



LINC

LUND UNIVERSITY FINANCE SOCIETY EST 1991

EQUITY RESEARCH REPORT

TROAX GROUP (TROAX)

”Global automation trends act in Troax’s favor”

RATING

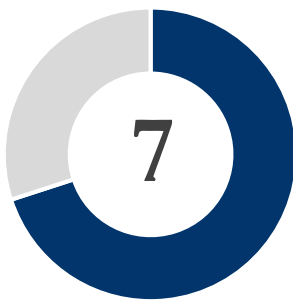
TABLE OF CONTENTS

Case Summary	3
Investment Thesis	4
Valuation	5
Management	6
SWOT-Analysis	7
Appendix	8
Disclaimer	9

COMPANY DESCRIPTION

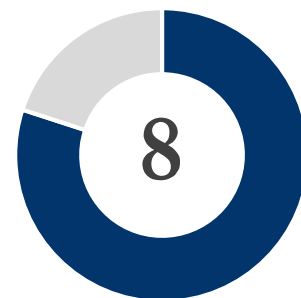
Troax is a manufacturer of storage solutions and protective equipment for industrial manufacturing in three categories. *Machine Guarding* consists of protective equipment such as fencing and glass barriers for primarily industrial robots and accounts for approximately 59% of Troax's sales. *Warehouse Partitioning* is storage solutions for warehouses which accounts for approximately 26% of sales. *Property Protection* is protective solutions such as protective fences in apartment storehouses accounting for approximately 15% of sales. Troax is the largest company in their niche market with an approximated global market share of 15%.

VALUE DRIVERS



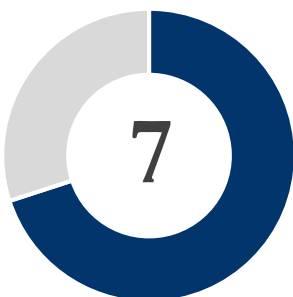
Troax has been able to establish a strong brand and an efficient production. Together with the integration of recent acquisitions Troax expects to reinforce their strong market position. The market is expected to continue a strong growth trend inline with automation, leaving Troax with an annual revenue growth of 9%.

FINANCIAL HISTORY



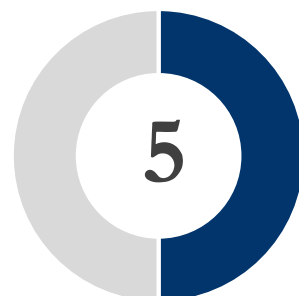
Troax has had revenue growth rates between 6-31% during 2014-2018. The CAGR for the period was approximately 20%. The company had a average gross margin of 40% and a EBIT-margin of around 20% during 2014-2018. The company has decreased its debt, with a debt-to-capital ratio of 56,9% 2018 from 67% 2017.

MANAGEMENT



Thomas Widstrand has been the President and CEO of Troax since 2008. Prior to Troax, Mr Widstrand was the CEO at Borås Wärfveri AB. Jan Svensson is the chairman since 2016, and the previous President and CEO at Investment AB Latour. Together they own 6% of Troax 20 000 000 shares outstanding.

RISK PROFILE



Troax is a cyclical company with a generic product taking on market risk as well as the risk for increasing competition. There are clear substitutes in the form of sensors that are currently being developed. Troax is also exposed to fluctuations in commodity prices.

TROAX GROUP (TROAX)



Troax is a market leader in a niche market focusing primarily on protective barriers for industrial robots. With a strong brand and a bigger sales force the company will have an organic growth rate of approximately 9% during the next 5 years and increase its global market share from the current 15% to 17,5% in 2023. Troax's margins will stay put due to its economies of scale and local production plants. We expect a gross margin of 40% and an EBIT-margin of 20%. Based on a DCF with present value, there is a current upside of 1,9% in share price in a base case scenario.

➤ **Global automation trends act in Troax's favor.**

Automation in the manufacturing industry has increased the industrial robot-per-employee ratio. This trend will most likely increase the demand for Troax's products and offer a continued market growth. Troax currently holds 15% of the global market share.

➤ **Troax can expect an organic revenue growth of 9% 2019-2023.**

Troax is the market leader with the highest revenue and largest market share in their industry. Together with an in-general strong market growth, a well established brand and a bigger sales force, Troax is expected to increase its market share and grow with a CAGR of approximately 9% to 2023. This gives Troax a global market share of 17,5% by 2023.

➤ **In a market with an average EBIT-margin of 10%, Troax stands out with their 20% EBIT-margin.**

Troax local production plants reduce shipping costs. With multiple orders and bigger production plants, Troax can benefit from economies of scale unlike most of their competitors. With an estimated EBIT-margin of 10% amongst Troax's competitors. Troax's 20% EBIT-margin displays Troax's ability to continue a strong growth whilst maintaining high margins.

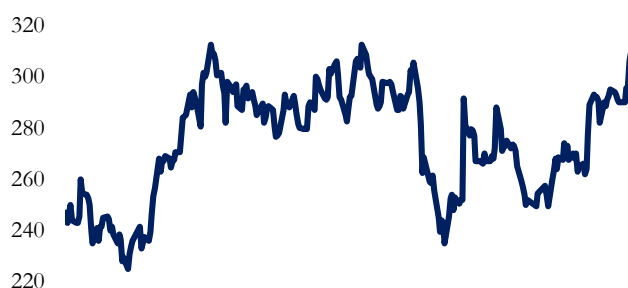
➤ **The DCF model indicates a moderate upside of 1,9% in share price.**

In a base case scenario the discounted cash flow model has projected a share price of 320 SEK, indicating an upside of 1,9%. In a bull case scenario the projected share price is 370 SEK, with an upside of 17,8% and in a bear case scenario the projected share price is 238 SEK signaling a downside of 24,2% in share price.

TROAX GROUP (TROAX)

Current Price (SEK)	314
52 w Low/High (SEK)	225 / 316
Market Cap (TEUR)	628 000
Net Debt (TEUR)	86 200
Enterprise Value (TEUR)	714 200
Sector	Fabricated Metal
Exchange	OMXS MIDCAP
Next Report	2019-05-14

1 Year Chart (SEK)

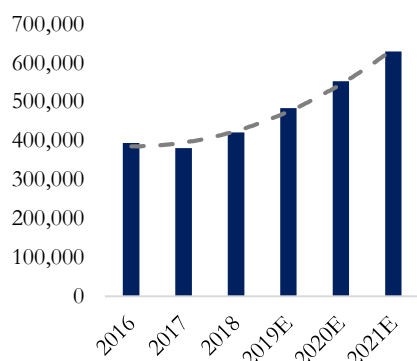


TEUR	2018A	2019E	2020E
Sales	161000	175882	209256
Growth (%)	5,8	9,2	9,1
Gross Marg (%)	40	40	40
EBITDA	35600	39852	42824
EBITDA Marg (%)	22	22,6	22,3
EBIT	32800	35176	38388
EBIT Marg (%)	20	20	20
EV/S	3,6	3,3	3
EV/EBITDA	16,3	14,6	13,6
EV/EBIT	17,7	16,5	15,1
Equity Ratio (%)	43	43	43

Ownership

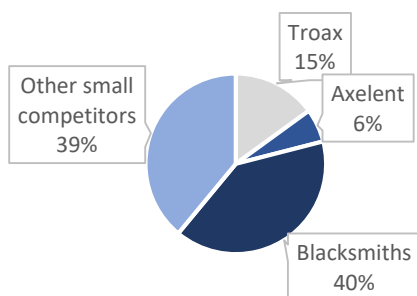
Investment AB Latour	30,1 %
Nordea Investment Funds	9,6 %
Svolder AB	6,5 %
Widstrand, Thomas	5,7 %

Estimated annual shipments of industrial robots

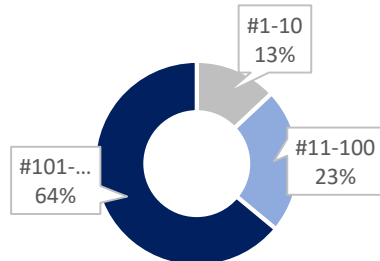


*Source: International Federation of Robotics, 2017

Global market shares for metalbased net panels (2018)



Customer Base Sales by customer 2018



Low customer dependency

Small recurring orders from a large number of customers. Average order is €3,000.

Pressure on producer margins pushes automation in modern manufacturing.

Today's fast paced environment is putting a lot of pressure on producers. Automation has become a key development in the manufacture business to increase efficiency and margins. The global market for industrial robots has been estimated to grow by 14% CAGR between 2019E and 2021E. Asia being one of the fastest growing markets with CAGR estimated around 16% 2019E-2021E.

The robot-to-employee ratio is expected to increase in all regions globally. 2016 the global average of installed industrial robot per 10,000 employees was at 74. South Korea was at the top of the list with 631 industrial robots per 10,000 employees. This market trend results in a growing global market for *Machine Guarding* which is expected to remain the largest product segment offered by Troax representing 59% of global sales. With the already fragmented market, and requirements of fast delivery from customers, it offers Troax a great opportunity to continue to expand their market share and overall growth of the company.

A growing and fragmented market increases Troax potential to increase their market share.

With an estimated market growth of around 5% per year and the fragmentation of the market, the market conditions offer Troax a future growth potential. It is estimated that local blacksmiths account for 40% of the global market share, this is especially prominent in North America and southern continental Europe. The inefficiencies of local blacksmiths to be able to produce and deliver at the same high pace and consistent quality as Troax is unlikely and therefore it could be argued to be unlikely that local blacksmiths will be able to defend their market share in the long run.

Troax size and global presence offers its clients the opportunity to get products delivered from different production plants in different countries. The company's products have a smart design where you can combine components and resemble parts in order to change and rebuild for example machine parks. This gives Troax's customers incentives to buy from the company again, when they need new parts. Troax is also increasing its sales force, which will strengthen their local positions and offer greater possibilities for further expansion.

Strong above market average EBIT-margins makes Troax a strong case. Local production and economies of scale enable high EBIT-margins for Troax. A presence in strategic geographical locations through local production such as in Chicago through the acquisition of Folding Guard decreases delivery time and shipping expenses. These factors gives Troax a market leading position and the highest revenue thanks to the benefits of economies of scale. The average EBIT-margin for the global market is estimated to be around 10%, while Troax has an average EBIT-margin of 20%.

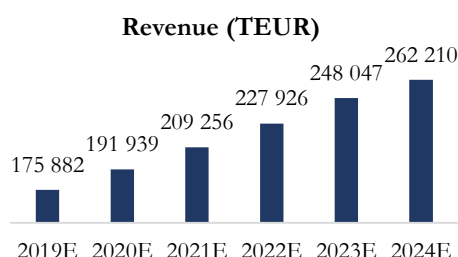
Troax is a cyclical company with a generic product.

Because Troax's customer base consists of industrial manufacturers they are highly affected by economic cycles. The company produces most of its products in metal, which is why it is exposed to fluctuations in commodity prices. Their customer base is also built around industrial manufacturing which in itself is highly dependent on the economic cycle. Furthermore Troax's products are generic, therefore the likelihood of competitors to challenge Troax is to be considered high.

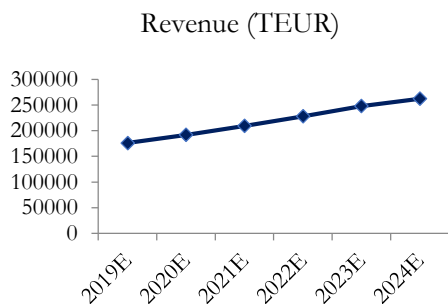
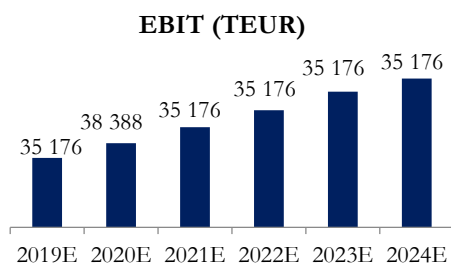
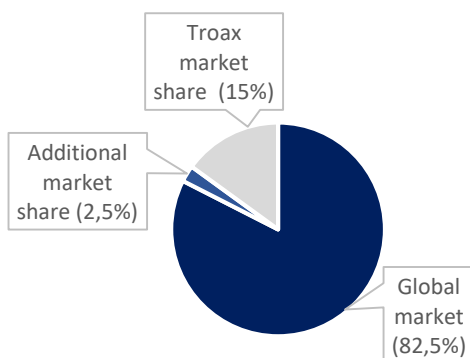
The DCF indicates a upside of 1,9 % in a base case scenario.

In a base case scenario the discounted cash flow model has projected a share price of 320 SEK, indicating an upside of 1,9%. In a bull case scenario the projected share price is 370 SEK, with an upside of 17,8%. In a bear case scenario the projected share price is 238 SEK, signaling a downside of 24,2% in share price. The revenue growth 2019E-2023E is expected to be 9%, after 2023E the revenue growth is expected to decrease to grow approximately 6% 2024E-2028E.

ESTIMATES AND ASSUMPTIONS



Troax market share 2018 and its additional market share 2023



The company expect an organic growth rate of 10%.

Troax has forecasted annual organic growth rates during 2019-2020, for the group, to be 10%. The company has estimated the market growth to be 2-3 % for “Storage solutions”, 3-4% for “Warehouse partitioning” and 7-8 % for “Machine guarding”. The global market growth for Troax’s products is estimated to be around 5%.

Expected organic growth rate of approximately 9% during 2019-2023.

Weighting Troax product segments from 2017 and multiplying it with each segments average growth rate, gives Troax a total growth rate of 5,7%. Troax has therefore during 2018 been able to gain an additional organic growth rate of 2,3%, by taking market shares. Troax is a cyclical company which its beta value of 0,84 indicates. Troax without acquisitions, can grow with an organic growth rate of 8-10% the next 5 coming years as long as the economy stays healthy.

From 2015-2017 Troax has gradually increased its global market share, according to estimates with approximately 2 percentage points each year. In 2018, however, it was only about 0,5 percentage points increase. Troax has communicated that it plans to increase its sales force to gain higher growth rates. With a larger sales force, local presence and a strong brand, Troax can continue to take 0,5 percentage points a year of the global market share, the next five years. This resembles approximately 3,3% revenue growth a year and will give Troax a global market share of 17,5% by 2023. This equals a CAGR of approximately 9%.

Big investments waits in 2019, but will return to normal pace thereafter.

The company is expecting capital expenditures to be as high in 2019 as it was during 2018. According to management, 2018 and 2019 will be years with unusually large investments in tangible assets. In 2018 a lot was invested in the integration of Folding Guard and Troax estimate that 4-5 MEUR will be invested in their Italian production factory in 2019 to meet higher demand. In 2020 and the nearby years capital expenditures are estimated to be lower. During historical years with normal capital expenditures, the CAPEX/Sales ratio has been about 2,1%. We expect capital expenditures to be 2,1% of sales from 2020 and going forward.

Gross margins and EBIT-margins will stay high, on 40% respectively 20%.

Troax have had a relative stable gross margin since 2014, being between 40-43%. The company is not seeing any bigger changes in its COGS, therefore the gross margin may stay put on the most recent level of 40%. Troax’s increasing market share will allow the company to generate economies of scale in its production. Together with a market leading position and a fragmented market Troax can maintain its high gross margin. Even though fluctuations in commodity prices may affect the company in the short run, they are not expected to have an impact in the long run.

Troax has been able to keep their EBIT-margins high for a long period of time, something which is expected to continue. Troax will increase its sales force, affecting cost of sales, but we expect this to have an equally big proportional effect on revenues keeping EBIT-margins intact at 20%.

Working capital is in proportion to sales.

Working capital have been stable during the period 2014-2017, making up 22-25% of sales. The average WC/Sales ratio for the period was approximately 23%. In the future time period the change in working capital will be due to increase in sales.

T TEUR	2019E	2020E	2021E	2022E	2023E	2024E
Revenue	175 882	191 939	209 256	227 926	248 047	262 210
EBIT	35 176	38 388	41 851	45 585	49 609	52 442
EBIT* (1-tax rate)	27 438	29 942	32 644	35 557	38 695	40 905
D&A	4 675	4 437	4 901	5 249	5 254	5 568
CAPEX	-8 900	-4 002	-4 363	-4 752	-5 172	-5 467
Change in WC	-3 413	-3 683	-3 972	-4 282	-4 615	-3 249
FCF	19 800	26 695	29 210	31 772	34 163	37 757
PV FCF	18 424	23 114	23 534	23 819	23 832	24 509

Weighted average cost of capital	
Risk free interest rate	2,9%
Market risk premium	6,4%
Cost of debt	0,9%
Tax	22%
Weight of equity	89%
Weight of debt	11%
Beta	0,84
WACC	7,5%

Valuation based on a DCF with a WACC of 7,5%.

The valuation has been done with a DCF model. Taking revenue and margins from the previous discussion into the calculations of the base case. To show the risk and broader interval of the firm value, Troax's share price has also been projected with bull and bear assumptions. The bull and bear assumptions are shallowly discussed and will not be elaborated further. With WACC the cost of capital has been calculated for the firm of approximately 7,5%. The market risk premium has been taken from a report published by PWC, as have the risk free interest rate.

Base case indicates a upside of 1,9%.

In base case the discounted cash flow model has projected a share price of 320 SEK which is a bit higher than today's share price of 314 SEK, per 2019-03-15. This implies that Troax is slightly undervalued, with a upside of 1,9% in share price. In base case revenues will grow with approximately 9% annually during 2019-2023 and with 5,7% during 2023-2028. The EBIT-margin will stay put on 20% during the period.

Bull case is indicating a upside of 17,8%.

In bull case the projected share price is 370 SEK, indicating a higher upside of approximately 17,8%. In a bull case it is expected that Troax will have an annual revenue growth of 12% during 2019-2023. The increase in sales force will have an even bigger impact on revenue and will raise Troax's global market share to 20% by 2023. Henceforth the company will grow with the market, a growth rate of 6,2%, to 2028. The higher market growth level of 6,21% is the effect of a higher growth level in Troax product segments: 3% for "storage cage"; 4% for "warehouse partitioning" and 8% for "machine guarding".

During the period we expect Troax to keep its gross margin of 40% and its EBIT margin of 20%. The company cannot improve its margin further due to competition. From 2029 and forward Troax will keep grow with the growth rate of the global economy with 2%, but keep its high margins of 20%.

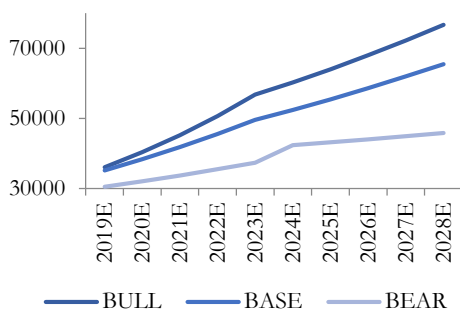
Bear case signals a downside of 24,2%.

In bear case the projected share price is 238 SEK indicating a downside of 24,2%. In the bear case Troax is expected to grow with the lower market growth rate of 5,2% during 2019-2023. Defending its market shares. The lower market growth level of 5,2% is the effect of a lower growth level in Troax product segments: 2% for "storage solutions"; 3% for "warehouse partitioning" and 7% for "machine guarding".

Troax's gross margin will be 40%, although its EBIT-margin will decrease because the cost of sales will have an lower impact on revenue. The EBIT-margin will therefore be 18% during 2019-2023. Henceforth Troax are expected to grow with the global economy of 2%, but with a better EBIT-margin of 20%.

DCF	Share price (SEK)	Upside (+) Downside (-)
Base	320	+1,9%
Bull	370	+17,8%
Bear	238	-24,2%

EBIT (TEUR)



Perpetuity Growth

		0,5%	1,5%	2,0%	2,5%	3,0%
WACC	8,5%	223	246	260	276	295
	8,0%	242	269	286	306	330
	7,5%	266	299	320	345	376
	7,0%	290	329	355	386	426
	6,5%	319	368	401	442	494



Jan Svensson (5000 Shares)

Chairman

Mr Svensson is currently the Chairman of the board, a position which he has held since 2016. Prior to becoming the Chairman of the board, he was the President and CEO at Investment AB Latour.

Thomas Widstrand (1 149 260 Shares)

President & CEO

Mr Widstrand is currently the President and Chief Executive Officer of Troax group. He has held these positions since 2008 and has been a board member since 2014. Prior to Troax, he was the CEO at Borås Wäfveri AB.



Anders Eklöf (0 Shares)

CFO

Mr Eklöf has been the Chief Financial Officer of Troax Group since 2017. He was previously a Finance Director at Strömsholmen AB. He is also an authorized public accountant and director at PWC.

Christian Hellman (0 Shares)

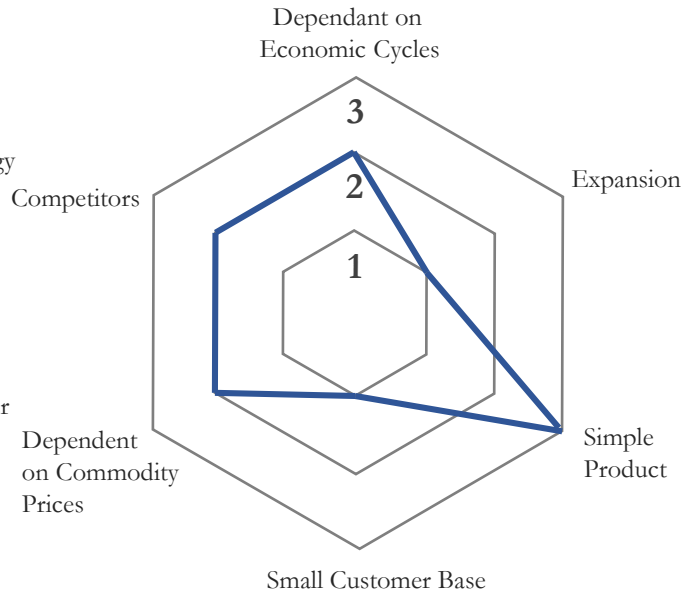
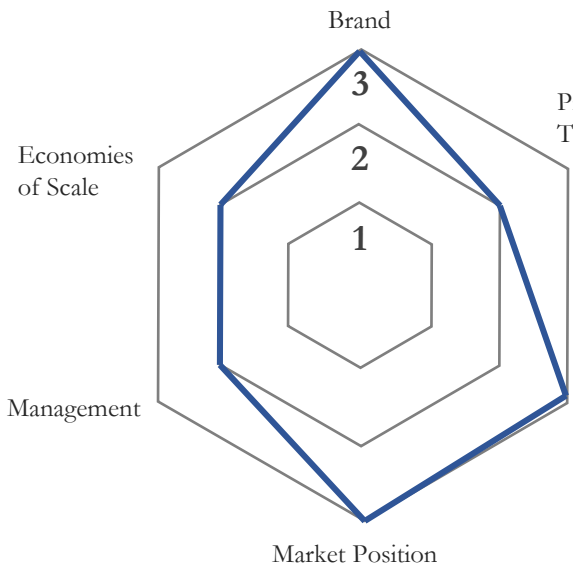
SCM

Mr Hellman became the Supply Chain Manager during 2017. Previously he was a site manager/factory manager at Expert's Nordic Warehouse and AQ Enclosures.



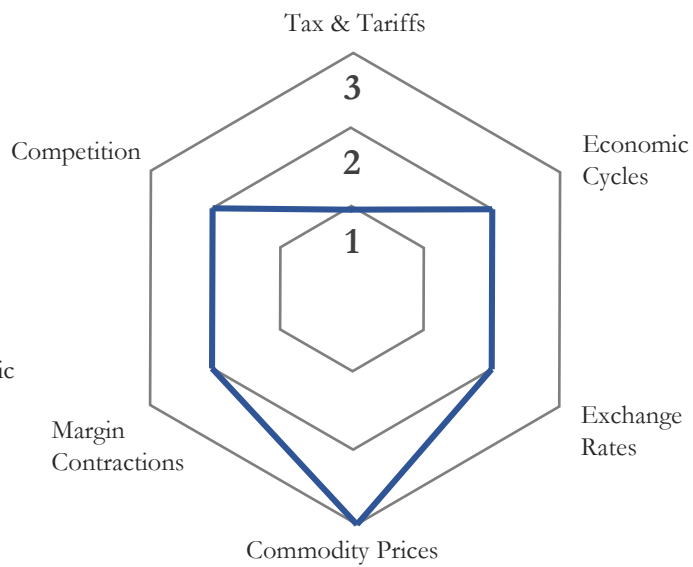
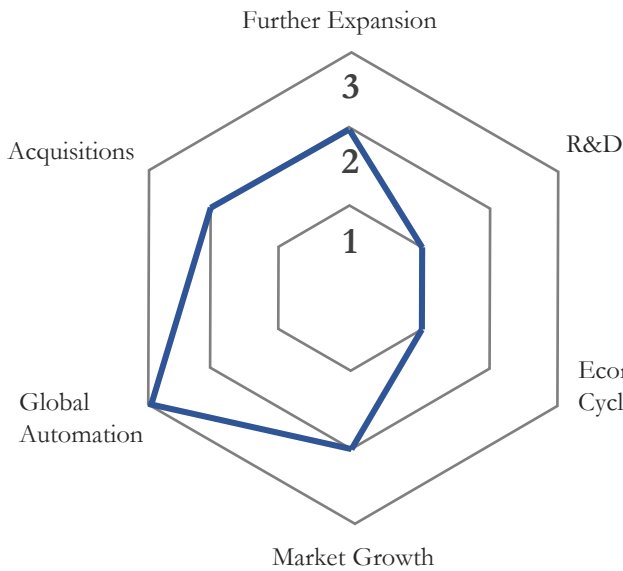
STRENGTHS

WEAKNESSES



OPPORTUNITIES

THREATS



Ansvarsbegränsning

Analys, dokument och all annan information (Vidare ”analys(en)”) som härrör från LINC Research & Analysis (”LINC R&A” (LINC är en ideell organisation (organisationsnummer 845002-2259))) är framställt i informationssyfte och är inte avsett att vara rådgivande. Informationen i analysen ska inte anses vara en köp/säljrekommendation eller på annat sätt utgöra eller uppmana till en investeringsstrategi.

Informationen i analysen är baserad på källor, uppgifter och personer som LINC R&A bedömer som tillförlitliga, men LINC R&A kan aldrig garantera riktigheten i informationen. Den framåtblickande informationen i analysen baseras på subjektiva bedömningar om framtiden, vilka alltid är osäkra och därför bör användas försiktigt. LINC R&A kan aldrig garantera att prognoser och framåtblickande estimat kommer att bli uppfyllda. Om ett investeringsbeslut baseras på information från LINC R&A eller person med koppling till LINC R&A, ska det anses som dessa fattas självständigt av investeraren. LINC R&A frånsäger sig därmed allt ansvar för eventuell förlust eller skada av vad slag det än må vara som grundar sig på användandet av analyser, dokument och all annan information som härrör från LINC R&A.

Intressekonflikter och opartiskhet

För att säkerställa LINC R&A:s oberoende har LINC R&A inrättat interna regler. Utöver detta så är alla personer som skriver för LINC R&A skyldiga att redovisa alla eventuella intressekonflikter. Dessa har utformats för att säkerställa att *KOMMISSIONENS DELEGERADE FÖRORDNING (EU) 2016/958 av den 9 mars 2016 om komplettering av Europaparlamentets och rådets förordning (EU) nr 596/2014 vad gäller tekniska standarder för tillsyn för de tekniska villkoren för en objektiv presentation av investeringsrekommendationer eller annan information som rekommenderar eller föreslår en investeringsstrategi och för uppgivande av särskilda intressen och intressekonflikter* efterlevs.

Om skribent har ett innehav där en intressekonflikt kan anses föreligga, redovisas detta i informationsmaterialet.

Övrigt

LINC R&A har ej mottagit betalning eller annan ersättning för att göra analysen.

Analysen avses inte att uppdateras.

Upphovsrätt

Denna analys är upphovsrättsskyddad enligt lag och är LINC R&A:s egendom (© LINC R&A 2017).

