MAINFIRST

Iwan Tjutjunnikow | 13 May 2018

RINGMETALL AG

Leveraging on leadership – initiating on a hidden champion

Outperform, Price Target: EUR 5.30

For important disclosure information please see Appendix section at the end of this report

MAINFIRST

Industrials
Germany

RINGMETALL AG

HP3 GY | 41 Pages | 13 May 2018

OUTPERFORM

Price Target: EUR 5.30

Leveraging on leadership – initiating on a hidden champion

Ringmetall is the leading global manufacturer of special components for industrial drums. These include clamping rings, covers and seals. The company commands an impressive market share of c.70%

We forecast an organic revenue CAGR of 4.5% for 2018-21e, which implies an outperformance of its primary end market, Chemicals. EBITDA margins should expand from 11.8% in 2017 to 14.5% in 2021e, largely driven by process automation and synergies.

We initiate coverage with an OPF recommendation and PT of EUR 5.3. However, if management successfully delivers on M&A, which is a central component of the growth strategy, we see upside to EUR 7.4.

LEVERAGING ON LEADERSHIP – 4.5% ORGANIC CAGR 2018-2021E

Following a series of what we believe have been strategically sound acquisitions, Ringmetall has successfully established a market leading position as a key supplier in the industrial packaging industry. According to Allied Market Research, the industrial packaging sub-division of drums is expected to outpace the general packaging market and show a CAGR of 6.1% through 2023e. In addition, Ringmetall will increasingly focus on leveraging its strong position by cross-selling additional products in a move to become the single global one-stop-shop for industrial drum manufacturers. Hence, we believe that the upper end of management guidance of c.3-5% organic growth through 2021e is highly achievable.

M&A IS A CENTRAL COMPONENT OF RINGMTALL'S GROWTH STRATEGY

Ringmetall's growth strategy is supported by M&A as a central pillar in an attempt to further cement its leading position as a global market leader in industrial packaging. Management has successfully built a strong M&A track record and reputation in the market, which positions the company as preferred partner for family-owned, mid-sized companies which may be looking to sell their business. This may explain the historically attractive valuation levels that Ringmetall was able to achieve for deals. We support our base case valuation with a post M&A DCF, assuming that Ringmetall will spend EUR 45m in acquisitions over the next three years. At transaction multiples slightly above historic levels and 50% equity/ 50% debt financing, the strategy should lead to material value accretion, adding EUR 1.90 per share to our base case PT.

ATTRACTIVE VALUATION, SHARE TRADES AT 22% DISCOUNT TO PEERS ON EV/EBIT 2019E

We derive a fair value of EUR 5.3 per share based on an average of DCF-approach (EUR 5.5) and SotP-analysis (EUR 5.1). The SotP-analysis reflects the different growth and margin characteristics of the company's two segments. In our view, the current discount to peers of 22%/ 32% for FY-18/19 on EV/EBIT-multiples provides an attractive entry point.

LAST CLOSE (EUR)	**4.10**
MKTCAP (EUR m)	**114**
UPSIDE (%)	**29.3**
DAILY T/O (EUR m)	**0.02**

CHANGES TO ESTIMATES	**2018E**	**2019E**

YEAR TO DEC (EUR M)	**2017**	**2018E**	**2019E**	**2020E**
Group revenue	102	110	116	120
EBITDA (rep.)	12	13	15	17
EBIT (rep.)	10	11	13	15
EPS (adj.) (EUR)	0.24	0.23	0.28	0.34
EPS (Cons.) (EUR)	0.17	0.22	0.25	0.00
DPS (EUR)	0.06	0.05	0.07	0.08
Net debt (cash)	5	2	(2)	(9)
RoCE (NOPAT) (%)	13.8	15.1	16.8	19.6
EPS y/y (%)	165.1	-5.0	21.8	21.2
ND/EBITDA (adj.)	0.43	0.16	n/m	n/m
EV/Sales	1.03	1.07	0.97	0.89
EV/EBITDA (adj.)	8.77	8.78	7.53	6.33
EV/EBIT (adj.)	10.5	10.3	8.72	7.21
P/E (adj.)	14.6	17.7	14.5	12.0
Dividend yield (%)	1.8	1.3	1.6	1.9
Free CF yield (%)	4.9	4.0	5.6	7.4
EV/CE	2.08	2.23	2.09	1.93

Next event: Q2/H1 Results (17 Sep 2018)

ANALYSTS

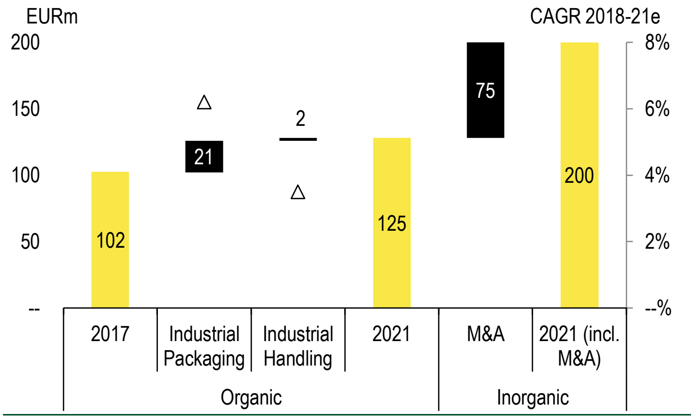
Iwan Tjutjunnikow
Equity Research
+49 (69) 78808 235
iwan.tjutjunnikow@mainfirst.com

COMMISSIONED RESEARCH

KEY FINANCIALS

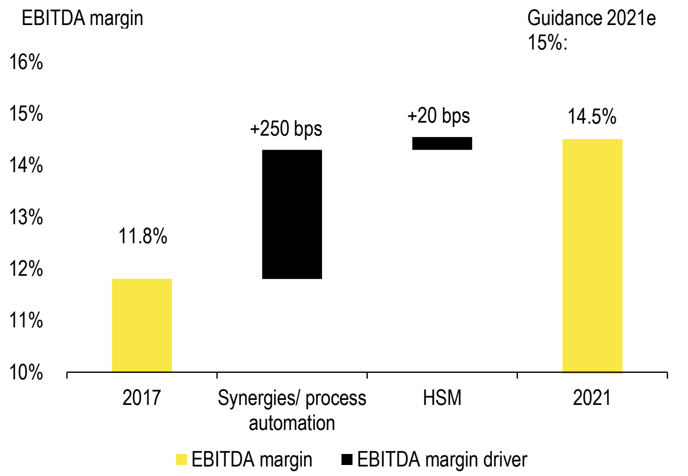
YEAR TO DECEMBER (EUR M)	2017	2018E	2019E	2020E
PROFIT & LOSS ACCOUNT				
Group revenue (as reported)	**102**	**110**	**116**	**120**
EBITDA	12	13	15	17
EBIT	**10**	**11**	**13**	**15**
Pre-tax result	9	10	12	14
Income tax, other items	(2)	(3)	(4)	(4)
Net result group	7	7	8	10
Minorities, other	(0)	(0)	(0)	(0)
Net result shareholders	**7**	**6**	**8**	**9**
EPS, fully diluted (EUR)	**0.24**	**0.23**	**0.28**	**0.34**
MainFirst adjustments				
Exceptionals in EBIT	0	0	0	0
Profit & Loss Account (adj.)				
EBITDA	12	13	15	17
EBIT	**10**	**11**	**13**	**15**
Op. result (Co. def.)	10	11	13	15
Net result, shareholders	7	6	8	9
EPS, fully diluted (EUR)	**0.24**	**0.23**	**0.28**	**0.34**
CASH FLOW STATEMENT				
EBITDA	12	13	15	17
Cash interest and tax	(3)	(5)	(5)	(5)
Changes in working capital	1	(2)	(1)	(1)
Other operating CF items	(0)	(0)	(0)	(0)
Net operating cash flow	**10**	**7**	**9**	**11**
Capital expenditure (intangibles, tangibles)	5	2	3	3
Free cash flow	**5**	**5**	**6**	**8**
Acquisitions, Disposals, Financial assets	(3)	0	0	0
Dividends, minority payouts	(2)	(1)	(2)	(2)
Capital measures, other	12	(0)	0	0
Change in net cash (debt)	**11**	**3**	**5**	**6**
Net cash (debt)	(5)	(2)	2	9
BALANCE SHEET				
Fixed assets	36	36	36	37
t/o Goodwill	22	0	0	0
Current assets	40	46	53	60
t/o Inventories	11	12	12	13
t/o Trade receivables	14	16	17	18
t/o Cash and equivalents	15	18	23	29
Group equity	39	44	50	57
t/o Shareholders equity	38	43	49	56
Interest-bearing liabilities	20	20	20	20
Other liabilities and provisions	17	18	19	19
t/o Pension provisions	0.81	0.81	0.81	0.81
t/o Trade liabilities	10	11	12	12
Balance sheet total	**76**	**82**	**89**	**97**
Net working capital	15	17	18	19
Capital employed (incl. Goodwill)	51	53	54	55
RATIOS				
Revenue y/y	8.5%	7.1%	5.7%	3.9%
EBITDA margin (adj.)	11.8%	12.2%	12.9%	14.0%
EBIT margin (adj.)	9.8%	10.4%	11.2%	12.3%
EPS (adj.), y/y	165.1%	-5.0%	21.8%	21.2%
Net working capital intensity (as a % of sales)	14.7%	15.4%	15.4%	15.4%
DSOs (trade receivables as days of revs)	49.1	54.3	54.3	54.3
Inventory turnover (Days)	39.1	39.2	39.2	39.2
Net debt (cash) / EBITDA (adj.)	0.43	0.16	n/m	n/m
EBITDA (adj.) / Capex	2.36	6.69	6.00	6.75
Free CF yield (FCF / market cap)	4.9%	4.0%	5.6%	7.4%
Oper. FCF yield ([FCF - net int. taxed] / EV)	5.3%	4.9%	6.4%	8.7%

HEALTHY FCF GENERATION IN UNDERLYING BUSINESS MARKS BASIS FOR CENTRAL M&A STRATEGY



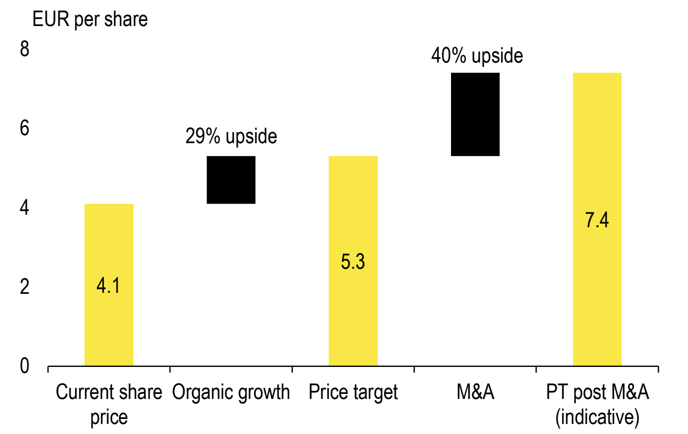
Source: MainFirst

MARGIN EXPANSION DOES NOT LOOK OVERLY AMBITIOUS



Source: MainFirst

INDUSTRIAL PACKAGING IS THE PRIMARY VALUE DRIVER, CENTRAL M&A STRATEGY PROVIDES ADDITIONAL UPSIDE



Source: MainFirst

Executive Summary

- In our view, Ringmetall is one of the many hidden champions in the German "Mittelstand". Over the last few years the company has established a market leading position as key supplier in an attractive sub-market of the industrial packaging industry, holding a market share of 70% globally or even 80% in Western industrial nations (ex-China);
- We forecast a 4.5% organic revenue CAGR 2018-21e for Ringmetall, which implies an outperformance of the underlying primary end markets of Industrial Packaging (CAGR 3.9%), Chemicals (CAGR 3.4%), Pharmaceuticals (6.3%), and Bulk Food Ingredients (4.6%);
- We expect the group's EBITDA margin to expand from 11.8% in 2017 to 14.5% in 2021e, largely driven by process automation and efficiency gains as well as cost synergies post the successful integration of recent acquisitions;
- Management has built a strong M&A track record which will remain a central component of Ringmetall's future growth strategy. We foresee continued successful execution on the M&A-front over the next three years which should provide upside to our base case valuation and move our PT to EUR 7.4 (vs. EUR 5.3).

Leveraging on leadership – 4.5% organic revenue CAGR 2018-21e

We initiate coverage of Ringmetall AG with an Outperform rating and a price target of EUR 5.3, implying 29% upside. Following a series of what we believe have been strategically sound acquisitions, Ringmetall has successfully established a market leading position as key global supplier in an attractive sub-market of the industrial packaging industry. The company focuses on niche products, such as clamping rings, covers and seals for industrial drums, which we believe creates a high degree of customer loyalty and, consequently, recurring revenues. Based on its current market share of 70% globally or even 80% in Western industrial nations, the company will increasingly focus on leveraging existing customer relationships through cross-selling initiatives in a strategic attempt to become the single global one-stop-shop for global industrial drum manufacturers- and users.

The company targets EUR >200m in sales by 2021e, which compares to EUR 102m in 2017. There are two components which, in our view, make this move feasible: Firstly, we model the existing business to reach EUR 125m in sales by 2021e, implying an organic CAGR of 4.5% for 2018-21e. Ringmetall's strong market position and the fact that the industrial packaging sub-division of drums is expected to outgrow the market (CAGR 6.1%), paired with the above mentioned cross-selling initiatives and disproportionately low market share in relatively new geographies, should ensure an outcome at the upper end of management's guidance range for organic growth of 3-5%. Secondly, we expect the remaining EUR 75m in incremental sales to come from acquisitions. Management has built a strong M&A track record over recent years and should be able to find additional attractive targets as the industry remains highly fragmented and Ringmetall commands a sound balance sheet.

Margin expansion does not look overly ambitious

Ringmetall's Executive Board expects the group EBITDA margin to expand from a current level of 11.8% in 2017 to at least 15.0% by 2021e. In our view, the margin target does not look ambitious, as we believe profitability will benefit not only from rising scale but also continued process automation. We also note that we have identified more cost synergy potential stemming from improved efficiency across the firm following the successful integration of a string of acquisitions over the last few years.

In addition to the positive development in Ringmetall's core division, we believe that current restructuring efforts in the Industrial Handling segment should likely contribute positively to the overall margin evolution of the group.

M&A is a central component of Ringmetall's growth strategy and could trigger c.81% upside to current share price

Ringmetall's growth strategy includes M&A as a central pillar in an attempt to further cement its leading position as a global market leader in its Industrial Packaging business. Over the last four years, Ringmetall acquired c.75% of today's revenues and hence, in our view, has successfully built a strong track record and reputation in the market. The company's reputation is based on the fact that Ringmetall acts as entrepreneur rather than a private equity-style acquirer. This makes the company a preferred partner, especially for family-owned, mid-sized companies which may face a lack of succession planning but would like to see their company continue in the hands of entrepreneurs. This has historically translated into what we believe were highly attractive valuations of 3-5x 1-year forward EV/EBITDA. We do not see any reason why the company should not continue to execute well on the M&A front.

In addition to bolt-on acquisitions in the company's current core business in Industrial Packaging, management has set out to leverage Ringmetall's know-how in clamping rings, lids and seals in adjacent end markets. Based on our conversations with the company, we would not rule out larger acquisitions in related industries such as linkage and closure systems, as well as pipe connections and suspension brackets to strengthen its small but emerging footprint and product portfolio in the space.

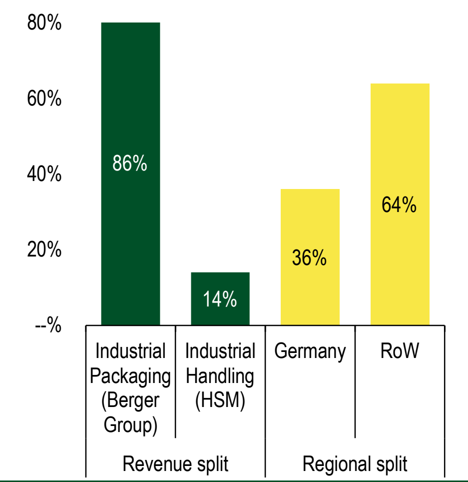
Attractive valuation - 22% discount to peers on EV/EBIT 2019e

Our fair value for Ringmetall (excluding M&A) is derived from the average of a DCF-analysis (EUR 5.5) and SotP-analysis (EUR 5.1). The SotP analysis reflects the different growth and margin characteristics of the two segments Industrial Packaging and Industrial Handling. Based on two different peer groups we derive 1-year forward target multiples of 11x EV/ EBIT and 12x EV/ EBIT for the two divisions respectively, which we apply to our financial forecasts. We deduct EUR 5.2m of net debt, EUR 0.8m of pensions and EUR 1.1m of minorities to derive a fair value of EUR 5.3 per share. Based on yesterday's closing price of EUR 4.10 our price target implies upside potential of 22% and, hence, we rate the stock Outperform. In our view, the current discount to peers of 22%/32% for FY-18/19 EV/EBIT provides an attractive entry point.In addition, we run a post M&A DCF-analysis which provides an indicative fair equity value for Ringmetall including potential acquisitions. Depending on the financing structure of future M&A, acquisitions could yield a value accretion in the range of EUR 1.62 – EUR 2.24 per share. This would result in a fair equity value per share of c.EUR 7.4 at the mid-point (compared to our PT of 5.3 which excludes M&A) and, hence imply upside of c.81% from current share price levels.

Contents

Discovering a hidden champion

Figure 1: Operational revenue split in FY-17



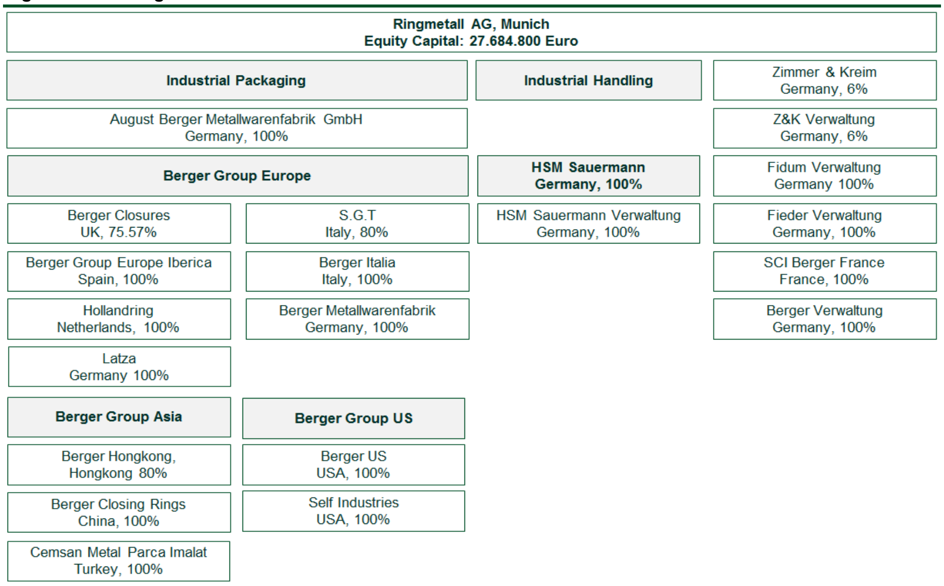
Source: MainFirst Research, company accounts

Ringmetall is a leading global specialist supplier to the industrial packaging industry with a primary focus on the chemicals industry. The company focuses on the production and distribution of high-quality and customised packaging elements designed to meet the specific needs of its customers. Ringmetall also develops and manufactures mounting systems for special purpose vehicles in the areas of logistics and warehouse logistics. The company generated revenues of EUR 102m in FY-17 and had >500 full-time employees.

The company's **Industrial Packaging** division (86% of sales, 91% of EBITDA) is focused on the manufacturing of sophisticated subcomponents for industrial drums, including clamping rings, covers and seals, as well as handles, closures and specially tailored components. With its extensive product portfolio – the largest in the world, according to our estimates – and 12 production facilities in seven countries on three different continents, the Ringmetall Group has captured the position as global market leader in the drum clamping rings market over the last few years and now commands a global market share of c. 70%, according to company accounts.

In addition to the core business of Industrial Packaging, Ringmetall attempts to leverage its close proximity to the international logistics sector offering services in **Industrial Handling** (c.14% of sales, EBITDA 9%). In this second division, the company supplies customers in the freight and warehouse logistics industry with application-oriented components for special purpose vehicles (SPVs), such as tractors, heavy goods vehicles and, in particular industrial forklift trucks. Looking at the geographical revenue split, Ringmetall generated slightly more than 1/3 of total revenues in Germany and 64% in the RoW region. While this may be an interesting starting point for the analysis of Ringmetall's business, we note that the vast majority of the business is exposed to the global macro-economy as customers are concentrated in globally operating industries regardless of the location of their headquarters.

Figure 2: Holding structure



Source: MainFirst Research, company accoounts

In addition to driving organic growth in all key geographic markets, **M&A is a central component of Ringmetall's growth strategy.** Key criteria in the selection process of suitable targets are (A) the market position; (B) production quality and client portfolios; (C) level of profitability. We will elaborate further on the potential value creation that this strategy is likely to add but already note at this stage that, in our view, management has built a strong track record in not only identifying but also integrating recent acquisitions into the group.

In Figure 3 below, we list what we believe were key milestones in the company's corporate history. Ringmetall emerged from H.P.I. Holding AG, an investment holding company with a focus on mid-sized industrial companies which was founded in 1997. H.P.I. made two important acquisitions in 1998, with August Berger and Zimmer & Kreim, which were the nucleus for Ringmetall's core business. The company went public in 2007.

Figure 3: Key milestones

1997	COMPANY FOUNDATION AS HPI HOLDINGS AG
1998	Acquisition of August Berger and Zimmer & Kreim
2007	IPO of HPI Holding
2012	Market Entry in China Acquisition of production sites in Italy and Turkey
2013	Acquisition of Packaging Handling Division (Germany, HSM) Acquisition of leading company in Packaging Solutions Divisions (Italy)
2015	Capital increase 10% Acquisition of Self Industries (USA) Rebranding of HPI Holding to Ringmetall
2016	Capital increase 10%
2017	Capital increase 10% Acquisition of HongRen (China) Acquisition of Latza (Germany)

Source: MainFirst Research, company accounts

Management

Spokesperson of the Management Board, **Christoph Petri**, was appointed to the Management Board in 2011. He has several years of experience in corporate consulting, private equity, and had previously been an M&A advisor to H.P.I. Holding where he built valuable know-how about the underlying industrial packaging market. In addition to operational investment management, Mr. Petri is in particular responsible for strategy, finance, controlling, investor relations and internationalisation.

In 2014, **Konstantin Winterstein**, was appointed to the Board with responsibility for Technology, Production and Operational Investment Management. Mr Winterstein brings many years of experience from the automotive and automotive supply industries into the group.

Shareholder structure and share price performance

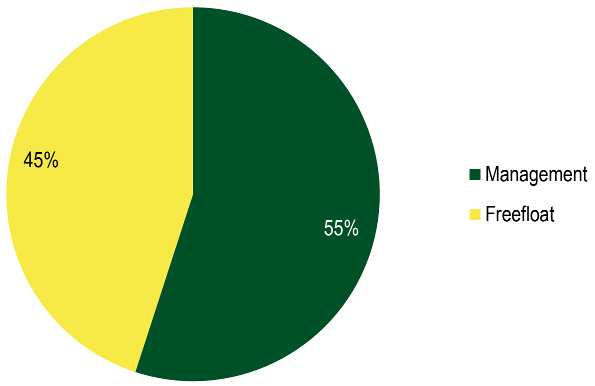
The share capital amounts to EUR 27.684.800 and is divided into 27.684.800 no-par value bearer shares.

Together, Ringmetall's management board owns 55% of the share capital with the remaining 45% in free float. From several discussions with the company, we understand that management has no intention to sell shares in the short- to medium-term.

Mr. Petri and Mr. Winterstein participated in the recent capital increase in late 2017. We believe management would be reluctant to have their current stake diluted to <50% in any potential equity raising in the future, which we interpret as a strong signal to all other minority shareholders.

Most likely as a consequence, the company is striving to become increasingly shareholder friendly. While Ringmetall is currently listed in the SCALE segment of Deutsche Boerse, management intends to up-list to the General Standard in the course of this year and Prime Standard looking at a one- or two year horizon. As a first step the company has successfully changed its reporting standards to IFRS (from German GAAP) which will become visible to shareholders for the first time with the publication of the FY17 annual report on 7 May 2018.

Figure 4: Shareholder structure

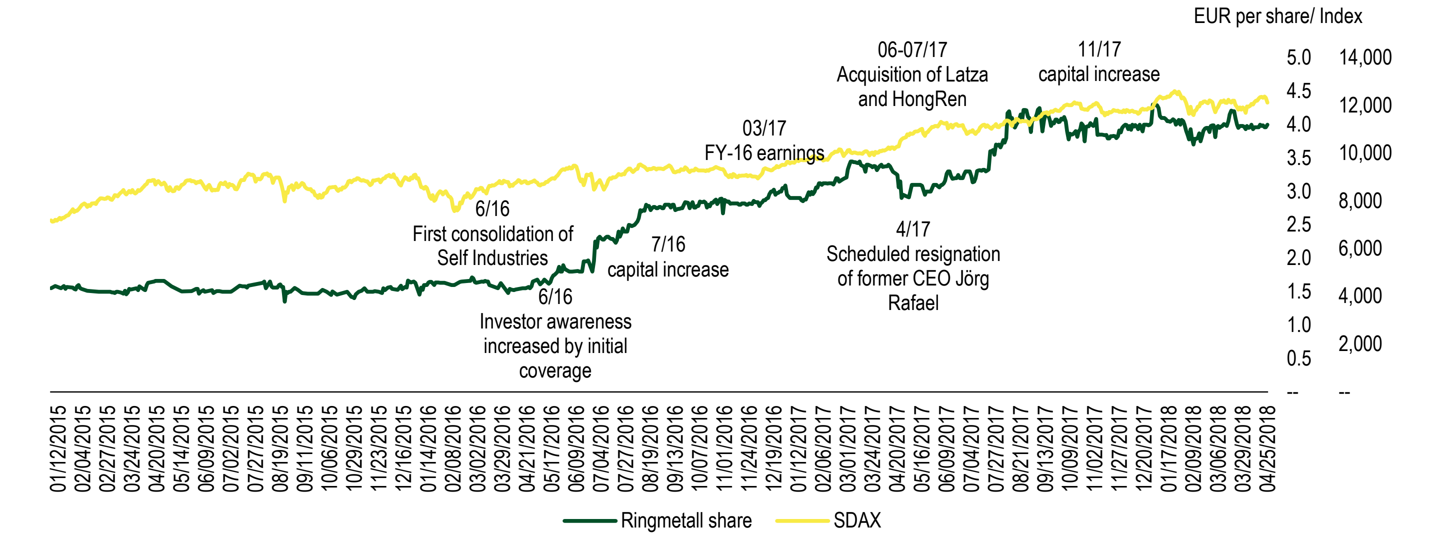


Source: MainFirst Research

Supervisory board

Ringmetall's supervisory board is chaired by Thilo von Selchow, Managing Director of Thilo von Selchow GmbH and former CEO of chip manufacturer ZMD. Other Members are Markus Wenner, attorney and Managing Director of GCI Management GmbH; Ralph Heuwing, CFO of Knorr Bremse AG and former CFO of Dürr AG.

Figure 5: Share price performance vs SDAX and key events



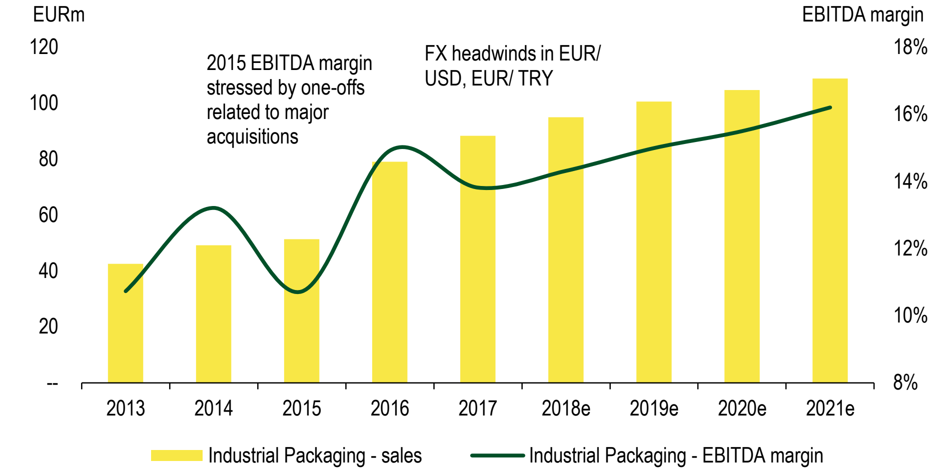
Source: MainFirst Research, company accounts, BBG

Ringmetall showed a solid positive development in the underlying business which translated into a strong upward trend of the share price in the period 2010-2015, performing 400%. However, momentum increased rapidly with the first consolidation of US pendant Self Industries in 2016 and management's efforts to accelerate capital market communication with a professional IR department which is headed by Ingo Middelmenne. We believe the move to the General Standard, combined with increased transparency and a build-up of research coverage will further increase investor's awareness of the company.

Industrial Packaging – the heart and core of Ringmetall's business

Ringmetall is organised into two segments, Industrial Handling and Industrial Packaging. In our view, the latter should clearly be regarded as the group's core business, which is also reflected in its relative size. The Industrial Packaging division accounts for 86% of total group sales and 91% of total group EBITDA in FY-17 (sales EUR 88.3m, EBITDA EUR 12.2m).

Figure 6: Industrial Packaging division



Source: MainFirst Research, company accounts

The business predominantly operates through the Berger Group, based in Berg (Germany), which has a history of over 60 years. Ringmetall's focus in Industrial Packaging lies in the manufacturing and distribution of highly specialised **industrial drum locking systems** and **drum clamping rings**, which are predominantly used in the transportation of hazardous goods in the pharmaceutical, chemical, petrochemical as well as food processing industries. Ringmetall's product portfolio is complemented with industrial drum accessories, e.g. lids, gaskets, handles. Hence, we view Ringmetall as one of the very few one-stop-shops in the market which provides a clear value proposition for customers and offers cross-selling potential for Ringmetall.

Figure 7: Clamping rings/ Lids and Gaskets/ Closing units and handles/ Pipe connections- and suspensions

Source: MainFirst Research, company accounts

With a global market share of more than 70% and a market share in the Western industrial nations of over 80%, we regard Ringmetall as one of the hidden champions in the German "Mittelstand" segment.

In addition to targeting customers in the core industries mentioned above, Ringmetall has started to leverage its know-how with careful offering of other linkage- and closure systems such as pipe connections- and suspensions, which should find demand in the sanitation and heating markets.

Looks like a simple product, yet its relative importance is significant

Ringmetall's major revenue driver (c.80% of sales) in the Industrial Packaging unit is clamping rings. Those products are used to seal the lid with the industrial drum, and as drums usually carry hazardous content the product is obliged to comply with strict UN safety standards. While the clamping ring only represents a small fraction (MFe c.4%) of the total cost of an industrial drum, its functional purpose - namely the prevention of leaks – underlines the importance in the overall value chain. As a result, customers require high quality standards from their suppliers to protect themselves from any potential accidents and related extraordinary costs. In our view, this leads to a high level of customer loyalty or, in other words, high barriers to entry into the industry.

High customer loyalty and stable recurring revenues

Ringmetall offers more than 2,000 variants of clamping rings in different sizes and materials, primarily used for steel, plastic and fibre drums. The clamping rings are manufactured on a proprietary, in-house machine park and in close co-operation with the company's core clients in order to meet individual specifications and to create a close customer-supplier relationship and, as a consequence, a high level of customer loyalty. One of the economically attractive features of clamping rings is the fact that they can only be closed and re-opened about 4-5 times before the safety risk starts to increase significantly. As a result, we believe the characteristics of clamping rings are closer to consumable goods than investment goods, which results in a high share of recurring revenues for Ringmetall with reasonably good visibility.

Ringmetall is key supplier to leading drum manufacturers

We believe that Ringmetall's well established position in the industry is underpinned by the fact that the company has strong, longstanding relationships with the three leading global drum manufacturers, namely Greif, Mauser and Schuetz.

While Ringmetall's two major clients, Greif and Mauser, account for c.40% of total revenues, the positive spin to what we concede marks a customer concentration risk is mutual dependency: The relative importance to the total cost of ownership and the fact that Ringmetall tailors their offering to customers' needs highlights a high entry barrier to the market. The remainder of sales are distributed across approximately 50 clients.

Figure 8: **International key clients – Industrial Packaging**

Source: MainFirst Research, company accounts

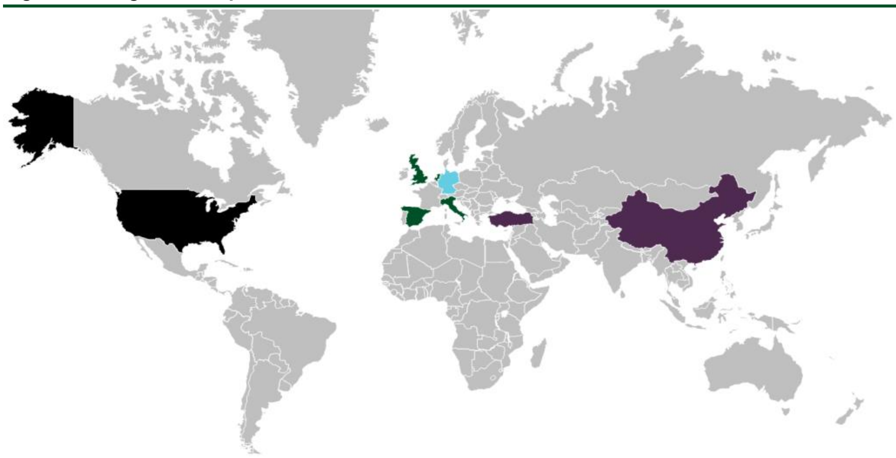
Figure 9: Industrial drum specifications

Source: MainFirst Research, company accounts

Why Asian competition is not a threat

In addition to six production sites in Europe, Ringmetall also operates two plants in Asia and three plants in the USA. As outlined above, Ringmetall commands a global leadership position with c. 70% market share. The competition is largely local and, in an overall context, highly fragmented. Hence, we project the market to further consolidate with Ringmetall taking an active role.

Figure 10: Regional footprint



Germany	Europe	USA	Asia
August Berger Berg	**Berger Closures** Peterlee, UK	**Self Industries** - Birmingham, Alabama - Houston, Texas - Shppensburg, Pennsylvania	**Cemsan** Dilovasi-Kocaeli, Turkey
HSM Sauermann Ernsgaden	**Berger Italia** Valmadera, Italy		**Berger Closing Rings** Chanshu, China
Metallwarenfabrik Berger Sessenhausen	**SGT** Albavilla, Italy		
	Berger Group Europe Iberica Reus, Spain		
	Hollandring Netherlands		

Source: MainFirst Research, company accounts

We concede that, at first glance, Ringmetall's product portfolio in the Industrial Packaging segment may seem highly vulnerable to low-cost (labour) competition in emerging markets. However, we see several reasons why barriers to entry are higher than investors may initially think. Firstly, we note that Ringmetall manufactures on a **proprietary, in-house machine park** which is designed for customers' individual specifications. Also, many Asian peers are simply not able to comply with strict UN safety standards. Moreover, potentially long shipping times to the main customer base (e.g. Greif, Mauser, etc.) pose high challenges to an efficient supply-chain management. To put things into perspective, we understand that Ringmetall has an average order visibility of around three weeks, which compares with an average duration of four to six weeks for sea freight from Asia to Europe. Ringmetall, on the other hand, operates a dense network of regional manufacturing hubs which result in a close proximity to the vast majority of customers. We also note that sea transportation of clamping rings may make them more vulnerable to corrosion.

Last but not least, due to the relative low monetary value of the clamping ring (MFE EUR 1 per ring) coupled with high proportions (commonly used in open top, 55 gallon steel drum: 55cm diameter), we believe overseas transportation costs would highly impact the margin profile of Asian manufacturers.

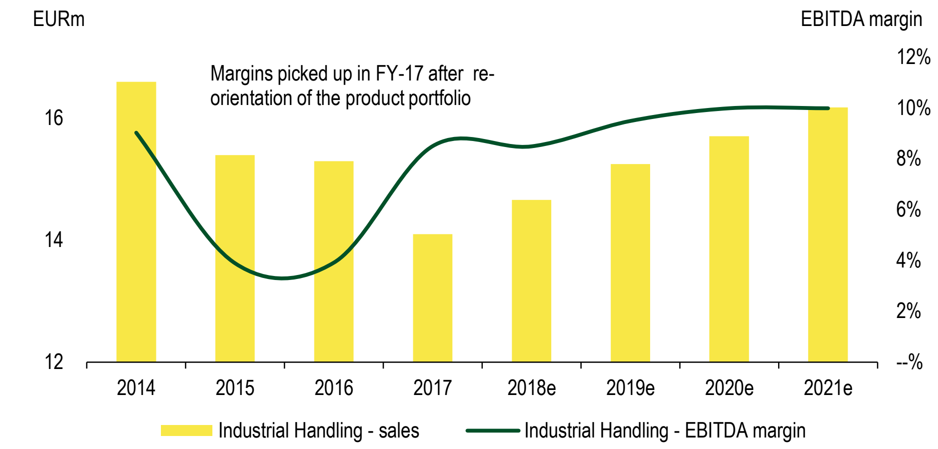
Industrial Handling – stable but non-core

Besides Industrial Packaging, Ringmetall also operates a second division, namely Industrial Handling, which in FY-17 accounted for sales of EUR 14.1m and EBITDA of EUR 1.2m. The division is predominantly organized in the HSM Sauermann Group. The business unit develops, produces and distributes components and complex assembly systems for special purpose vehicles (SPV) such as forklift trucks, industrial trucks and agricultural machinery.

The product portfolio compromises restraint systems, lifting mast parts and clutch and brake pedals with custom specifications, as well as complex welding assemblies, trailer coupling systems and hydraulic components.

Driven by know-how from many years of experience in the automotive industry of management board member Konstantin Winterstein, Ringmetall is gradually shifting its strategic focus into higher margin products, which is already reflected in the recent financial performance of the segment, namely rising margins (at the expense of shrinking revenues). We understand that HSM Sauermann is currently reviewing the entire product portfolio with the strategic goal to launch a new product generation over the next few years.

Figure 11: Industrial Handling division



Source: MainFirst Research, company accounts

Clients in the Industrial Handling division include well-known manufacturers of industrial trucks and utility vehicles for agriculture and forestry, as well as numerous small- and mid-sized suppliers to the automotive and specialised industry.

Figure 12: International key clients – Industrial Handling

Source: MainFirst Research, company accounts

Leveraging on leadership: 4.5% organic growth plus EUR 75m from M&A

Following a series of what we believe have been strategically sound acquisitions, Ringmetall successfully established a market leading position in an attractive sub-market in the Industrial Packaging industry. The company focuses on niche products which create a high degree of customer loyalty and recurring revenues. Moreover, the company will increasingly focus on leveraging the existing cross-selling potential to become the single global one-stop-shop for industrial drum manufacturers.

In addition, we firmly believe that Ringmetall management will continue to actively drive consolidation in a still fragmented market. This is given its leading position, strong cash flow and balance sheet profile and, last but not least, access to capital markets. As we outline in more detail later in this research report, M&A is likely to focus on bolt-on acquisitions while, at the same time, management would not rule out larger, transformative deals on an opportunistic basis.

Overall the company targets for EUR >200m sales by 2021, which compares to EUR 102m in FY-17. We forecast the underlying business will reach EUR 125m in sales by 2021e, implying a revenue CAGR of 4.5% (management guidance 3%-5%). Thus, we expect the remaining EUR 75m in sales to be contributed by acquisitions in related industries, which we view as feasible due to management's strong track record. The EBITDA margin is targeted at least at 15%, primarily driven by process automation and synergies.

Industrial Packaging as the primary value driver

As we already outlined towards the beginning of our research report, the **Industrial Packaging** division constitutes Ringmetall's core business. The company has managed to build a global footprint, and with the acquisition of Metallwarenfabrik Berger in 2015, the group reached the status of the only one-stop-shop for major drum manufacturers by expanding their offering by lids and gaskets.

The divisions' primary product consists of clamping rings (MFe c.80% of Industrial Packaging division sales) which are solely used for open-top drums.

Open-top drums have covers that are easily removable and are typically used in situations where frequent addition or extraction of the contents occurs. The ability to completely empty the open-top drum is also an important advantage, especially for filling goods with a high viscosity. Characteristic goods include hazardous and non-hazardous solids and high viscosity liquids which range from soils, absorbents, syrups, glues, oils, aerosols, perfume or anything containing lithium batteries which also are considered as dangerous goods.

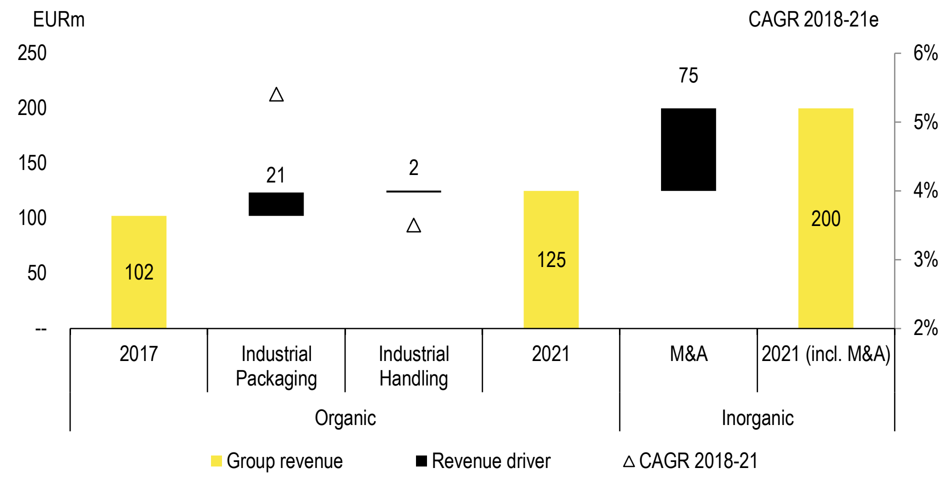
As a result, Ringmetall's core division, Industrial Packaging, is directly related to the development of the industrial packaging markets (CAGR 3.9%) in which the sub-division drums is expected to outperform the industry with a CAGR of 6.1% 2017-23e. The division is also influenced by the expansion of the key user industries, namely: chemicals (CAGR 3.4%), pharmaceuticals (CAGR 6.3%) and bulk food/ beverages (CAGR 4.4%). We understand that other end user industries, such as lubricants and building and construction, to be of minor importance. The Industrial Handling division is closer related to the development of industrial vehicles and agricultural machines (CAGR 3%).

With Ringmetall pro-actively driving market consolidation, advancing in its cross-selling approach as a one-stop-shop, and the fact that drums are expected to outgrow the market by volume terms (CAGR 6.1%), we believe the upper end of management guidance of ~3-5% organic growth will be reached, outperforming underlying industrial packaging and end user markets.

We therefore model an organic sales CAGR of 4.7% for 2018-21e in the Industrial Packaging segment.

The **Industrial Handling** division, on the other hand, should only provide a marginal incremental sales contribution of EUR 2m by 2021E, which would result in a sales increase from EUR 14.1m to 16.2m (CAGR 3.3% 2018-21e). As we noted before, the segment is currently undergoing a strategic realignment process which, once completed, could potentially trigger a recovery in top-line growth. However, given its relatively small size compared to Industrial Packaging, investors are likely to focus on the progress in Industrial Packaging when valuing the company.

Figure 13: **Revenue bridge 2018-21e**



Source: MainFirst Research, company accounts

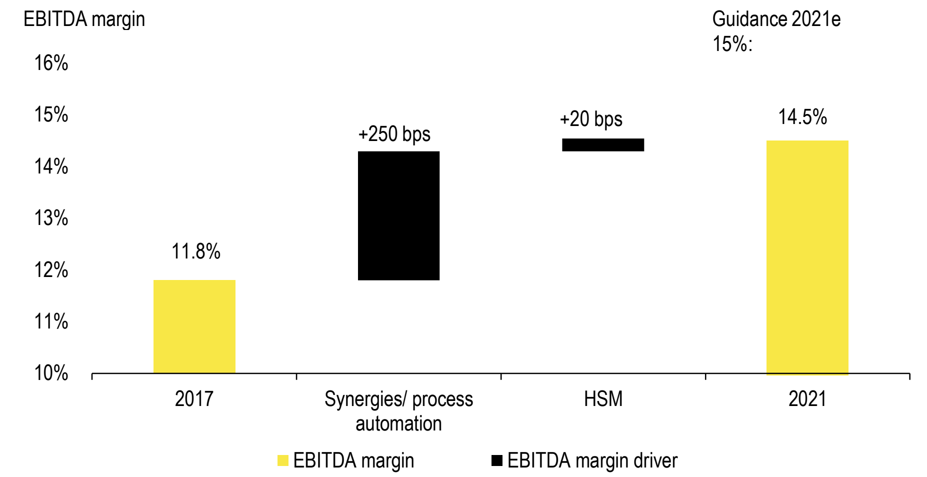
EBITDA margins set to expand from 11.8% in FY-17 to 14.5% by 2021

As outlined previously, Ringmetall management expects the group EBITDA margin to expand from a current level of 11.8% in 2017 to at least 15% by 2021e. In our view, the margin target does not look overly ambitious, as we believe profitability can benefit not only from rising scale but also continued process automation. We also note that there is continued cost synergy potential which management should be able to reap from its string of acquisitions over the last few years. Ringmetall's production lines are highly automated, allowing for disproportional production growth compared to FTE costs.

To underpin our view, we provide the following case study: Back in 2015 Ringmetall relocated its assembly line in Löbnitz into the primary production line in Berg, which led to significant cost savings and synergies, and a corresponding expansion in the group EBITDA margin from 8.2% in 2015 to 12.0% in 2016. Management now targets similar moves for Ringmetall's US subsidiary, Self-Industries, which was acquired at the end of 2015. In summary, we model and EBITDA margin expansion in the Industrial Packaging segment from 13.8% in FY-17 to 16.2% in FY-21E.

In addition to the positive development in the core division, we believe that current restructuring efforts in the Industrial Handling segment (HSM) should likely contribute positively to the overall margin evolution of the group. The division targets to shift from job-order production towards more profitable self-developed and in parts patented products. In summary, we project margins in Industrial Handling to move from 8.5% in FY-17, to 10% in FY-21E.

Figure 14: EBITDA margin bridge 2018-21e



Source: MainFirst Research, company accounts

A closer look at the importance of steel prices

Global steel prices are of particular importance for the company's margin profile. On average, we estimate that steel accounts for slightly more than 50% of the price of a clamping ring. This made it essential that Ringmetall organised its customer contracts with a (steel) price variation clause to pass through the movement of the steel price, which can be very volatile, as we show in Figure 15 below. Note that steel prices cannot be hedged properly with financial instruments.

Ringmetall's clamping ring selling prices are based on the so called MEPS steel price index – a commonly used indicator in industrial engineering, created by MEPS, a leading independent supplier of metal price information. Hence, investors should be aware that Ringmetall's top-line performance varies with the development of steel prices.

In addition, we note that Ringmetall's input prices are exclusively based on cut hot rolled coil (HRC) which is only one component of the MEPS Index. Hence, there may be a temporary divergence in input prices and steel prices which can be passed on to customers which triggers gains or losses, obviously with an effect on Ringmetall's profit margins.

Figure 15: Hot rolled coil steel future price - USD

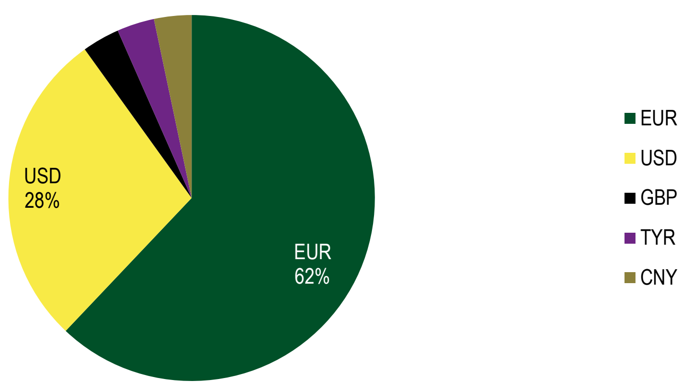
Source: MainFirst Research, BBG

FX-moves have predominantly translation effects

As a result of Ringmetall's aggressive internationalisation strategy over the last few years, especially with the major acquisition of Self Industries in the United States, Ringmetall has become increasingly exposed to currency risks.

We believe especially the weakening of the USD and TRY vs. the EUR to represent a continued headwind for the company's financial performance in 2017/18. We estimate that Ringmetall generates c. 62% of sales in EUR, c. 28% of sales in USD and approximately a sum of 10% in GBP/ TRY/ CNY.

Figure 16: FX exposure



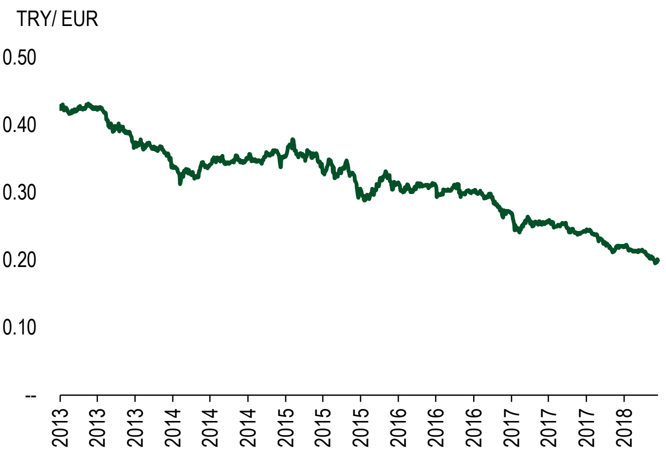
Source: MainFirst Research, company accounts

While FX will continue cause fluctuations to the company's top-line performance in the future, we note that the vast majority will only have translation effects as the company is almost exclusively producing its products in Industrial Packaging locally.

Figure 17: USD/ EUR – c.34% of sales

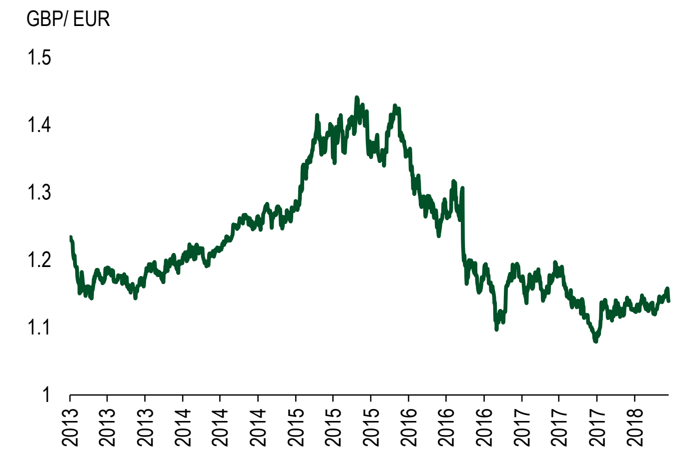
Source: MainFirst Research, BBG

Figure 18: TRY/ EUR – c.10% of sales



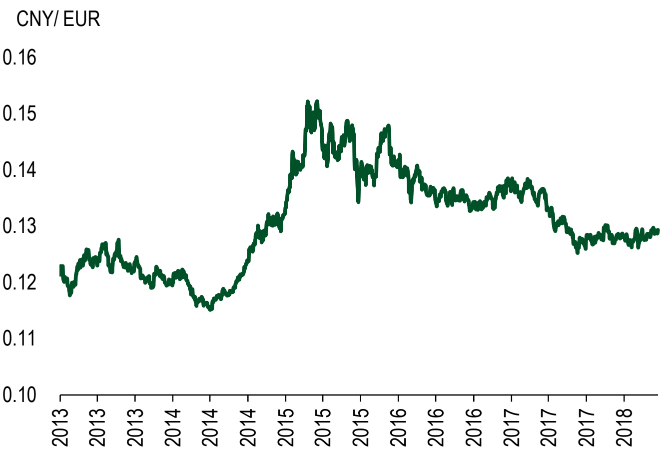
Source: MainFirst Research, BBG

Figure 19: GBP/ EUR – c.10% of sales



Source: MainFirst Research, BBG

Figure 20: CNY/ EUR – <10% of sales



Source: MainFirst Research, BBG

Bolt-on acquisitions as a central strategy for growth

As we have outlined earlier, Ringmetall's growth strategy includes M&A as a central pillar to further cement its leading position as global market leader in its Industrial Packaging business.

In our view, M&A is a highly sensible strategic tool to support the company's growth path. Ringmetall has successfully built a strong track record and reputation in the market. The latter mainly centres around the fact that Ringmetall acts as entrepreneur rather than a private equity style investor, which makes the company a preferred takeover partner, especially for family-owned, mid-sized companies which may face a lack of entrepreneurial succession. In many cases, this could translate into highly attractive valuations of takeover targets.

Management has strict criteria for M&A which, in our view, formed the basis of the company's success in the past: For instance, potential targets need to be profitable, i.e. should not be in restructuring stage. Moreover, those companies should add technological expertise to Ringmetall's portfolio and / or have a strong set of long-standing and complementary client relationships, most likely in new geographic markets. Lastly, we note that management has historically shown a high degree of price discipline in its M&A efforts, **as valuation multiples ranged between 3-5x 1-year forward EV/EBITDA** which we find attractive, especially as this was before the realisation of any potential cost synergies.

In our view, Ringmetall will naturally continue to be an active market consolidator in its core division Industrial Packaging. We believe potential transactions could include the purchase of smaller producers of drum closures, in particular to further expand the company's offering of accessories with lids, gaskets and handles. From our discussions with management, as well as the company's historic track record, we conclude that the size of potential target companies will likely be up to annual sales of c. EUR 10m with a geographic focus on Ringmetall's current primary markets, i.e. the Americas, Europe and Asia. There may always be exceptions to the rule, as we could witness in the recently acquired HSM Sauermann, now part of the group's Industrial Handling segment, and the acquisition of the US subsidiary in the Industrial Packaging division, Self-Industries, which we believe was of high strategic importance as it secured access to one of the most important future markets for the company.

Figure 21: **Acquisitions – including increases of previously held stakes**

Date	Country	Company	Currency	Sales (m)
Apr 12	Italy	S.G.T S.r.l	EUR	7
Apr 12	Turkey	Cemsan Metal Parca Imalat	EUR	5
Oct 13	Germany	HSM Sauermann GmbH & Co KG	EUR	17
Apr 13	Italy	Rieke Italia S.r.l	EUR	9
2015	Turkey	Cemsan Metal Parca Imalat	EUR	5
2015	Germany	Metallwerkfabrik Berger GmbH	EUR	4
Dec 15	USA	Self Industries	USD	28
2016	Italy	S.G.T S.r.l	EUR	7
Jun 17	China	HongRen	EUR	1
Jul 17	Germany	Latza GmbH	EUR	5

Source: MainFirst estimates, company accounts

Strengthening the emerging product portfolio into adjacent end-markets

As Ringmetall already operates in rather concentrated end markets in Industrial Packaging, the scope for further M&A in the current core business in our view may be limited. Hence, management has set out to leverage the company's technological know-how in clamping rings into adjacent end markets. Based on our conversations with the company, we would not rule out larger acquisitions in related industries such as linkage- and closure systems and pipe- connections- and suspensions to strengthen its small but emerging footprint and product portfolio in the space.

As a reminder, Ringmetall targets approximately EUR 75m in incremental in-organic sales by 2021, and we believe the majority of the potential M&A contribution will come from companies with customers in adjacent end markets.

Based on discussions with management, the company initiated a pilot project in 2017 with a leading manufacturer in the sanitation and heating market as partner. In our view, the underlying business profile could imply significantly higher margins compared to Ringmetall's current core business in Industrial Packaging, as the end customer industry is highly fragmented.

Running the numbers on Ringmetall's M&A strategy

Based on our analysis of historic estimated transaction multiples, and assuming that management will remain highly price disciplined in its M&A approach, we expect 1-year forward transaction multiples in the range of 5x - 6x EV/EBITDA for assets in Ringmetall's core market. This is notably higher than the historic range of 3-5x, which is explained by a continuous benign global economic environment which likely led to an underlying expansion in valuation multiples.

We further assume potential target companies generate average EBITDA margins of c.12.5%, which is broadly in-line with Ringmetall. Hence, we derive a total Enterprise Value of EUR 47m for Ringmetall's total M&A strategy over the next few years (cf. figure 22).

Figure 22: **Targeted Enterprise Value**

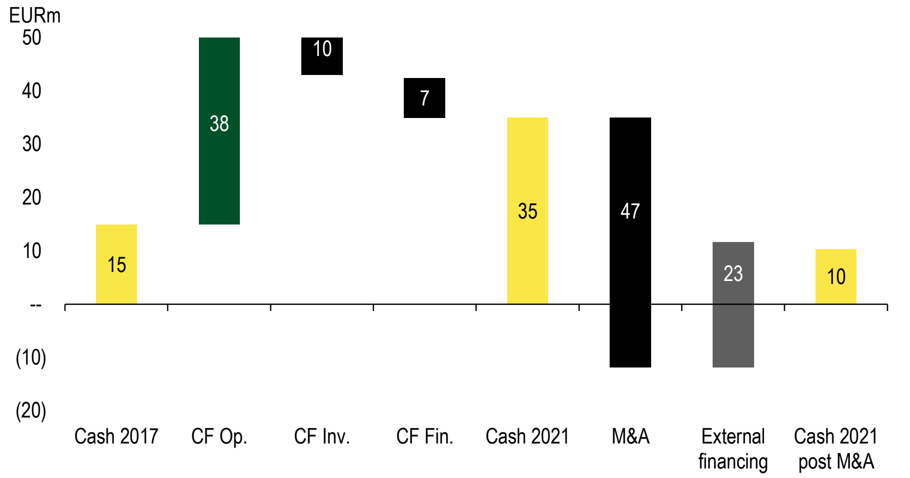
M&A target financials	
Targeted revenue range (EURm)	75
EBITDA (EURm)	9
EV/ EBITDA multiple (MFe)	5x
Targeted EV (EURm)	47

Source: MainFirst Research

We understand that the Executive Board aims to finance acquisitions preferably through its underlying free cash flow generation. While this clearly marks a healthy base for future M&A activities and signals a conservative approach by management, we note that a certain bridge financing may be needed to be able to execute on opportunistic deals in the short- to mid-term.

Based on the assumptions outlined in the previous paragraphs, the expected cash outflow of c. EUR 47m to finance the purchase of c. EUR 75m in revenues through 2021 would exceed Ringmetall's cash position of c.EUR 34m which we model can be achieved through organic growth. Hence, we believe that c. 50% of the total transaction value (of c. EUR 47m) will likely be financed externally, either via debt or potentially even with the help of a capital increase on which we elaborate in detail in the valuation section (cf. figure 36-38).

Figure 23: **Cash evolution pre- and post M&A**



Source: MainFirst Research, company accounts

Solid outlook for key end markets

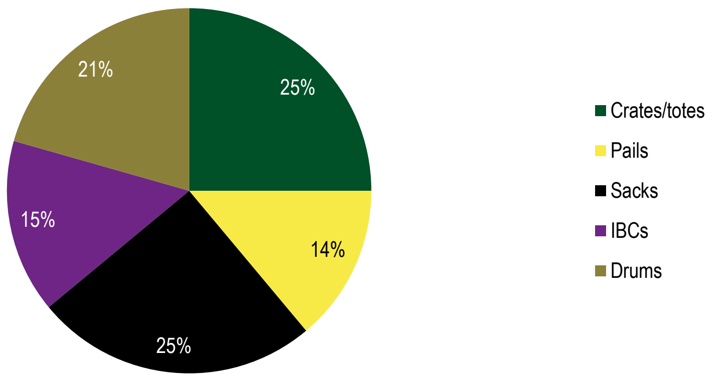
Ringmetall's core division, Industrial Packaging, is directly related to the development of the industrial packaging markets, and is particularly influenced by the expansion of the four key user industries, namely: chemicals and pharmaceuticals, lubricants, bulk food and beverages and building and construction. On the other hand, the Industrial Handling division is closer related to the development of industrial vehicles and agricultural machines. As we outline below, these end markets all exhibit a very solid growth outlook through 2022, ranging from a CAGR of 3.0-6.3%, based on continued strong development of global trade activities.

Global Industrial Packaging Industry – CAGR 3.9% 2016-23E

Recent data from market intelligence of Allied Market Research forecasts the global industrial packaging market to grow from USD 53bn in 2016 to USD 70bn in 2023, implying a CAGR of 3.9%. Consumption increases will continue to be driven primarily by the faster-growing transition economies of Asia, Central and Eastern Europe and Africa, rather than the more mature advanced economies of Western Europe, North America and Japan.

According to market research of Smithers Pira, the industrial packaging market is split into the categories drums (21%), Intermediate Bulk Container (IBCs) (15%), sacks (25%), pails (14%) and crates/ totes (25%). Market researchers expect drums to outperform the Industrial Packaging market with a CAGR of 6.1% between 2017- 23e. We note new regulations, globalisation and company security guidance increasingly urge for the development of packaging products that ensure the proper transportation and handling of industrial goods. We would expect these trends to continue and increase their influence in the next years, encouraging the development of high-quality and resilient packaging solutions that are tailored to customer's needs.

Figure 24: Global Market for Industrial Packaging Products by 2020 – CAGR 3.9%



Source: Smithers Pira

Chemical Industry – CAGR 3.4% 2018-20E

The global chemical production (excl. pharmaceuticals), according to BASF, is expected to grow by 3.4% in 2018. BASF, as one of the leading companies in the chemicals industry, expects a slightly weaker expansion in advanced economies (2017: +3.7%; 2018: +2.4%). At the same time, growth in emerging markets is expected to pick up slightly with a growth rate of 4.2% in 2018 vs 3.4% in 2017.

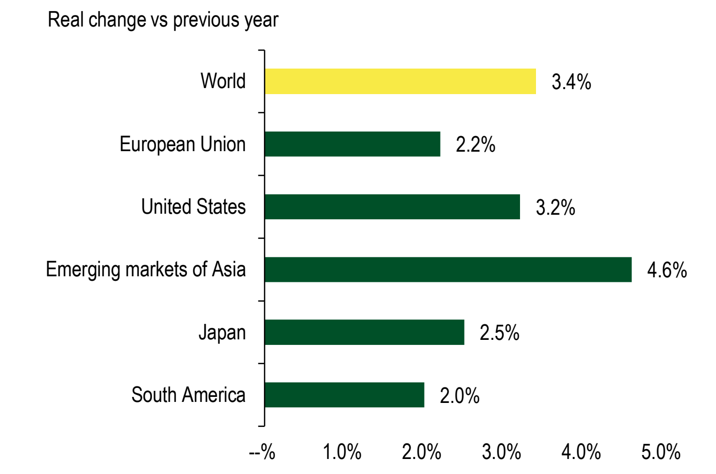
The development of the world's largest chemical market – **China** – has a significant impact on the global growth rate. As a result, China will presumably once again account for almost two percentage points of global chemical growth.

The **European Union,** according to BASF, is expected to grow above average in 2018, but slower than in 2017 as domestic demand in key customer industries will probably be slightly weaker following strong industrial growth in the previous year and also due to weaker export demand from Asia.

By contrast, chemical growth in the **United States** should pick up. One reason for the higher growth forecast for 2018 is the production outages in the US caused by Hurricane Harvey in fall 2017. In addition, new production capacities will reach the market in 2018, supported by the increase of shale oil production which will presumably increase exports as well.

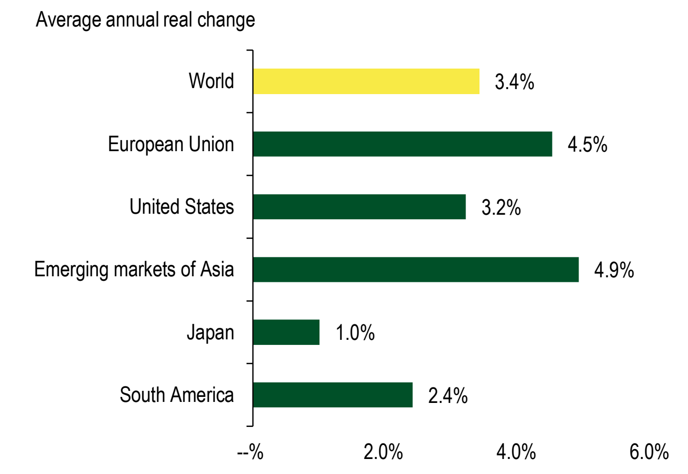
Japan is expected to level-off after the unusually strong, largely export-driven growth in the previous year. In South America, BASF assumes that the upturn in the chemicals industry will continue in line with the overall economic recovery.

Figure 25: Outlook for chemical production 2018 (excl. pharmaceuticals)



Source: BASF

Figure 26: Outlook for chemical production 2018-20 (excl. pharmaceuticals) – CAGR 3.4%



Source: BASF

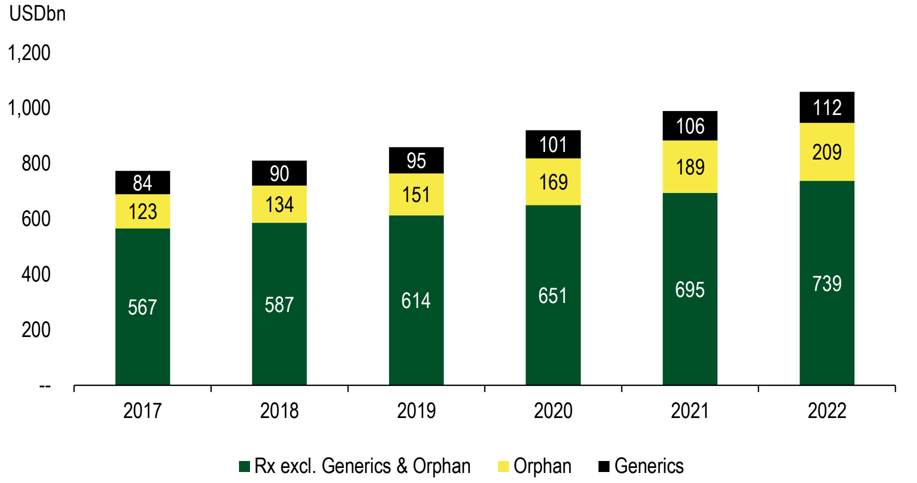
Pharmaceutical industry – CAGR 6.3% 2017-22E

The market for pharmaceuticals is growing consistently. According to a current market report by Evaluate Pharma, the overall market will increase to USD 1.06tn through 2022, implying a CAGR of 6.3%. Despite political uncertainties regarding general healthcare, the US will record the largest growth, while the so called pharmerging markets will require about two thirds of the entire drugs volume.

Reasons for the high growth are obvious, namely the increase in global population by 1.24% per year until 2030 combined with an aging demographic

- the proportion of people aged 65 to 80 will rise to 28%, compared to 22% in 2000. Increasing urbanisation and a growing middle class are making drugs available and affordable for more people and also lead to a higher demand for medication.

Figure 27: Global prescription drug sales – CAGR 6.3%



Source: Smithers Pira

Bulk food ingredients – CAGR 4.6% 2018-23E

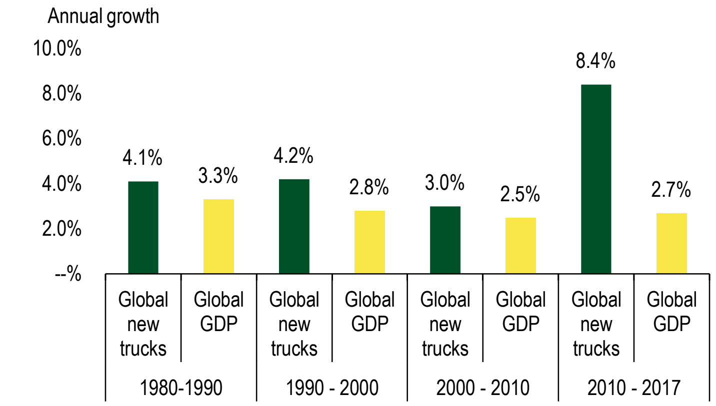
The bulk food ingredients market is expected to achieve a CAGR of 4.6% 2018-23 (acc. to Mordor Intelligence), primarily driven by evolving lifestyle factors such as demand for packed convenience food & beverage products.

The robust growth in the food service retail chains and a globally increasing number of restaurants and cafes provides opportunities for growth in bulk food ingredients. Growing urbanisation, the increase in global exposure, and western lifestyle influence in emerging markets have led to growing popularity of packaged, processed and ready-to-eat food.

Industrial vehicles – CAGR 3% 2016-21E

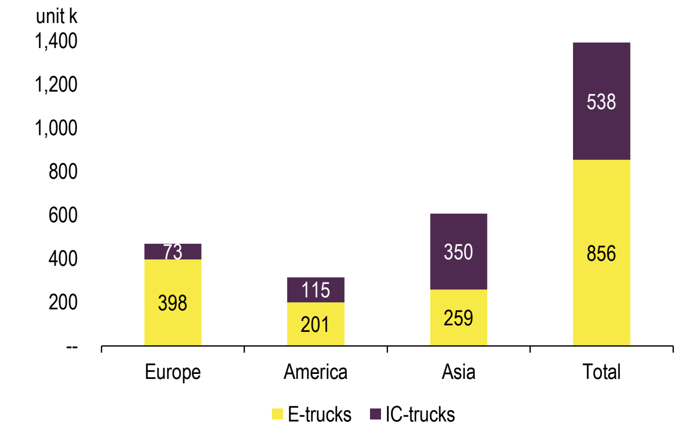
The industrial vehicles market was estimated to be USD 27bn in 2016, and is projected to see a CAGR of 3% to reach USD 30bn by 2021 (acc. to market intelligence MarketsandMarkets). Increased industrialisation and an increasing number of warehouses and e-commerce platforms are expected to drive growth for the industrial vehicle market globally.

Figure 28: Global new truck sales grew historically at c.1.5x World GDP



Source: MainFirst Research, KION

Figure 29:Industrial truck orders in FY-17 – E-trucks grow strongly on increasing relevance to TCO, regulations and improving batteries



Source: MainFirst Research, WITS

With regard to agricultural machinery, the expansion is highly dependent on the economic cycle and the price of agricultural goods. Following three years of recession, agricultural machinery production in Germany showed an increase of 7% in in 2017, and an increase of 4% is expected for 2018 (acc. to industry body VDMA).

Financial Estimates

Ringmetall is currently listed in the SCALE segment of Deutsche Boerse and the company's financial reporting is based on German GAAP (HGB). However, with the recent publication of the FY-17 annual report, 2018, Ringmetall has switched to IFRS reporting standards which should further increase transparency.

While the overall impact from the change of reporting has been negligible for most operating metrics, the transition from HBG to IFRS approximately halved the absolute D&A charge, as regular amortisation charges on the company's (sizeable) goodwill position will cease and be replaced by the IFRS 'Impairment Only' approach.

Revenue and Earnings Model

Our revenue and earnings estimates are based on a segmental financial model which follows Ringmetall's reporting structure, i.e. the divisional split into Industrial Packaging and Industrial Handling. As previously discussed, we expect the core division of Industrial Packaging to grow with a CAGR of 4.7% from 2018-21e and, hence, reach the upper end of management guidance of 3.0%-5.0% organic growth during that period. We expect an outperformance vs. the underlying primary end markets of chemical (CAGR 3.4%), pharmaceuticals (6.3%) and bulk food ingredients (CAGR 4.6%) following Ringmetall's active role as a market consolidator, the cross-selling potential as a one-stop-shop, and the fact that the Industrial Packaging sub-division drums is expect to outgrow the market with a CAGR of 6.1%.

We model the Industrial Handling division's sales to increase with a CAGR of 3.3% during 2018-21e, slightly outperforming the underlying end-market for Industrial vehicles (CAGR 3%) as we expect the re-designed portfolio to trigger an increase in demand from key customer groups.

Overall, this should lead to group revenues of EUR 125m by 2021e, primarily driven by the core division Industrial Packaging which we project to contribute an additional EUR 21m in sales. We project the Industrial Handling division to add a further EUR 2m in group revenues by 2021e.

We forecast the group EBITDA margin to expand from 11.8% in FY-17 to 14.5% in 2021e. As outlined previously, we view the targeted margin range of 15% in 2021e as not overly ambitious, as we believe profitability to not only benefit from rising scale and continued process automation, but also from synergy potential from its string of acquisitions.

Figure 30: Revenue and Earnings Model

	2013	2014	2015	2016	2017	2018E	2019E	2020E	2021E	COMMENTS
Industrial Packaging	42.5	49.2	51.3	79.1	88.3	94.9	100.6	104.6	108.8	CAGR 4.7%
y/y	n/m	16%	4%	54%	12%	8%	6%	4%	4%	2018-21e
as % of sales	91%	75%	77%	84%	86%	87%	87%	87%	87%	
EBITDA	4.6	6.5	5.5	11.8	12.2	13.6	15.1	16.1	17.6	
EBITDA margin	10.7%	13.2%	10.7%	14.9%	13.8%	14.3%	15.0%	15.5%	16.2%	
Industrial Handling	4.1	16.6	15.4	15.3	14.1	14.7	15.3	15.7	16.2	CAGR 3.3%
y/y	n/m	305%	(7%)	(1%)	(8%)	4%	4%	3%	3%	2018-21e
as % of sales	9%	25%	23%	16%	14%	13%	13%	13%	13%	
EBITDA		1.5	0.6	0.6	1.2	1.2	1.4	1.6	1.6	
EBITDA margin		9.0%	3.9%	3.9%	8.5%	8.5%	9.5%	10.0%	10.0%	
Group sales	46.5	65.8	66.7	94.3	102.4	109.6	115.9	120.4	125.0	CAGR 4.5%
y/y	n/m	42%	1%	41%	9%	7%	6%	4%	4%	2018-21e
Group EBITDA	3.5	7.2	5.4	11.4	12.0	13.4	15.0	16.9	18.1	
EBITDA margin	7.5%	10.9%	8.2%	12.0%	11.8%	12.2%	12.9%	14.0%	14.5%	
Regional	46.5	65.8	66.7	94.4	102.4	109.6	115.9	120.4	125.0	
Germany	19.0	33.1	31.9	34.1	37.0	37.3	37.1	36.1	35.0	
as % of sales	41%	50%	48%	36%	36%	34%	32%	30%	28%	
Rest of the World	27.5	32.7	34.8	60.3	65.4	72.3	78.8	84.2	90.0	
as % of sales	59%	50%	52%	64%	64%	66%	68%	70%	72%	

Source: Company accounts, MainFirst Research

Cash-Flow and Balance Sheet

Leaving aside the string of acquisitions over recent years, we understand that Ringmetall's underlying business requires maintenance capex of approximately EUR 2m-3m annually. In addition, management has demonstrated good working capital discipline which we believe can even further improve post the successful integration of recent acquisitions. Hence, we believe Ringmetall's healthy free cash flow generation (MFe c.5%-6% of sales, 4% yield) should allow the company to gradually finance its M&A strategy from its internal financial resources.

Going forward we would not rule out that future M&A could be partially financed via debt (as Ringmetall has grown to a size that makes it a respected partner for banks) or, in case larger opportunities arise, with additional equity. We note that the Executive Board historically preferred to finance acquisitions with the help of capital markets, e.g. capital increases in 2015, 2016 and 2017 raising a total of c.EUR 18m over this period.

Figure 31: Cash flow statement

YEAR TO DECEMBER (EUR M)	2014	2015	2016	2017	2018E	2019E	2020E	2021E	2022E	2023E
EBITDA (as reported)	**7**	**5**	**11**	**12**	**13**	**15**	**17**	**18**	**19**	**19**
Cash interest and tax payments	(1)	(2)	(4)	(3)	(5)	(5)	(5)	(5)	(5)	(6)
thereof: Cash tax payments	(1)	(1)	(2)	(2)	(3)	(4)	(4)	(4)	(4)	(4)
Change in working capital	(2)	2	(0)	1	(2)	(1)	(1)	(1)	(1)	(1)
Inventories	(1)	1	(1)	0	(3)	(2)	(1)	(1)	(1)	(1)
Trade receivables	(2)	1	1	1	2	1	0	0	0	0
Trade liabilities & prepayments	0	0	0	0	0	(0)	(0)	0	0	0
Other operating CF items	0	0	1	(0)	(0)	(0)	(0)	(0)	(0)	(0)
Operating cash flow	**4**	**6**	**9**	**10**	**7**	**9**	**11**	**12**	**12**	**13**
Capex	**2**	**19**	**3**	**5**	**2**	**3**	**3**	**3**	**3**	**4**
Intangible fixed assets	(2)	(19)	(3)	(5)	(2)	(3)	(3)	(3)	(3)	(4)
Free cash flow	**2**	**(13)**	**6**	**5**	**5**	**6**	**8**	**9**	**9**	**9**
Acquisitions/Disposals/Financial assets	(1)	14	(3)	(3)	0	0	0	0	0	0
Dividends, minority payouts	0	(1)	(1)	(2)	(1)	(2)	(2)	(2)	(2)	(3)
Equity measures	(2)	3	5	9	0	0	0	0	0	0
Other changes in net cash	1	(15)	1	2	(0)	0	0	0	(0)	(0)
Change in net cash	**(0)**	**(12)**	**8**	**11**	**3**	**5**	**6**	**6**	**7**	**7**
Net cash (debt)	**(12)**	**(24)**	**(17)**	**(5)**	**(2)**	**2**	**9**	**15**	**22**	**28**
CASH FLOW RATIOS										
Operating cash flow/Sales	5.8%	8.9%	9.5%	9.7%	6.0%	7.7%	9.0%	9.4%	9.4%	9.5%
Free cash flow/Sales	3.2%	-19.1%	6.0%	4.7%	4.2%	5.5%	6.9%	7.0%	7.0%	6.9%
Dividend payout ratio	0.0%	676.0%	47.1%	24.8%	21.6%	21.8%	22.0%	22.0%	22.0%	22.0%
Capex/Sales	2.6%	28.0%	3.4%	5.0%	1.8%	2.2%	2.1%	2.4%	2.3%	2.6%
Capex/D&A	42.6%	459.2%	65.0%	254.6%	99.7%	122.6%	120.8%	140.8%	137.0%	153.7%
D&A/Sales	6.1%	6.1%	5.3%	2.0%	1.8%	1.8%	1.7%	1.7%	1.7%	1.7%

Source: Company reports, MainFirst estimates

Due to Ringmetall's healthy FCF generation net debt declined to c. EUR 5.2m in 2017 from peakish 2015 levels of EUR 24m, implying a net debt/ EBITDA ratio of 0.4x and a net gearing of 13%. In our view, the fact that the company was able to show >10% RoCE in 2016 underlines management's ability to convert employed capital very efficiently, as we outlined previously in our report taking the example of the integration of Self Industries in 2016.

Figure 32: Balance Sheet

YEAR TO DECEMBER (EUR M)	2014	2015	2016	2017	2018E	2019E	2020E	2021E	2022E	2023E
Fixed assets	**25**	**37**	**34**	**36**	**36**	**36**	**37**	**38**	**38**	**40**
Intangibles	10	23	21	23	23	23	23	23	23	23
t/o Goodwill	10	23	21	22	0	0	0	0	0	0
Tangibles	15	13	12	12	12	13	13	14	15	16
Financial fixed assets	0	0	0	1	1	1	1	1	1	1
Other fixed assets	0	0	0	0	0	0	0	0	0	0
Current assets	**20**	**27**	**31**	**40**	**46**	**53**	**60**	**67**	**75**	**83**
Inventories	6	9	10	11	12	12	13	13	14	14
Trade receivables	10	14	14	14	16	17	18	19	19	20
Other current assets	1	1	1	0	0	0	0	0	0	0
Cash & equivalents	3	3	5	15	18	23	29	35	42	48
Group equity	**18**	**20**	**25**	**39**	**44**	**50**	**57**	**65**	**73**	**82**
Minorities	2	2	1	1	1	1	1	1	1	1
Shareholders' equity	16	18	24	38	43	49	56	64	72	81
Provisions	**2**	**2**	**3**	**1**	**1**	**1**	**1**	**1**	**1**	**1**
Pension	1.82	1.99	2.57	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Other	0	0	1	0	0	0	0	0	0	0
Liabilities	**24**	**42**	**36**	**35**	**37**	**38**	**38**	**39**	**39**	**39**
Interest-bearing liabilities	15	27	22	20	20	20	20	20	20	20
Interest-free liabilities	9	15	15	15	17	17	18	18	19	19
Trade liabilities	7	9	10	10	11	12	12	13	13	14
Other interest-free liabilities	3	6	5	6	6	6	6	6	6	6
Balance sheet total	**45**	**64**	**65**	**76**	**82**	**89**	**97**	**105**	**114**	**123**
CAPITAL AND LIQUIDITY RATIOS										
Net working capital	9	14	15	15	17	18	19	19	20	21
Capital employed	34	51	49	51	53	54	55	57	58	60
Tangible group equity	9	(3)	4	17	44	50	57	65	73	82
Number of shares, fully diluted (m)	20.8	22.9	25.2	27.7	27.7	27.7	27.7	27.7	27.7	27.7
Fixed asset intensity (as a % of revenue)	23.2%	20.9%	13.5%	13.3%	32.7%	31.3%	30.5%	30.1%	29.6%	29.6%
Net working capital intensity	14.4%	21.0%	15.6%	14.7%	15.4%	15.4%	15.4%	15.4%	15.4%	15.4%
Fixed assets as a % of total assets	56.0%	57.8%	52.6%	47.2%	43.6%	40.8%	38.0%	35.8%	33.7%	32.3%
Net debt (cash) as a % of BS total	27.7%	37.8%	25.6%	6.8%	2.6%	-2.7%	-8.9%	-14.2%	-19.0%	-23.1%
Equity ratio (Group equity/BS total)	41.2%	30.9%	38.9%	51.6%	53.5%	56.3%	59.3%	62.1%	64.6%	66.8%
Net gearing (Net debt/Group equity)	0.67	1.23	0.66	0.13	0.05	(0.05)	(0.15)	(0.23)	(0.29)	(0.35)
Net debt/EBITDA (adj.)	1.72	4.44	1.46	0.43	0.16	n/m	n/m	n/m	n/m	n/m
Interest cover (EBITDA/Net interest)	8.89	8.30	8.19	10.9	8.30	12.9	14.0	14.5	14.5	14.5
DSOs (trade receivables as days of revs)	54.1	76.4	55.1	49.1	54.3	54.3	54.3	54.3	54.3	54.3
Inventory turnover (Days)	35.7	49.8	39.8	39.1	39.2	39.2	39.2	39.2	39.2	39.2
RETURN RATIOS										
Price/NAV	2.01	1.97	2.46	2.59	2.65	2.32	2.02	1.77	1.57	1.40
Price/Tangible NAV	3.73	(10.5)	15.2	5.83	2.58	2.27	1.98	1.74	1.55	1.39
RoE (Net result/Shareholders' equity)	9.5%	-3.6%	9.7%	17.8%	15.0%	16.0%	16.9%	16.1%	14.8%	13.6%
RoCE (EBIT)	9.2%	2.7%	13.1%	19.7%	21.6%	23.9%	26.8%	28.1%	28.5%	28.4%
RoCE (NOPAT)	7.0%	-0.6%	7.0%	13.8%	15.1%	16.8%	19.6%	20.5%	20.8%	20.8%
Return on total assets (NOPAT)	5.4%	-0.5%	5.3%	9.3%	9.7%	10.2%	11.2%	11.1%	10.7%	10.2%
ENTERPRISE VALUE COMPONENTS										
Enterprise value	49	63	79	106	118	113	107	100	94	87
Market Cap (EUR m)	33	35	59	98	114	114	114	114	114	114
Net debt (cash)	12	24	17	5	2	(2)	(9)	(15)	(22)	(28)
Pension provisions	1.82	1.99	2.57	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Market value of minorities	2	2	1	1	1	1	1	1	1	1
Other items	0	0	0	0	0	0	0	0	0	0

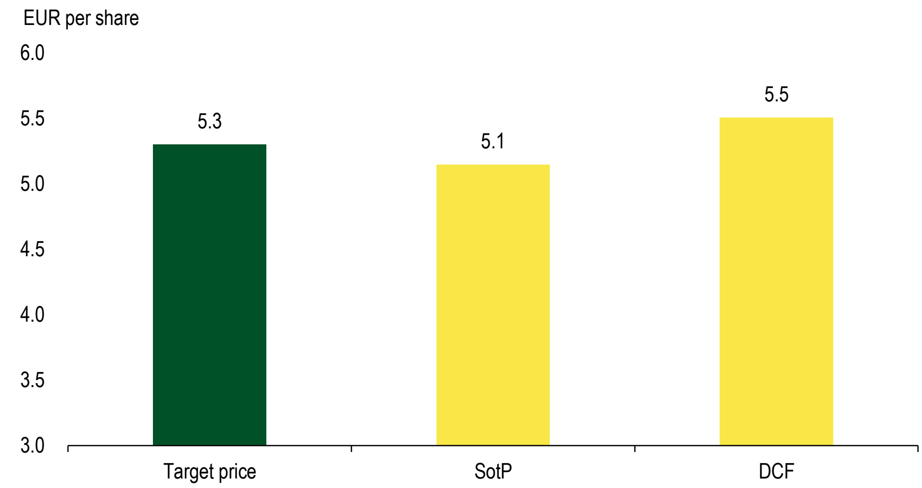
Source: Company reports, MainFirst estimates

Valuation – Price target of EUR 5.3

We use a blend of DCF and SotP to derive our price target

Our fair value for Ringmetall is derived from the average of DCF-analysis (EUR 5.5) and SotP-analysis (EUR 5.1). The SotP analysis reflects the different growth and margin characteristics of the two segments, Industrial Packaging and Industrial Handling. Based on two different peer groups which we display in detail in figure 34, we derive 1-year forward target multiples of 11x EV/ EBIT and 12x EV/EBIT, which we apply to our financial forecasts. We deduct EUR 5.2m of net debt, EUR 0.8m of pensions and EUR 1.1m of minorities to derive a fair value for Ringmetall's equity of EUR 5.3 per share. Based on yesterday's closing price of EUR 4.10, our price target implies upside potential of 29% and, hence, we rate the stock Outperform.

Figure 33: Ringmetall - Price Target overview by valuation approach



Source: MainFirst Research

SotP Valuation – our primary valuation methodology

In our analysis of the company, we found that there are only a very limited number of publicly listed peers available which could potentially mirror Ringmetall's product and service offering across the two segments Industrial Packaging and Industrial Handling. We therefore present a sum of the parts valuation approach in which we included (1) leading companies in the Industrial Packaging market to benchmark and value Ringmetall's core business, and (2) major clients in the industrial vehicle space to model the valuation of the group's Industrial Handling segment.

We apply a discount of 10% to the enterprise value we derive for the Industrial Packaging division to account for Ringmetall's relatively small size (market cap) and inferior trading liquidity profile. We discount the Industrial Handling division by 20% vs. peers to reflect risks in the current portfolio restructuring measures and inferior industry position compared to Jungheinrich and Kion which, as a reminder, are major clients for the group's Industrial Handling business.

Figure 34: Ringmetall - Sum of the parts valuation

Industrial Packaging (MFE 90% of FY-20 EBITDA)

	EV EBITDA			EV EBIT			P/ E			Sales CAGR	EPS CAGR	EBIT margin	Sales (LCY)	FCF per
	FY-18E	FY-19E	FY-20E	FY-18E	FY-19E	FY-20E	FY-18E	FY-19E	FY-20E	FY-17/ 20	FY-17/ 20	FY-20	FY-20	share
Ringmetall (MFe)	9x	8x	7x	10x	9x	8x	18x	15x	12x	3%	14%	12%	120	0.2
Ringmetall (Cons)	8x	8x	n/m	10x	9x	11x	13x	n/m	n/m	3%	9%	9%	126	0.3
Greif	8x	8x	7x	11x	10x	8x	18x	15x	14x	2%	8%	11%	4,236	4.2
TriMAS	10x	9x	9x	14x	13x	n/m	17x	15x	15x	2%	5%	14%	908	1.8
NORMA	12x	11x	10x	15x	14x	13x	19x	18x	16x	3%	7%	16%	1,187	2.7
Silgan Holdings	9x	9x	9x	13x	13x	13x	13x	12x	12x	1%	4%	10%	4,549	2.0
Crown Holding	19x	18x	17x	43x	38x	36x	83x	60x	52x	4%	17%	28%	6,029	2.1
Median	10x	9x	9x	14x	13x	13x	18x	15x	15x	2%	7%	14%	4,236	2.1
premium/ (discount)	(8%)	(10%)	(10%)	(10%)	(10%)	(10%)	(10%)	(10%)	(10%)					
Applied mutiple	9x	8x	8x	12x	11x	12x	16x	14x	13x					
Imlied equity value	102	106	114	119	128	149	92	98	113					
EUR per share	**3.7**	**3.8**	**4.1**	**4.3**	**4.6**	**5.4**	**3.3**	**3.5**	**4.1**					

Industrial Handling (MFE 10% of FY-20 EBITDA)

	EV EBITDA			EV EBIT			P/ E			Sales CAGR	EPS CAGR	EBIT margin	Sales (LCY)	FCF per
	FY-18E	FY-19E	FY-20E	FY-18E	FY-19E	FY-20E	FY-18E	FY-19E	FY-20E	FY-17/ 20	FY-17/ 20	FY-20	FY-20	share
Ringmetall (MFe)	9x	8x	7x	10x	9x	8x	18x	15x	12x	3%	14%	12%	120	0.2
Ringmetall (Cons)	8x	8x	#N/A N/A	10x	9x	11x	13x	12x	n/m	3%	9%	9%	126	0.3
Jungheinrich	9x	8x	8x	18x	16x	15x	19x	17x	16x	4%	5%	8%	4,153	(0.4)
KION	9x	8x	7x	15x	14x	12x	17x	15x	14x	4%	8%	10%	8,983	3.1
Median	9x	8x	7x	16x	15x	14x	18x	16x	15x	4%	7%	9%	6,568	1.4
premium/ (discount)	(20%)	(20%)	(20%)	(20%)	(20%)	(20%)	(20%)	(20%)	(20%)					
Applied mutiple	7x	6x	6x	13x	12x	11x	14x	13x	12x					
Imlied equity value	9	9	9	14	15	16	4	5	5					
EUR per share	**0.3**	**0.3**	**0.3**	**0.5**	**0.5**	**0.6**	**0.2**	**0.2**	**0.2**					
SOP (90% IP/ 10% IH)	**4.0**	**4.2**	**4.4**	**4.8**	**5.1**	**5.9**	**3.5**	**3.7**	**4.3**					

Source: MainFirst Research

In the bullet points below we briefly describe the business models of the peers we used to derive suitable target multiples for both of Ringmetall's divisions.

Industrial Packaging

Greif (NYSE: GEF) is a US based global leader in industrial packaging products & services and is a major client of Ringmetall. The company produces and sells industrial packaging products, namely steel, plastic and fibre drums among others. It operates in four segments, including Rigid Industrial Packaging & Services; Paper Packaging & Services; Flexible Products & Services, and Land Management. Greif employs 13,235 people and generated trailing twelve month revenues of USD 3.7 billion.

TriMAS (NASDAQ: TRS) is a diversified manufacturer of engineered products that serve a variety of industrial commercial and consumer end markets. The packaging market is responsible for 61% of the operating profit, which primarily consists of the Rieke brand. Rieke's products include plastic closure and dispensing systems, such as foamers, pumps and sprayers, as well as plastic closure caps and spouts, and steel drum closures. TriMas has 4,000 employees in 13 countries and generated revenues of USD 815m in FY-17.

NORMA (ETR: NOEJ) is an international market and technology leader in the area of engineered joining technology, offering quick connectors, clamps and pipe couplings. With its 27 production sites and numerous sales offices, the company generated revenues of EUR 1bn in FY-17 with 6,300 employees.

Silgan Holdings (NASDAQ: SLGN) is a leading supplier of rigid packaging for consumer goods products with annual net sales of USD 3.6 billion in FY-16. The Company manufactures metal and plastic closures and dispensing systems for food, beverage, health care, garden, home and beauty products. In addition, Silgan is a leading supplier of plastic containers for shelf-stable food and personal care products and dispensing systems

Crown Holding (NYSE: CCK) designs, manufactures and sells packaging products for consumer goods. Its primary products include steel and aluminium cans for food, beverage, household, and other consumer products; glass bottles for beverage products; and metal vacuum closures, steel crowns and caps. It also offers aerosol cans and ends, and promotional and specialty packaging containers with various lid and closure variations. Crown employs 24,000 people and generated net sales of USD 8.7bn in FY-17.

Industrial Handling

Jungheinrich (ETR: JUN3) is a client of Ringmetall's Industrial Handling division and manufactures battery, diesel, and gas powered merchandise stackers and forklifts. The products are used in warehouses, production facilities, and for point-of-sales retail storage. It produces shelving systems, rents forklifts, sells used forklifts, offers financing, and manages forklift fleets. The company sells in Europe, the Americas, Africa, and Asia.

KION (ETR: KGX) is a global leader in industrial trucks, related services and supply chain solutions. Across more than 100 countries worldwide, the KION group designs, builds and supports logistics solutions that optimise material and information flow within factories, warehouses and distribution centres. The company is the largest manufacturer of industrial trucks in Europe, the second-largest producer of forklifts globally, and a leading provider of warehouse automation.

DCF Analysis in detail

Figure 35: DCF Analysis

YEAR TO DECEMBER (EUR)	2017	2018E	2019E	2020E	2021E	2022E	2023E	2024E	2025E	2026E	TERMINAL
Core model assumptions											
Group revenue	102	110	116	120	125	130	134	136	139	142	144
EBIT (adj.), excl. at-equity	10	11	13	15	16	17	17	17	18	18	18
NOPAT (adj.)	7	8	9	11	12	12	12	13	13	13	13
Capex	(5)	(2)	(3)	(3)	(3)	(3)	(4)	(4)	(4)	(4)	(5)
Depreciation	2	2	2	2	2	2	2	2	2	3	3
Change in working capital	1	(2)	(1)	(1)	(1)	(1)	(1)	-	-	-	-
Other operating items	-	-	-	-	-	-	-	(1)	(1)	(1)	(1)
Free operating CF (FoCF)	**5**	**6**	**7**	**9**	**10**	**10**	**10**	**11**	**10**	**11**	**11**
Group revenue, y/y %	8.5%	7.1%	5.7%	3.9%	3.9%	3.9%	2.9%	2%	2%	2%	1.5%
EBIT margin %	9.8%	10.4%	11.2%	12.3%	12.8%	12.8%	12.8%	12.8%	12.7%	12.7%	12.6%
Working-capital intensity %	14.7%	15.4%	15.4%	15.4%	15.4%	15.4%	15.4%	15.4%	15.4%	15.4%	15.4%
Fixed-asset intensity %	13.3%	32.7%	31.3%	30.5%	30.1%	29.6%	29.6%	29.9%	30.4%	30.8%	31.6%
Capex as a % of revenue	5%	1.8%	2.2%	2.1%	2.4%	2.3%	2.6%	2.6%	2.9%	2.8%	3.1%
Capex as a % of Depreciation	254.6%	99.7%	122.6%	120.8%	140.8%	137%	153.7%	148.4%	162.1%	155.7%	166.8%
Normalised tax rate	30%	30%	30%	27%	27%	27%	27%	27%	27%	27%	27%
RoCE (NOPAT)	14.4%	15.7%	17.2%	20%	21.1%	21.4%	21.4%	21.1%	20.9%	20.6%	20.2%
Free CF/CE	9.6%	11.2%	13.7%	17.1%	17.4%	17.8%	17.5%	17.7%	16.9%	16.8%	16.2%

DCF PARAMETERS	CURRENT		TARGET
Interest-bearing liabilities, as % of EV	3%		7%
WACC	7.6%		7.3%
NPV of FoCF	**151**		**160**
+ Net cash (debt), current		(5)	
- Pension prov. (Book value)		(0.81)	
- Minorities (Market value)		(1)	
+/- Other items		0	
= Equity value	144		153
/ Number of shares (m)		28	
= NPV per share (EUR)	**5.21**		**5.52**

COMMON PARAMETERS	
Terminal FCF growth	1.5%
Risk-free rate	1.75%
Market risk premium	6%
Beta	1
Cost of debt (pre-tax)	1.8%

Sensitivity Analysis Terminal Growth

WACC	0.0%	0.5%	1.0%	1.5%	2.0%	2.5%
6.3%	6	6	6	7	7	8
7.3%	5	5	5	6	6	6
8.3%	4	4	4	5	5	5
9.3%	4	4	4	4	4	4
10.3%	3	3	3	4	4	4
11.3%	3	3	3	3	3	3
12.3%	3	3	3	3	3	3
13.3%	2	2	2	3	3	3

Likely value accretion through M&A provides an additional 40% upside

We further cement our positive view on Ringmetall with a post M&A DCF model to provide an indicative fair equity value for Ringmetall which reflects a continuation of management's (in our view highly successful) industry consolidation strategy.

The model assumes incremental sales of EUR 75m from acquisitions from 2021. We assume a margin profile for the target(s) of 12.5% on the EBITDA and 10.5% on the EBIT level.

As we also outlined in our report, management is likely to use FCF as primary source to finance M&A. However, our forecasts also show that there will be a likely financing gap to reach the target of acquiring c. EUR 75m in incremental revenues. Hence, our post M&A DCF-model assumes three different scenarios for the financing of the gap which we estimate will be around EUR 23m: (1) 50% equity/ 50% debt, (2) 100% debt; (3) 100% equity.

Depending on the scenario we expect acquisitions to yield a value accretion in the range of EUR 1.62 – 2.24 per share (cf. figure 36-38). Overall we expect the fair value of the Ringmetall group in the range of EUR 7.41 – 7.75 post M&A, which implies up to 81% upside compared to yesterday's closing price of EUR 4.10.

As a note, we are aware of the fact that, in reality, Ringmetall's future M&A will likely be spread be spread over the 2018-2021e period. Nevertheless, our model shows the underlying value creation that investors should expect from Ringmetall's strategy.

Figure 36: Scenario I – 50% equity/ 50% debt

		EBITDA margin				
		10.5%	11.5%	12.5%	13.5%	14.5%
EV/ EBITDA	3x	2.86	2.76	2.67	2.57	2.48
	4x	2.52	2.40	2.28	2.15	2.03
	5x	2.20	2.05	1.90	1.75	1.61
	6x	1.89	1.71	1.54	1.37	1.20
	7x	1.58	1.38	1.19	1.00	0.81

Source: MainFirst Research

Figure 37: Scenario II – 100% debt

		EBITDA margin				
		10.5%	11.5%	12.5%	13.5%	14.5%
EV/ EBITDA	3x	3.08	3.00	2.92	2.84	2.76
	4x	2.80	2.69	2.58	2.47	2.36
	5x	2.51	2.38	2.24	2.11	1.97
	6x	2.23	2.07	1.90	1.74	1.58
	7x	1.94	1.75	1.56	1.37	1.19

Source: MainFirst Research

Figure 38: Scenario II – 100% equity

		EBITDA margin				
		10.5%	11.5%	12.5%	13.5%	14.5%
EV/ EBITDA	3x	2.66	2.55	2.44	2.34	2.23
	4x	2.28	2.15	2.02	1.88	1.76
	5x	1.93	1.77	1.62	1.47	1.32
	6x	1.60	1.42	1.25	1.08	0.91
	7x	1.29	1.09	0.90	0.71	0.53

Source: MainFirst Research

In Figure 39 below we show our full post-M&A value accretion calculation in detail.

Figure 39: M&A value accretion

DCF post M&A	FY-17	FY-18	FY-19	FY-20	FY-21	FY-22	FY-23	FY-24	FY-25	FY-26	Terminal
Revenue	102,348	109,587	115,868	120,351	200,008	206,346	211,605	215,837	220,154	224,557	227,925
o/w acquisition				--	75,000	76,500	78,030	79,591	81,182	82,806	84,048
y/y	--%	7.1%	5.7%	3.9%	66.2%	3.2%	2.5%	2.0%	2.0%	2.0%	1.5%
EBIT	10,035	11,375	12,958	14,809	23,872	24,657	25,301	25,754	26,215	26,631	26,985
o/w acquisition				--	7,875	8,033	8,193	8,357	8,524	8,695	8,825
margin	9.8%	10.4%	11.2%	12.3%	11.9%	11.9%	12.0%	11.9%	11.9%	11.9%	11.8%
NOPAT	7,025	7,962	9,071	10,811	17,427	17,999	18,470	18,800	19,137	19,441	19,699
CapEx	(5,108)	(2,000)	(2,500)	(2,500)	(4,000)	(4,000)	(4,500)	(4,500)	(5,000)	(5,000)	(5,500)
Depreciation	2,006	2,006	2,039	2,069	4,131	4,189	4,277	4,358	4,468	4,570	4,699
Change in working capital	1,170	(1,845)	(968)	(691)	(1,718)	(1,646)	(1,275)	(1,012)	(920)	(828)	(628)
Other operating items	(389)	(410)	(433)	(450)	(467)	(486)	(500)	(510)	(520)	(530)	(538)
FCFF	4,704	5,713	7,208	9,239	15,373	16,057	16,472	17,137	17,165	17,652	17,732
Discount factor	0.97	1.05	1.12	1.21	1.30	1.39	1.50	1.61	1.73	1.86	2.00
NPV	4,835	5,465	6,415	7,651	11,845	11,512	10,989	10,637	9,914	9,486	159,521

	Scenario I	Scenario II	Scenario III
	50% equity/ 50% debt	100% debt	100% equity
NPV post M&A	248,269	248,269	248,269
+ Net cash (debt), current	(20,195)	(31,914)	(8,477)
- Pension prov. (Book value)	(806)	(806)	(806)
- Minorities (Market value)	(1,072)	(1,072)	(1,072)
= Equity value	226,196	214,477	237,915
/ Number of shares	30,543	27,685	33,401
NPV per share (post M&A)	7.41	7.75	7.12
NPV per share (pre M&A)	5.51	5.51	5.51
M&A value accretion per share	1.90	2.24	1.62
Current share price	4.10	4.10	4.10
Upside to current share price	81%	89%	74%
Deal financing			
Cash (FY-20 MFE)	35,071	35,071	35,071
cash-out for acquisition	(23,438)	(23,438)	(23,438)
Cash new	11,633	11,633	11,633
Debt (FY-20 MFE)	20,110	20,110	20,110
new issuance	11,719	23,438	--
Debt new	31,829	43,548	20,110
Net cash/ (debt)	(20,195)	(31,914)	(8,477)
Capital increase	11,719	--	23,438
New number of shares	30,543	27,685	33,401
EBIT	14,809	14,809	14,809
Financial result	(1,496)	(1,789)	(1,204)
Tax rate	27%	27%	27%
Non controlling interest	(450)	(450)	(450)
Net income	9,718	9,504	9,932
EPS diluted	0.32	0.34	0.30
EPS pre M&A	0.34	0.34	0.34
EPS accretion	(7%)	0%	(13%)

Source: MainFirst Research

Ringemtall - Risks

In the bullet points below, we list what we believe are the biggest risks for our positive investment case for Ringmetall:

- Ringmetall's Industrial Packaging business largely depends on the global chemicals industry. Hence, the company is clearly exposed to the risk of a potential global macro slow-down which would naturally affect customers in the industry

- Ringmetall shows a high degree of customer concentration as the company generates c. 40% of clamping ring revenues with two large customers (drum manufacturers). Hence, any potential changes in the relationship to either of those key customers could lead us to adjust our financial forecasts accordingly

- As we outlined in our research report, steel is by far the biggest component of the company's cost of materials. While the vast majority of all contracts contain cost escalation clauses with regard to steel, abrupt changes and high volatility in steel prices can have (temporary) adverse effects on the company's financial performance

- As a result of its aggressive M&A policy over recent years (which we expect to continue as we outlined in the main part of our research report), the goodwill position in Ringmetall's balance sheet has risen accordingly. While we generally view the company's balance sheet structure as very healthy, any potential impairment charges could negatively affect the group's equity position

- While Ringmetall has built an almost flawless M&A execution track record, we see potential risks that management may overpay for future acquisitions or fail to properly integrate those assets.

Appendix: Regulatory Disclosures and Disclaimer

MAINFIRST BANK AG (here forth referred to as “MAINFIRST”) is an independent Bank and Investment Firm subject to supervision by the German Federal Financial Services Authority (Bundesanstalt für Finanzdienstleistungsaufsicht; BaFin). MAINFIRST produces and distributes financial analysis directly and through its affiliates MAINFIRST Bank AG London Branch, subject to market conduct supervision by the Financial Conduct Authority (FCA), MAINFIRST BANK AG Paris Branch, subject to market conduct supervision by the Autorité des Marchés Financiers (AMF), MAINFIRST BANK AG Milan Branch, subject to market conduct supervision by the Commissione Nazionale per le Società e la Borsa (Consob) and MAINFIRST SCHWEIZ AG, subject to supervision by the Eidgenössische Finanzmarktaufsicht (FINMA), to eligible counterparties, professional clients and other institutional (non-retail) investors as defined by applicable local laws (here forth referred to as “Qualified Institutional Investors”) in accordance with the Commission Delegated Regulation (EU) 2016/958, the German Securities Trading Act (Wertpapierhandelsgesetz; WpHG) and any further applicable laws and regulations. It is intended for distribution as Third Party Research in the United States of America through MAINFIRST Securities US Inc., registered with the U.S. Securities and Exchange Commission under the Exchange Act, and a member of the Securities Investor Protection Corporation (SIPC) and the Financial Industry Regulatory Authority (FINRA; CRD #150982), to institutional investors and major institutional investors as defined in Rule 15a-6 under the U.S. Exchange Act of 1934, as amended (Exchange Act)The following regulatory disclosures and disclaimer provide necessary investor information on the applicable rules governing the production and distribution of financial analysis.

Company-Specific Disclosures

Pursuant to Commission Delegated Regulation (EU) 2016/958 of 9 March 2016, Section 85 WpHG and any further applicable rules in case of distribution through its affiliates, MAINFIRST has to disclose relationships and circumstances that may create conflicts of interest because they could impair the impartiality of the producer(s), MAINFIRST including its affiliates or any other persons or entities that are acting on their behalf and are involved in the production of this Publication.

Only if explicitly stated in this Publication, the author(s), MAINFIRST, its affiliates, any other persons or entities involved on their behalf in the preparation of this Publication:

(Key 1) hold a net long or short position exceeding the threshold of 0.5% of the total issued share capital of the subject issuer or the subject securities or other financial instruments (the “Company” or the “Companies”) calculated under computational methods required by German law (data as of the last trading day of the past month)

(Key 2) act as a market maker or liquidity provider in the financial instruments of the Company

(Key 3) belong to a consortium as a lead manager or co-lead manager of any publicly disclosed offer of financial instruments of the Company over the previous twelve (12) months

(Key 4) form party to any other agreement with the Company relating to the provision of investment banking services that has been in effect over the previous twelve (12) months or has given rise during the same period to the payment of a compensation or expects to receive or intends to seek compensation for investment banking services from the Company in the next three (3) months.

(Key 5) form party to an agreement with the Company relating to the production of the Publication or any recommendation (this includes agreements concerning the production of commissioned research)

(Key 6) act as a corporate broker to the Company

(Key 7) have a material conflict of interest at the time of distribution of the Publication or any other significant financial interest in relation to the Company

(Key 8) have received non-investment banking related compensation from the Company within the past year

(Key 9) the aforementioned person(s) or a member of his/her/their household(s) respectively persons closely associated with them is an officer, director, or advisory board member of the Company.

(Key 10) the Company holds shares exceeding 5% of the total issued share capital of MAINFIRST or any of its affiliates

(Key 11) a draft of this Publication was shown to the issuer (for fact checking purposes) and changes have been made to this report prior to its publication.

COMPANY	KEY
Ringmetall AG	5,11

Source: MainFirst

For information on the effective organizational and administrative arrangements set up within MAINFIRST for the prevention and avoidance of conflicts of interest with respect to recommendations, including information barriers, please see the MAINFIRST Conflicts of Interest Policy on CONFLICTS OF INTEREST MANAGEMENT POLICY. MAINFIRST discloses on a daily basis the proportion of all recommendations that are “outperform” and “underperform” as well as the proportion of issuers corresponding to each of these categories to which MAINFIRST has supplied material investment banking services over the previous 12 months on EQUITY_RESEARCH_DISCLOSURE_OF_INTERESTS_AND_CONFLICTS_OF_INTEREST. Please note that MAINFIRST does not update publications regularly.

RECOMMENDATION DEFINITION

The recommendations of MAINFIRST are defined as follows. If not stated otherwise on the title page of the Publication the presumed performance is calculated always over the next 12 months.

RECOMMENDATION	DEFINITION OF RECOMMENDATION STRUCTURE
Outperform	Expected to appreciate and outperform the STOXX Europe 600 by at least 5%
Underperform	Expected to underperform the STOXX Europe 600 by at least 5%
Neutral	Expected to perform broadly in line (+/- 5%) with the STOXX Europe 600

Source: MainFirst

Any forecasts or price targets shown for Companies and/or financial instruments discussed in this Publication may not be achieved due to multiple risk factors including but not limited to market and sector volatility, corporate action, unavailability or inaccurateness of information despite diligent verification or the subsequent recognition that underlying assumptions made by MAINFIRST or other sources relied upon in the Publication were unfunded.

DISTRIBUTION OF EQUITY RESEARCH RECOMMENDATIONS

RECOMMENDATION	NO. OF COMPANIES	AS A % OF TOTAL	BANKING SERVICES PROVIDED	AS A % OF TOTAL
Outperform	118	46	0	0
Neutral	105	41	0	0
Underperform	20	8	0	0

Source: MainFirst, daily update also available on http://www.mainfirst.com/en/downloads/legal-disclaimer-clauses.html under "Equity Research Disclosure of Interests and Conflicts of Interest"

BASIS OF VALUATION OR METHODOLOGY

Any basis of valuation or methodology used to evaluate a financial instrument or Companies, or to set a price target for a financial instrument, is herewith adequately summarized. The so-called fair value is calculated from a combination of the valuation model applied (e.g. DCF, Sum-of-the-Parts Model, Peer Group Valuation). The different valuation methods are detailed in the Research Guidelines on EQUITY RESEARCH APPROACH respectively on EQUITY RESEARCH GENERAL DISCLOSURES AND LEGAL DISCLAIMER. Any changes in the methodology or basis of valuation used are included in the Publication.

MAINFIRST RECOMMENDATION HISTORY

COMPANY	DATE	REC	PRICE

Source: MainFirst, Bloomberg (*) O – Outperform, U – Underperform, N – Neutral, NR – Not rated

PRICING OF FINANCIAL INSTRUMENTS

Unless otherwise noted, the financial instruments mentioned in this Publication are priced as of market close on the previous trading day. All other financial instruments mentioned in this Publication are summarized in the following table.

COMPANIES MENTIONED IN THIS REPORT

Company name	Bloomberg code	Exchange	FX	Last Close	Date	Rating
Greif	GEF	NYSE	USD	48.2	24/04/2018	N/R
Mauser	not listed	n/m	n/m	n/m	24/04/2018	N/R
Schuetz	not listed	n/m	n/m	n/m	24/04/2018	N/R
TriMas	TRS	NASDAQ	USD	22.26	24/04/2018	N/R
Norma	NOEJ	XETRA	EUR	62.45	24/04/2018	N
Silgan Holdings	SLGN	NASDAQ	USD	22.17	24/04/2018	N/R
Crown Holdings	CCK	NYSE	USD	40.12	24/04/2018	N/R
Jungheinrich	JUN3	XETRA	EUR	37.32	24/04/2018	OPF
KION	KGX	XETRA	EUR	77.48	24/04/2018	OPF

Source: MainFirst, Bloomberg (*) O – Outperform, U – Underperform, N – Neutral, NR – Not rated

General Disclosures and Disclaimer

Author(s): the financial analyst(s) as referred to on the front cover. This Publication was prepared by the legal entity named on the cover page. When quoting please cite MAINFIRST as the source. This Publication is provided to Qualified Institutional Investors for their information. It may not be reproduced, redistributed, passed on, directly or indirectly, to any other person or published, in whole or in part, in any form or by any means for any purpose without MAINFIRST's prior express consent.

The financial analyst(s) responsible for the production of this Publication certify that all of the views expressed in this report accurately reflect their personal views about any and all of the subject financial instruments or Companies. No part of any of the analyst(s)' compensation was, is, or will be, directly or indirectly related to the specific recommendations or views expressed by the analyst in this Publication. In particular, the financial analyst(s) receive compensation based upon various factors, including the accuracy of research, client support and feedback, competitive factors and overall MAINFIRST revenues, which include revenues from Equity Brokerage and independent ECM services.

The information, tools and material presented in this Publication are provided to recipients for informational purposes only and are not to be used or considered as an offer or solicitation to sell or offer or solicitation to buy or subscribe for securities or other financial instruments. This Publication is for clients only and it is intended to provide information to assist Qualified Institutional Investors in making their own investment decisions. It is not intended to provide investment advice to any specific investor. In particular, it does not constitute a personal recommendation or take into account the particular investment objectives, financial situation, or individual investor needs. Investments discussed and recommendations made herein may not be suitable for all investors. Recipients must exercise their own independent judgement as to the suitability of such investments and recommendations in the light of their own investment objectives, experience, tax and financial position or individual needs.

This Publication has been prepared by its author(s) independently of the Company, and none of MAINFIRST, the Company or its shareholders have verified any of the information given in this document, unless otherwise stated herein. The Publication is based on information derived from selected public sources we believe to be reliable and in good faith but neither its fairness, accuracy, completeness or suitability for investors' purposes can be represented or warranted, expressly or impliedly. Opinions expressed herein reflect the current views of the author(s) and not necessarily the opinions of MAINFIRST or any of its subsidiaries or affiliates. Any opinions, forecasts, assumptions, estimates, derived valuations and target price(s) contained herein are as of the date of this Publication and subject to change at any time without prior notice. There can be thus no assurance that future results or events will be consistent with any such opinions, forecasts or estimates.

MAINFIRST salespeople or traders may provide market commentary or trading strategies to Qualified Institutional Investors, third parties or to MAINFIRST trading desks that reflect opinions that are contrary to the opinions expressed in this Publication. MAINFIRST may have issued other Publications that are inconsistent with, and reach different conclusions from, the information presented in this Publication. Those Publications may reflect different assumptions, views and analytical methods of the analysts who prepared them and MAINFIRST is under no obligation to ensure that such Publications are brought to your attention, unless article 4 para. 1 point (h) Commission Delegated Regulation (EU) 2016/958 of 9 March 2016 applies.

MAINFIRST hereby expressly disclaims, to the extent permitted by applicable law and/or regulation (tort, contract, strict liability or otherwise), all warranties, express, statutory or implied, regarding this Publication and any results to be obtained from the use of this Publication, including but not limited to all warranties of merchantability, fitness for a particular purpose or use and all warranties arising from course of performance, course of dealing and/or usage of trade or their equivalents under the applicable laws and/or regulations of any jurisdiction. MAINFIRST does not warrant or guarantee the accuracy, timeliness, suitability, completeness or availability of this Publication or the information or results obtained from use of this Publication, or that this Publication or the information or results will be free from error.

Under no circumstances and under no theory of any applicable law and/or regulation, shall MAINFIRST or any of its affiliates be liable to anyone for any direct, indirect, special, incidental, consequential, punitive or exemplary damages arising in any way from the information contained in this Publication, including damages for trading losses or lost profits, or for any claim or demand by any third party, even if MAINFIRST knew or had reason to know of the possibility of such damages, claim or demand.

SELECTED COMPANIES DISCLOSURE

For selected companies, MAINFIRST financial analysts may identify shorter-term trading opportunities that are either consistent or inconsistent with MAINFIRST's existing longer term recommendations. This information is made solely available to MAINFIRST clients. MAINFIRST may trade for its own account as a result of the short term trading opportunities seen by analysts and may also engage in securities transactions in a manner inconsistent with this Publication and with respect to subject financial instruments, will sell to or buy from customers on a principal basis. Disclosures of conflicts of interest, if any, are discussed in the company specific disclosures section or daily on EQUITY_RESEARCH_DISCLOSURE_OF_INTERESTS_AND_CONFLICTS_OF_INTEREST.

FURTHER COUNTRY SPECIFIC RESEARCH DISCLOSURES

For countries where MAINFIRST operates local disclosures may apply which can be found on EQUITY_RESEARCH_FURTHER_COUNTRY_SPECIFIC_DISCLOSURES

INTERNATIONAL DISTRIBUTION AND RESEARCH LOCATIONS

Please find details regarding MAINFIRST's location disclosures under MAINFIRST_LOCATION_DISCLOSURES

International Distribution and Research Locations

MainFirst Bank AG
Frankfurt, Headquarters
Kennedyallee 76
60596 Frankfurt am Main
Phone +49 (69) 78808 0
Fax +49 (69) 78808 198
Regulated by:
Bundesanstalt für Finanzdienstleistungsaufsicht (BaFin),
Marie-Curie-Str. 24-28, 60439 Frankfurt/Main

MainFirst Bank AG
London Branch
151 Shaftesbury Avenue, First Floor
London WC2H 8AL
Phone +44 (20) 7478 8000
Fax +44 (20) 7478 8099
Regulated by:
Financial Conduct Authority (FCA),
25 The North Colonnade, London E14 5HS

MainFirst Bank AG
Milan Branch
Via Ugo Foscolo 8
20121 Milan
Phone +39 (02) 854 6571
Regulated by:
Commissione Nazionale per le Società e la Borsa (Consob)
Via G.B. Martini, 3 - 00198 Roma

MainFirst Bank AG
Paris Branch
80 Avenue de la Grande Armée
75017 Paris
Phone +33 (1) 7098 3940
Regulated by:
Autorité des Marchés Financiers (AMF)
17 place de la Bourse 75082 Paris Cedex 02

MainFirst Schweiz AG
Zurich
Gartenstrasse 32
CH-8002 Zurich
Phone +41 (43) 888 61 00
Fax +41 (43) 888 6199
Regulated by:
Eidgenössische Finanzmarktaufsicht (FINMA),
Einsteinstr. 2, CH-3003 Bern

International Distribution Locations

MainFirst Securities US Inc.
New York
35th Floor
747 Third Avenue
Phone +1 (212) 750 4200
Fax +1 (212) 750 4219
Regulated by:
Financial Regulatory Authority (FINRA),
99 High Street, Suite 900, Boston MA 02110

MainFirst Bank AG
Munich Branch
Maffeistraße 4
80333 Munich
Phone: +49 (89) 99292 820
Fax +49 (89) 99292 8299
Regulated by:
Bundesanstalt für Finanzdienstleistungsaufsicht (BaFin),
Marie-Curie-Str. 24-28, 60439 Frankfurt/Main