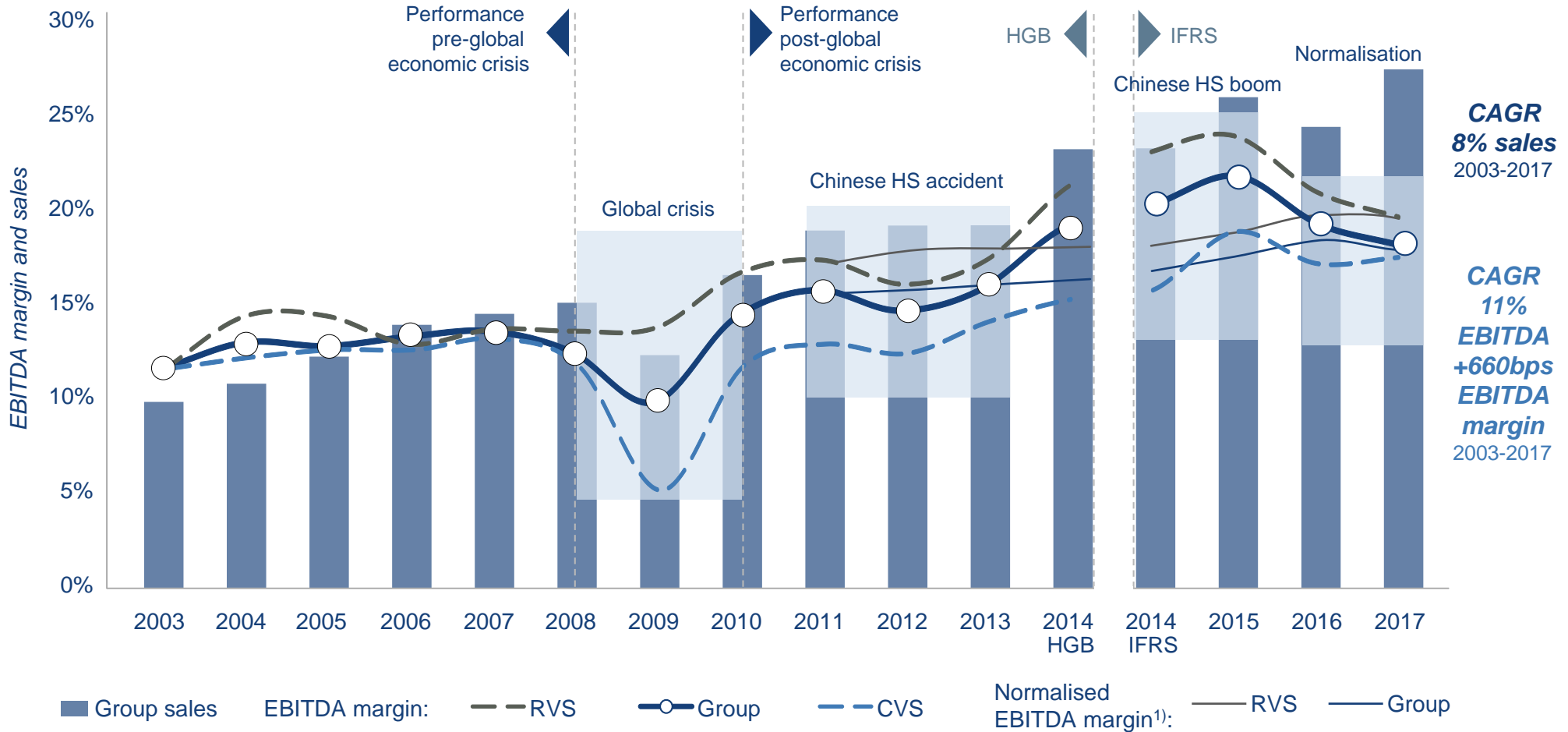
### Innovative business model

- New connectivity-based business models
- Preventive
- Predictive

Notes: Based on German GAAP (HGB); BilRUG sales allocated proportionally between OE and aftermarket; <sup>1)</sup> Total CVS aftermarket sales and independent aftermarket sales EMEA (excl. South Africa & Skach) as proxy for the global split; <sup>2)</sup> Does not include service locations at customers' premises; Source: Knorr-Bremse information

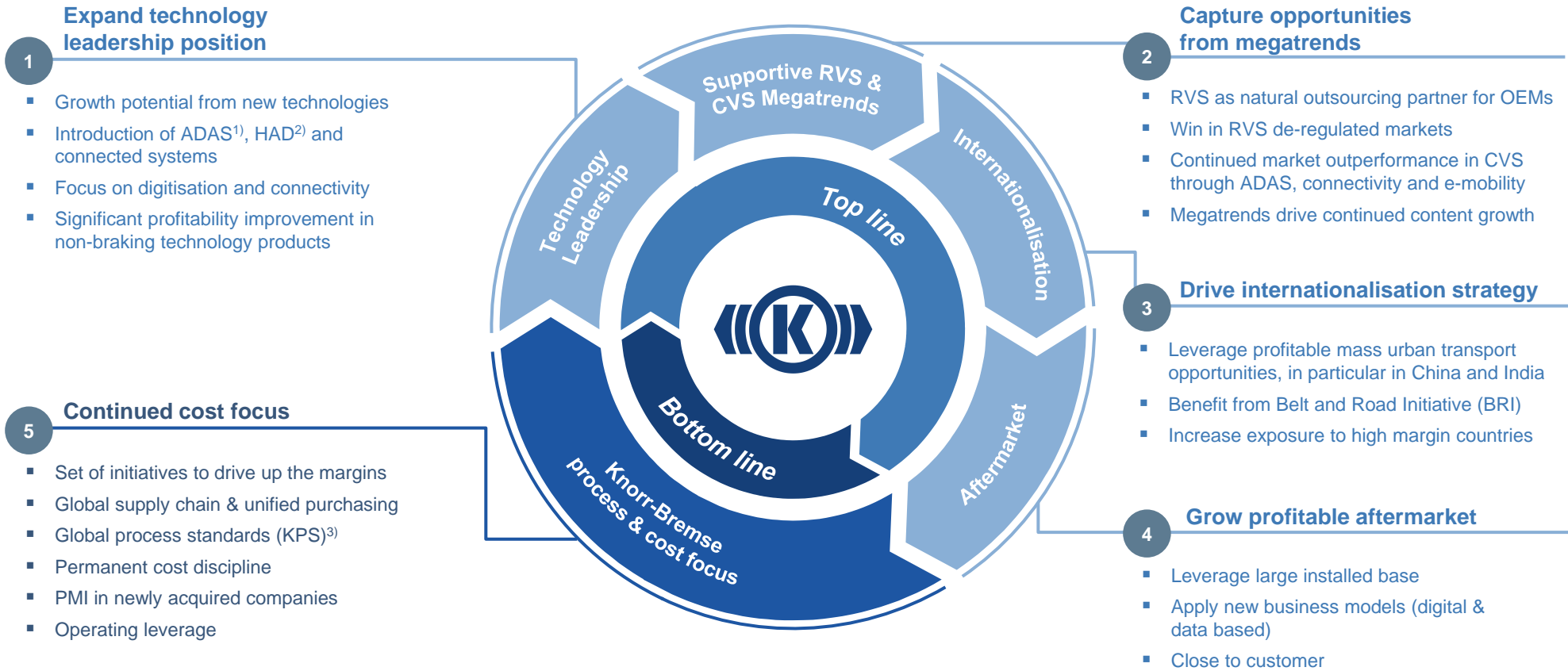
# 6 Superior financial profile – Outstanding track record of growth and profitability improvement

## Strong track record of resilient and profitable growth



Notes: Financials based on German GAAP (HGB) prior to 2014 and IFRS 2014-2017; Data presented in accordance with German GAAP (HGB) may not be comparable to data prepared in accordance with IFRS; <sup>1</sup>Normalised margin estimate for China accident impact and recovery; Estimate based on Knorr-Bremse assumptions; Source: Knorr-Bremse information

# 7 Leadership excellence – Clear vision for future value creation



*Consistent M&A and integration strategy*

**Medium-term target organic growth of 4.5-5.5% p.a. complemented by value-add M&A**

**Target medium-term EBITDA margin expansion of +150bps**

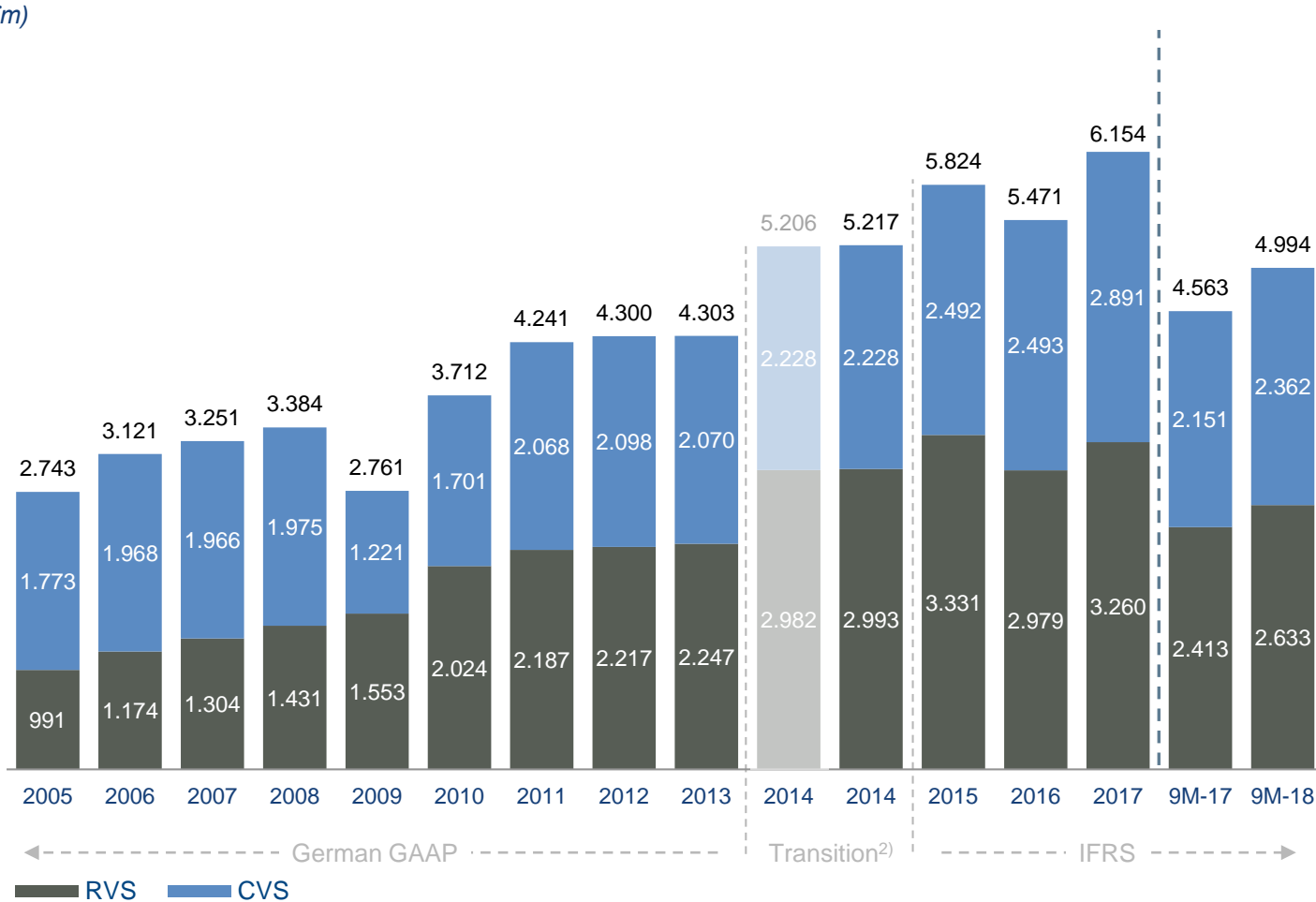
Notes: <sup>1)</sup> ADAS – Advanced driver assistance system; <sup>2)</sup> HAD – Highly automated driving; <sup>3)</sup> KPS – Knorr-Bremse production system; Source: Knorr-Bremse information



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# Track record of strong and sustainable top-line growth ...

## Historical sales<sup>1)2)</sup> by division

(€m)

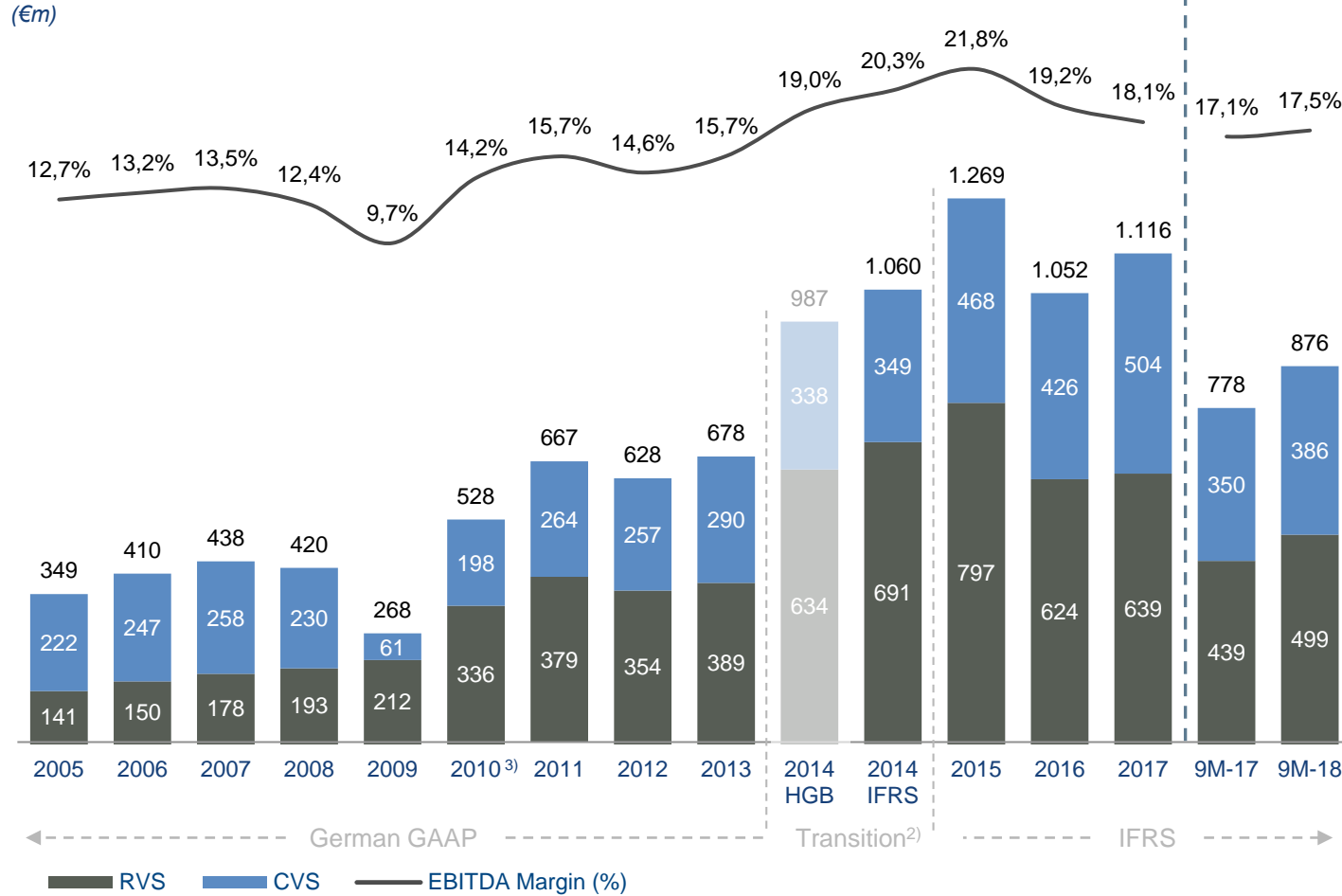




CAGR <sup>2)</sup>			
2005-17	2010-17	2016-17	9M-17/ 9M-18
<b>Group</b>			
<b>7.0%</b>	<b>7.5%</b>	<b>12.5%</b>	<b>9.5%</b>
			
<b>4.2%</b>	<b>7.9%</b>	<b>16.0%</b>	<b>9.8%</b>
			
<b>10.4%</b>	<b>7.0%</b>	<b>9.4%</b>	<b>9.1%</b>

Notes: <sup>1)</sup> Divisional historic figures do not add up to group sales excluding consolidations/other; <sup>2)</sup> 2014 represents the first year that Knorr-Bremse prepared its financial statements in accordance with IFRS. Prior to 2014, financial statements were only prepared in accordance with German GAAP (HGB). IFRS differs in certain aspects from German GAAP (HGB), and accordingly data presented in accordance with German GAAP (HGB) may not be comparable to data prepared in accordance with IFRS; Source: Knorr-Bremse information

# ... combined with disproportionate EBITDA growth

## Historical EBITDA<sup>1)2)</sup> profitability



CAGR <sup>2)</sup>			
2005-17	2010-17	2016-17	9M-17/ 9M-18
<b>Group</b>			
<b>10.2%</b>	<b>11.3%</b>	<b>6.0%</b>	<b>12.6%</b>
			
<b>7.1%</b>	<b>14.3%</b>	<b>18.3%</b>	<b>10.5%</b>
			
<b>13.4%</b>	<b>9.6%</b>	<b>2.5%</b>	<b>13.7%</b>

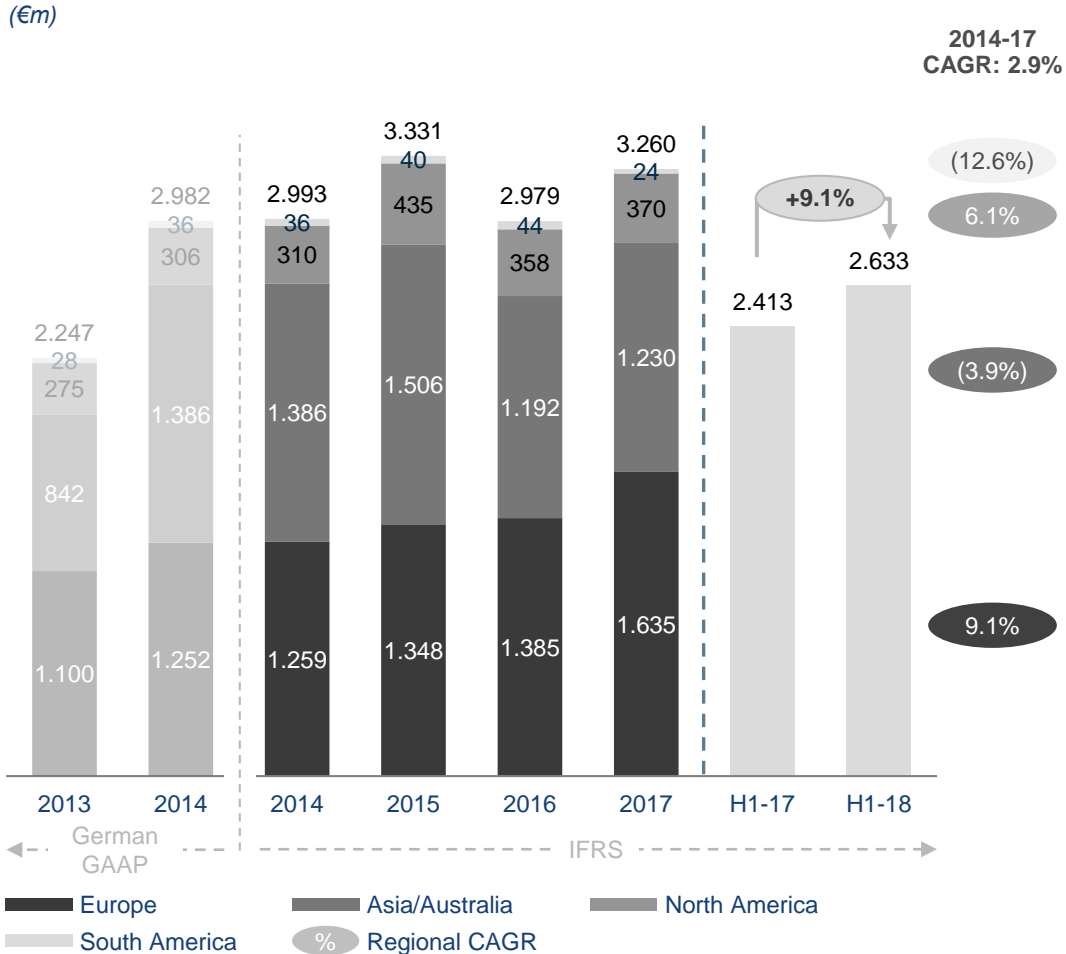
■ Significant YoY profitability growth with a ~13% growth in EBITDA at the group level (~14% for RVS and ~11% for CVS)

Notes: <sup>1)</sup> Divisional historic figures do not add up to group EBITDA excluding consolidations/other; <sup>2)</sup> 2014 represents the first year that Knorr-Bremse prepared its financial statements in accordance with IFRS. Prior to 2014, financial statements were only prepared in accordance with German GAAP (HGB). IFRS differs in certain aspects from German GAAP (HGB), and accordingly data presented in accordance with German GAAP (HGB) may not be comparable to data prepared in accordance with IFRS; <sup>3)</sup> EBITDA 2010 including extraordinary expenses due to BilMOG; Source: Knorr-Bremse information

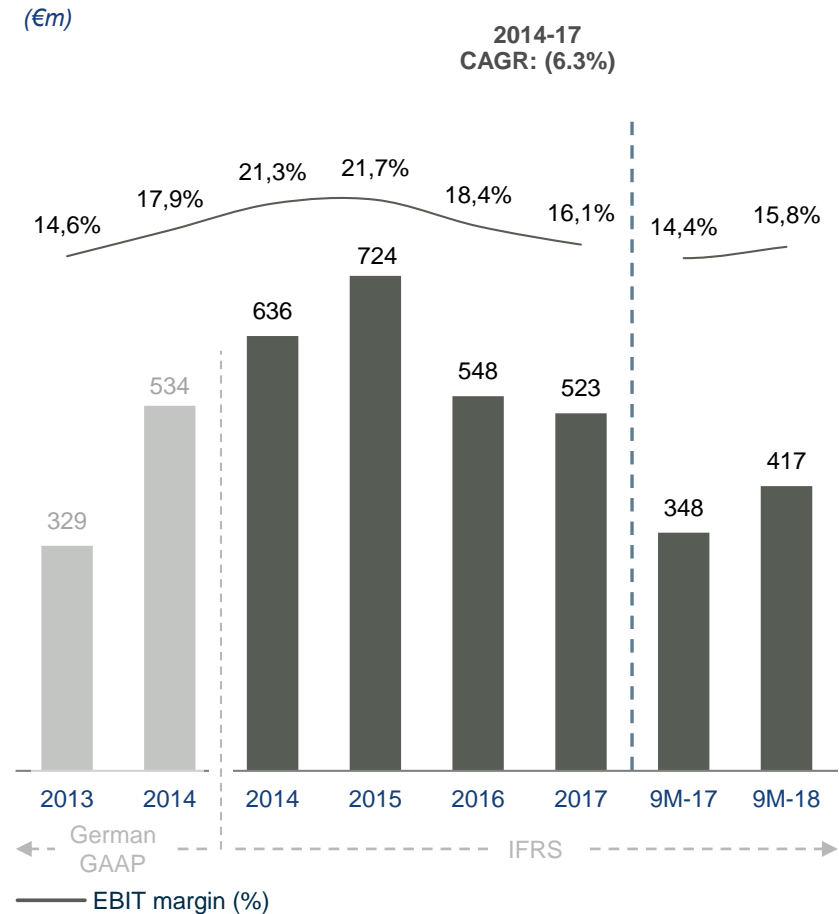
# RVS – Sales development driven primarily by Europe and China with profitability reflecting regional margin mix dynamics



## Regional sales development<sup>1)2)</sup>



## EBIT<sup>2)</sup>

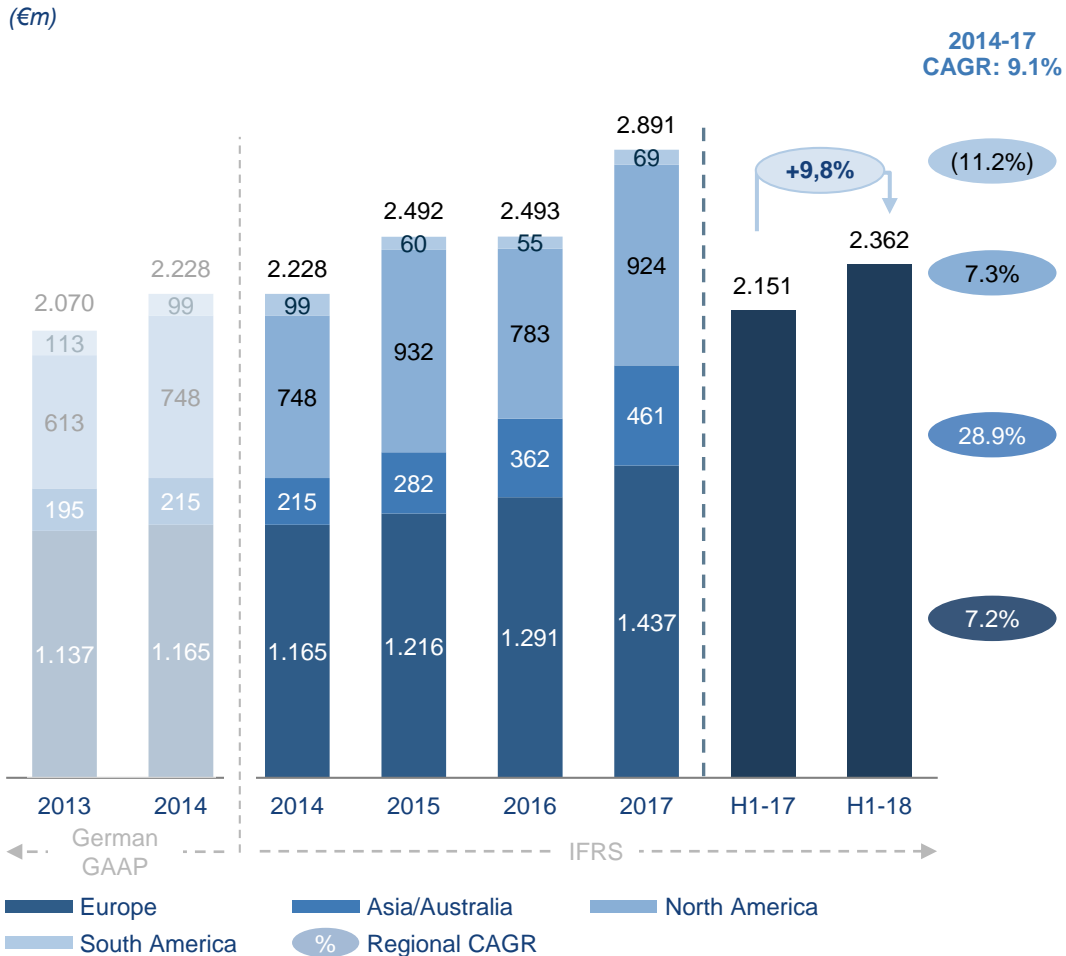


Notes: <sup>1)</sup> 3<sup>rd</sup> party historic regional sales figures do not add up to divisional sales excluding IC sales; <sup>2)</sup> 2014 represents the first year that Knorr-Bremse prepared its financial statements in accordance with IFRS. Prior to 2014, financial statements were only prepared in accordance with German GAAP (HGB). IFRS differs in certain aspects from German GAAP (HGB), and accordingly data presented in accordance with German GAAP (HGB) may not be comparable to data prepared in accordance with IFRS; Source: Knorr-Bremse information

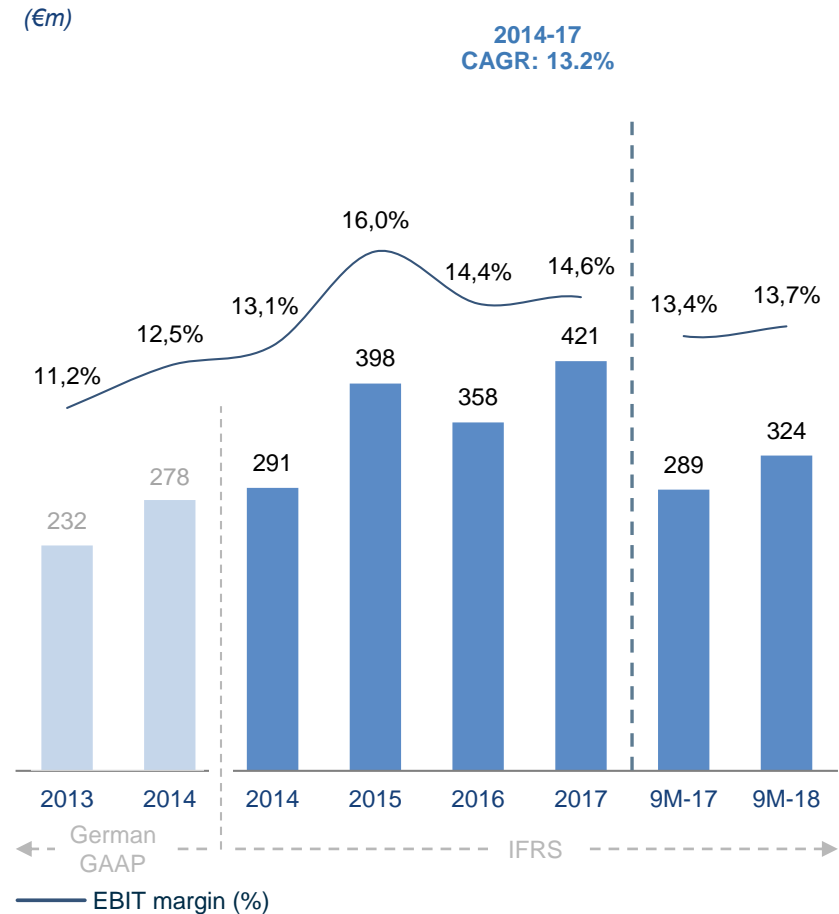
# CVS – Sales growth driven by strong momentum across key regions coupled with significant margin expansion



## Regional sales development<sup>1)2)</sup>



## EBIT<sup>2)</sup>



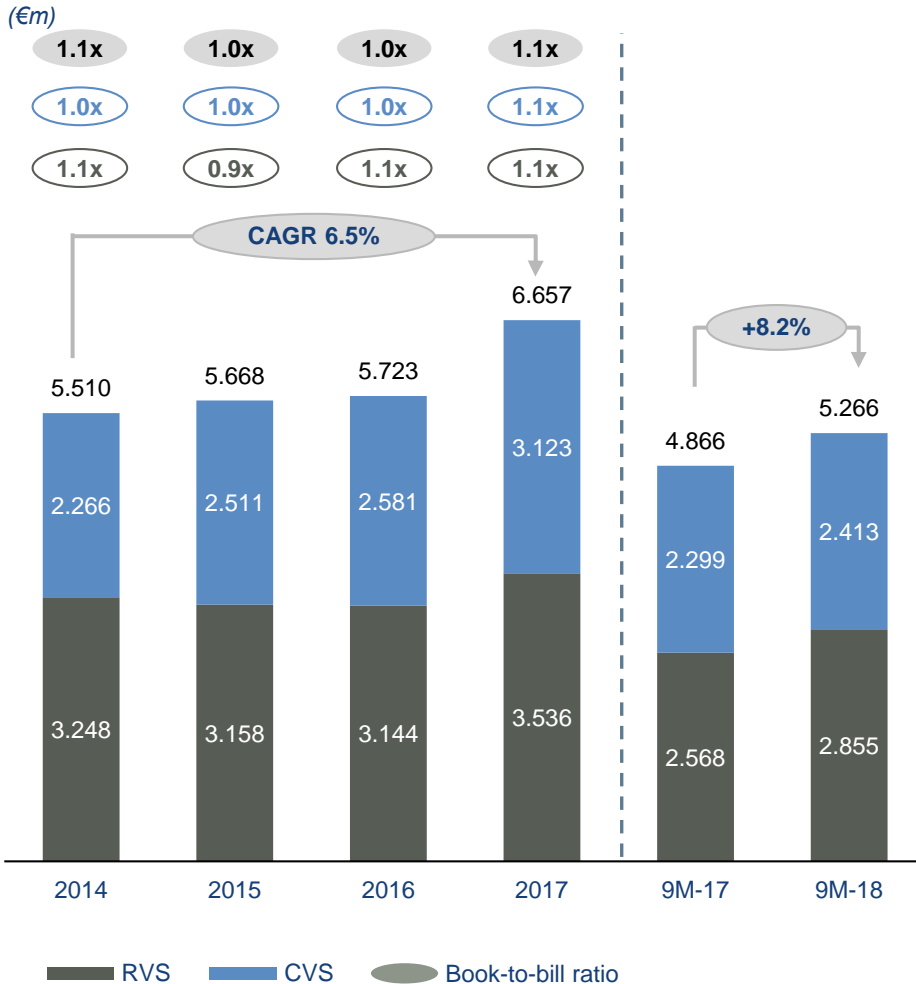
Notes: <sup>1)</sup> 3<sup>rd</sup> party historic regional sales figures do not add up to divisional sales excluding IC sales; <sup>2)</sup> 2014 represents the first year that Knorr-Bremse prepared its financial statements in accordance with IFRS. Prior to 2014, financial statements were only prepared in accordance with German GAAP (HGB). IFRS differs in certain aspects from German GAAP (HGB), and accordingly data presented in accordance with German GAAP (HGB) may not be comparable to data prepared in accordance with IFRS; Source: Knorr-Bremse information



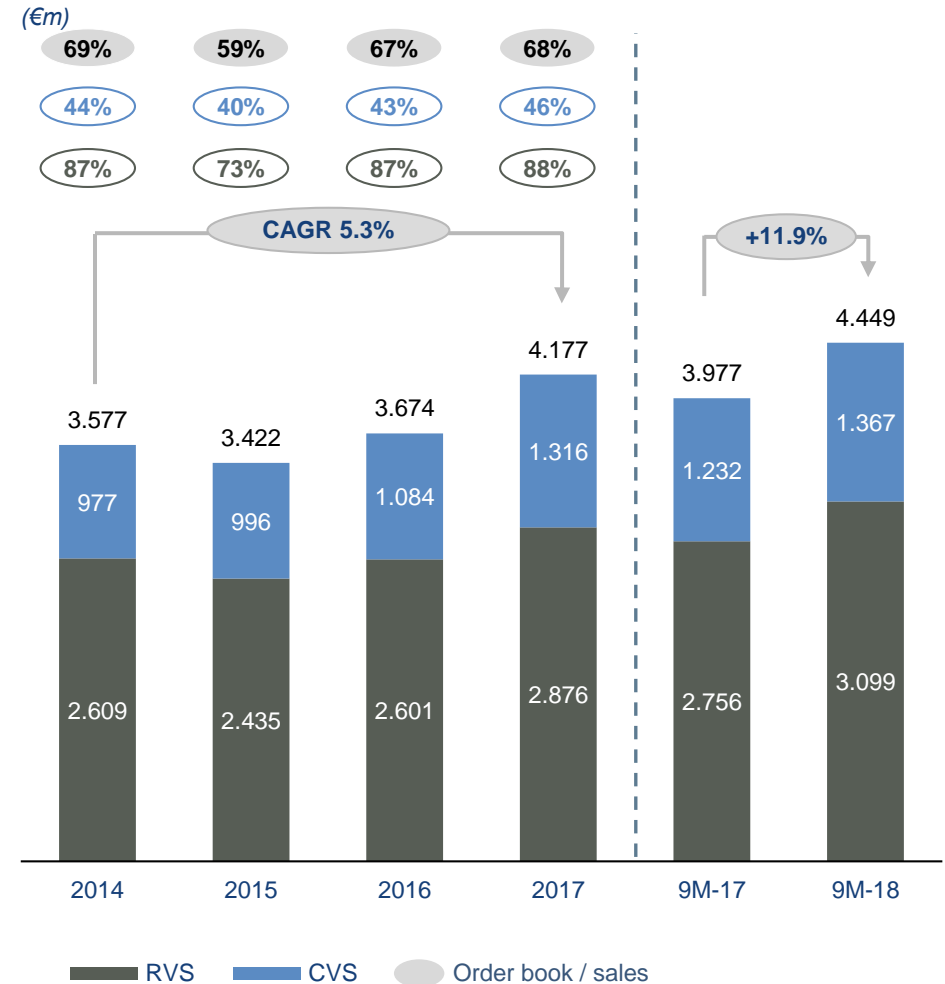


# Top-line visibility supported by high order intake and order book

## Order intake 2014-17<sup>1)2)</sup>



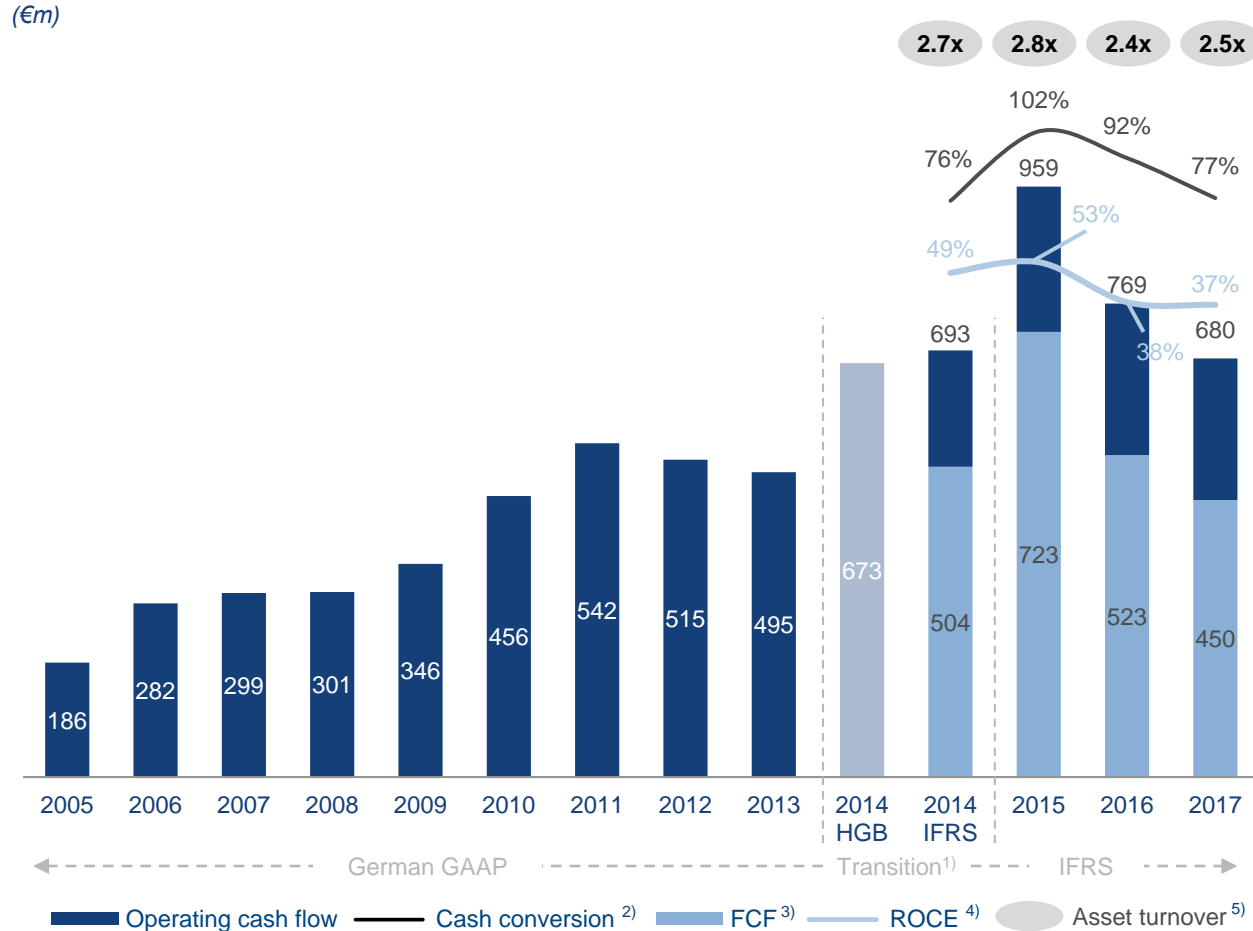
## Order book 2014-17<sup>2)3)</sup>



Notes: <sup>1)</sup> Non-GAAP metric; <sup>2)</sup> Group figures include consolidations/other; <sup>3)</sup> Calculated based on financial statements prepared in accordance with IFRS; Source: Knorr-Bremse information

# Knorr-Bremse is a high return and cash generative business

## Strong cash generation abilities



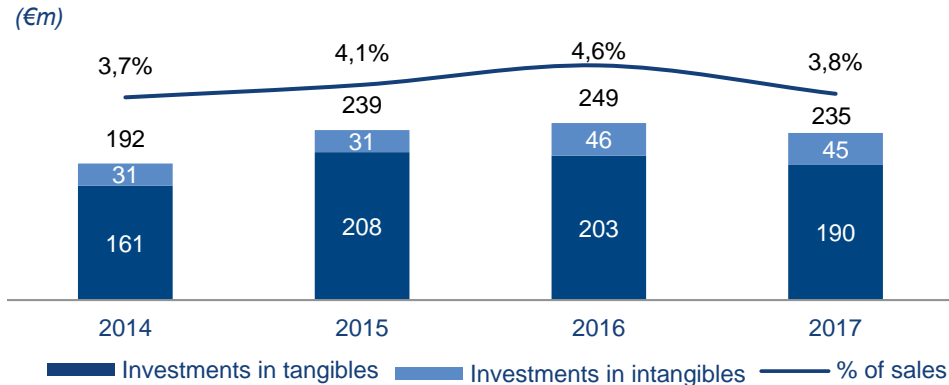
## Key drivers and factors

<b>EBIT margins</b>	<ul style="list-style-type: none"> <li>ROCE normalisation along with EBIT in 2016 largely driven by China RVS HS</li> <li>Additional margin upside from historical acquisitions of low margin businesses with future turnaround potential</li> </ul>
<b>Asset turnover</b>	<ul style="list-style-type: none"> <li>Strong asset turnover above c.2.0x</li> <li>Consistent historical sales growth</li> <li>Moderate decrease due to capex and working capital growth</li> </ul>
<b>FCF generation</b>	<ul style="list-style-type: none"> <li>Recent normalisation mainly due capex program and changes in net working capital resulting from China pre-payments</li> <li>Cash flow mirrors EBITDA development in combination with low WC levels (pre-payments)</li> <li>2017 impacted by extraordinary costs of attempted Haldex acquisition, IPO preparation and IFRS conversion (total ~€30m)</li> </ul>

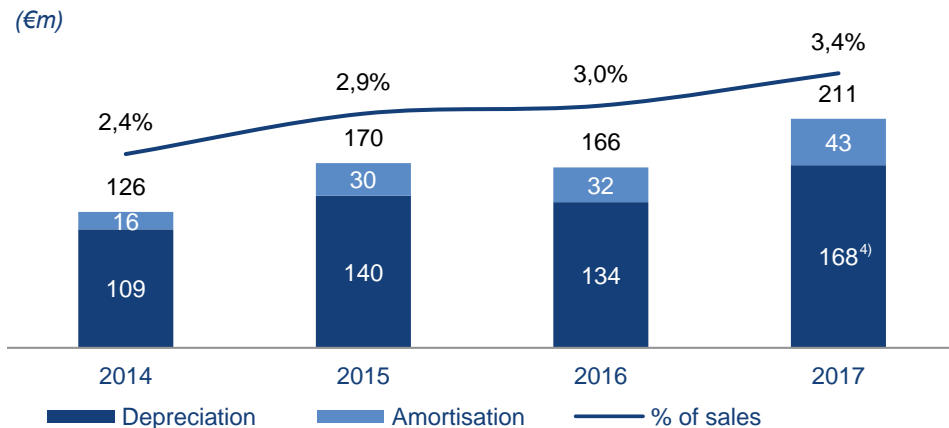
Notes: <sup>1)</sup> 2014 represents the first year that Knorr-Bremse prepared its financial statements in accordance with IFRS. Prior to 2014, financial statements were only prepared in accordance with German GAAP (HGB). IFRS differs in certain aspects from German GAAP (HGB), and accordingly data presented in accordance with German GAAP (HGB) may not be comparable to data prepared in accordance with IFRS; <sup>2)</sup> Cash conversion defined as: (OCF - investments in fixed assets - investments in intangible assets) / net income; <sup>3)</sup> FCF (Free Cash Flow) defined as cash flow from operations minus cash-relevant capex; <sup>4)</sup> ROCE defined as EBIT divided by capital employed (Fixed assets + Intangible assets + Net working capital); <sup>5)</sup> Asset turnover defined as sales divided by capital employed; Source: Knorr-Bremse information

# Fully invested asset base driving low capex requirements

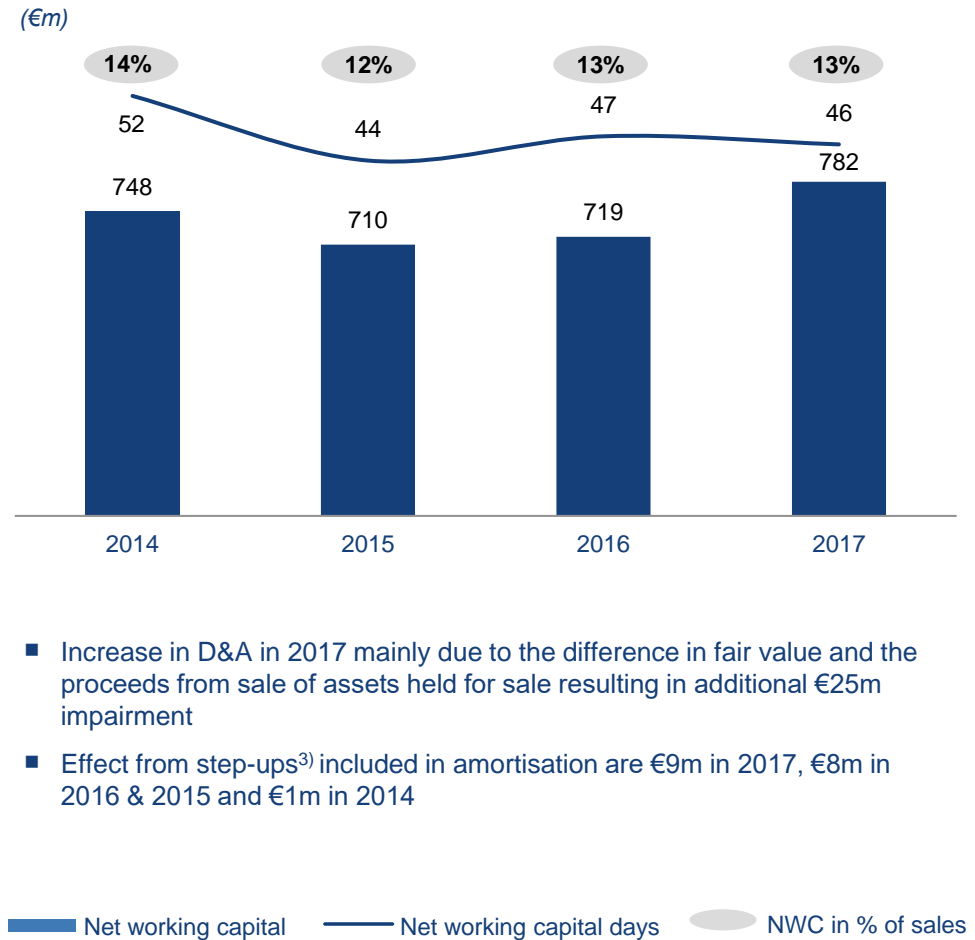
## Capex<sup>1)</sup>



## D&A



## Net working capital<sup>2)</sup>



Notes: Based on financial statements prepared in accordance with IFRS; <sup>1)</sup> As per asset register, defined as investments in fixed and intangible assets incl. finance leasing; <sup>2)</sup> Net working capital defined as Inventory + Accounts receivables + Construction contracts with positive balances - Accounts payables - Construction contracts with negative balances - Prepayments received; <sup>3)</sup> Step-ups from key PPA's (Selectron, Powertech, GT & Kiepe Electric); <sup>4)</sup> Including €25m from impairment of assets held for sale; Source: Knorr-Bremse information

## 2018 guidance

P&L	Revenue	<ul style="list-style-type: none"> <li>6,600 – 6,700 mEUR</li> <li>Assuming constant currencies, organic growth only</li> </ul>
	EBITDA Margin	<ul style="list-style-type: none"> <li>17.5 – 18.5%</li> <li>Assuming no structural changes</li> </ul>
Cash flow	Capex	<ul style="list-style-type: none"> <li>Capex ratio in line with 2014–2017 average               <ul style="list-style-type: none"> <li>➤ RVS: c. 4% of revenue</li> <li>➤ CVS: c. 4% of revenue</li> </ul> </li> </ul>
	Working capital	<ul style="list-style-type: none"> <li>DWC requirements expected to be in line with 2014-2017 average</li> </ul>
Capital structure	Leverage	<ul style="list-style-type: none"> <li>Maintain solid investment grade</li> <li>Target leverage &lt;1x Net debt/EBITDA, incl. post financing of acquisitions</li> </ul>
	Dividend	<ul style="list-style-type: none"> <li>Target payout ratio of 40–50% of IFRS net income</li> </ul>
Other	Tax rate	<ul style="list-style-type: none"> <li>IFRS tax rate @ ~30%</li> </ul>

# Medium-term guidance unchanged

## Medium-term guidance

P&L	Revenue	<ul style="list-style-type: none"> <li>▪ Group organic CAGR of c. 4.5%–5.5%               <ul style="list-style-type: none"> <li>➢ RVS c. 5–6%</li> <li>➢ CVS c. 4–5%</li> </ul> </li> <li>▪ Assuming constant currencies</li> </ul>
	EBITDA Margin	<ul style="list-style-type: none"> <li>▪ Margin expansion c. 150 bps compared to 2017               <ul style="list-style-type: none"> <li>➢ Driven by both divisions</li> <li>➢ RVS division slightly ahead vis-à-vis CVS division</li> </ul> </li> </ul>
Cash flow	Capex	<ul style="list-style-type: none"> <li>▪ Capex ratio in line with 2014–2017 average               <ul style="list-style-type: none"> <li>➢ RVS: c. 4% of revenue</li> <li>➢ CVS: c. 4% of revenue</li> </ul> </li> </ul>
	Working capital	<ul style="list-style-type: none"> <li>▪ DWC requirements expected to be in line with 2014-2017 average</li> </ul>
Capital structure	Leverage	<ul style="list-style-type: none"> <li>▪ Maintain solid investment grade</li> <li>▪ Target leverage &lt;1x Net debt/EBITDA, incl. post financing of acquisitions</li> </ul>
	Dividend	<ul style="list-style-type: none"> <li>▪ Target payout ratio of 40–50% of IFRS net income</li> </ul>
Other	Tax rate	<ul style="list-style-type: none"> <li>▪ IFRS tax rate @ ~30%</li> </ul>

## Upcoming investor relations events

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Event	Date [mm/dd/yyyy]	Location
<b>Berenberg – European Conference</b>	12/05/2018	Pennyhill Park (near London)
<b>Commerzbank – German Investment Seminar</b>	01/14-16/2019	New York
<b>Kepler Cheuvreux – German Corporate Conference</b>	01/21/2019	Frankfurt

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2	Key Company Highlights	7
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# Effective corporate governance with clear accountabilities and aligned management incentives

## Two-tier board clear accountabilities

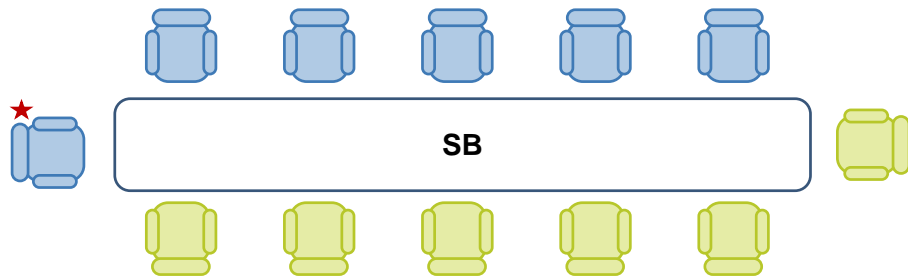
### Supervisory board




#### ■ Members appointed

- Klaus Mangold (Chairman)
- 6 Shareholder representatives
- 6 Employee representatives

#### ■ Heinz Hermann Thiele (Honorary Chairman)

#### ■ Actively provides strategic guidance



 Shareholder representatives  Employee representatives  Chairman

### Executive board

#### ■ Runs the company with clear accountability

#### ■ Complementary broad experience

#### ■ Capital markets experience

## Executive board incentivised to create shareholder value<sup>1)</sup>

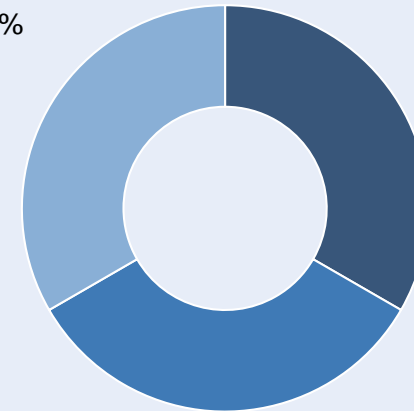
*Proportion of individual remuneration components in case of 100% target achievement*

**Long-term incentive  
(EVA-based, ~3 year period)**

~30.0%-33.3%

**Base compensation**

~33.3-40.0%



~28.6-33.3%

**Short-term incentive**

- 30% turnover growth
- 30% working capital
- 30% Profit before tax
- 10% quality

Notes: <sup>1)</sup> Data as per 1.1.2019; Source: Knorr-Bremse information



# Group income statement 9M 2018

## Consolidated statement of profit or loss

	Nine Months		3rd quarter	
	2018	2017	2018	2017
	TEUR	TEUR	TEUR	TEUR
Revenues	4.994.045	4.562.514	1.671.805	1.586.521
Changes in inventories of unfinished/finished products	29.098	46.516	(177)	(12.610)
Other own work capitalized	40.851	23.848	21.079	9.263
<b>Total operating performance</b>	<b>5.063.994</b>	<b>4.632.878</b>	<b>1.692.706</b>	<b>1.583.174</b>
Other operating income	52.511	51.390	4.707	10.492
Cost of materials	(2.519.520)	(2.237.916)	(839.127)	(774.279)
Personnel expenses	(1.119.837)	(1.067.007)	(373.381)	(358.624)
Other operating expenses	(601.286)	(601.297)	(191.250)	(200.696)
<b>Earnings before interest, tax, depreciation and amortization (EBITDA)</b>	<b>875.862</b>	<b>778.047</b>	<b>293.655</b>	<b>260.067</b>
Depreciation and amortization	(157.569)	(161.370)	(47.691)	(66.505)
<b>Earnings before interests and taxes (EBIT)</b>	<b>718.294</b>	<b>616.678</b>	<b>245.964</b>	<b>193.563</b>
Interest income	17.403	16.874	6.179	5.007
Interest expenses	(28.566)	(30.954)	(10.328)	(9.640)
Other financial result	(35.973)	(25.223)	(1.157)	(299)
<b>Income before taxes</b>	<b>671.158</b>	<b>577.374</b>	<b>240.659</b>	<b>188.631</b>
Taxes on income	(174.235)	(187.907)	(50.727)	(68.789)
<b>Net income</b>	<b>496.923</b>	<b>389.467</b>	<b>189.932</b>	<b>119.842</b>
Thereof attributable to:				
Profit (loss) attributable to non-controlling interests	30.964	37.683	7.508	4.425
Profit (loss) attributable to the shareholders of Knorr-Bremse AG	465.958	351.783	182.424	115.416
	<b>496.923</b>	<b>389.467</b>	<b>189.932</b>	<b>119.842</b>
<b>Earnings per share in Euro</b>				
undiluted	2,89	2,18	1,13	0,72
diluted	2,89	2,18	1,13	0,72
EBITDA Margin	17,5%	17,1%	17,6%	16,4%
EBIT Margin	14,4%	13,5%	14,7%	12,2%
EBT Margin	13,4%	12,7%	14,4%	11,9%

Notes: Based on financial statements prepared in accordance with IFRS; <sup>1)</sup> Including leased personnel; Source: Knorr-Bremse information