

Adapting to a shift in demand

Raute's 2017-18 was busy as familiar customers executed major capacity investments; thus '18 marked a record year for the company. European order intake fell substantially in '19, and was soft in other markets as well, barring Russia. This year may prove a relatively stable one owing to the record-large Russian order, yet should the cool environment be prolonged revenue is bound to fall further from the EUR 150m level. Our TP is EUR 25, rating HOLD.

Demand for large and small orders remains at a good level

Raute left the record-year '18 behind with a strong EUR 95m order book. Order intake remained at a decent level in early '19, but activity began to cool steadily during the year due to increasing market uncertainty. This was manifest in mid-sized projects (such as repair and improvement investments) accounting for an exceptionally low share of order activity. Uncertainty has stayed high, but it should also be noted demand for spare parts and maintenance services remains stable, implying good capacity utilization rates at plywood and LVL mills. The record-large EUR 58m Segezha order means Raute can guide flat sales development for this year. Nevertheless, Raute guides decreasing EBIT for the year as the company has recognized a need to accelerate its investments in R&D and marketing. Raute looks to segment its machinery in order to better address lower price points and so achieve meaningful growth in emerging markets, but also aims to further improve its digital solutions offering.

Focus now on the missing middle-sized order demand

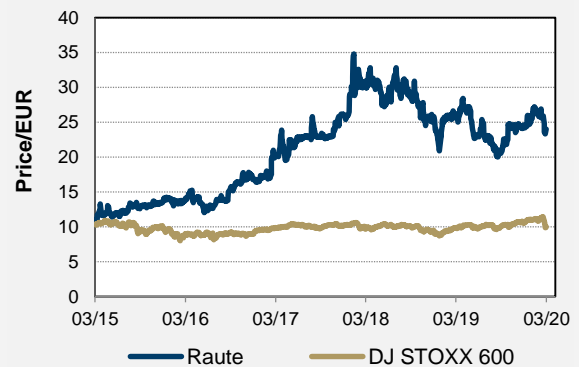
Raute's customer demand is now focused on both large and small orders i.e. major new capacity projects, minor improvements and services. By contrast, demand for mid-sized projects, like modernizations, is at an exceptionally low level. It's always hard to predict when big orders will materialize; we'll focus on monitoring how mid-sized order activity develops going forward.

We view the multiples neutral in current market situation

Raute is now valued at 7x EV/EBITDA and 11x EV/EBIT '20e. We view the valuation neutral given the long-term fundamentals but high current uncertainty. Our TP is EUR 25, rating HOLD.

Rating

■ HOLD



Share price, EUR (Last trading day's closing price) 24.00

Target price, EUR 25.0

Latest change in recommendation 01-Aug-19

Latest report on company 14-Feb-20

Research paid by issuer: YES

No. of shares outstanding, '000's 4,249

No. of shares fully diluted, '000's 4,249

Market cap, EURm 102

Free float, % -

Exchange rate -

Reuters code RAUTE.HE

Bloomberg code RAUTE:FH

Average daily volume, EURm 0.1

Next interim report 29-Apr-20

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+ BUY ■ HOLD - SELL

KEY FIGURES

	Sales EURm	EBIT EURm	EBIT %	FCF EURm	EPS EUR	P/E (x)	EV/Sales (x)	EV/EBIT (x)	FCF yield %	DPS EUR
2018	181.1	14.9	8.2%	-11.2	2.76	7.7	0.5	5.7	-12.4	1.40
2019	151.3	8.4	5.6%	18.0	1.80	15.0	0.7	11.8	15.7	1.45
2020E	142.0	7.6	5.3%	9.2	1.50	16.0	0.6	11.0	9.0	1.47
2021E	139.5	9.3	6.7%	9.3	1.75	13.7	0.6	8.7	9.1	1.50
2022E	145.2	10.3	7.1%	5.9	1.95	12.3	0.6	7.8	5.8	1.52
Market cap, EURm			102	Gearing 2020E, %		-37.0	CAGR EPS 2019-22, %			2.7
Net debt 2020E, EURm			-18	Price/book 2020E		2.1	CAGR sales 2019-22, %			-1.4
Enterprise value, EURm			84	Dividend yield 2020E, %		6.1	ROE 2020E, %			12.8
Total assets 2020E, EURm			88	Tax rate 2020E, %		15.9	ROCE 2020E, %			13.4
Goodwill 2020E, EURm			1	Equity ratio 2020E, %		56.2	PEG, P/E 20/CAGR			1.5

Investment summary

Raute provides plywood and LVL manufacturing solutions

Raute offers manufacturing equipment and associated services for the entire production process of veneer-based products, namely plywood and laminated veneer lumber (LVL). Raute can provide plywood and LVL mills with separate machinery and individual production lines as well as complete mill-scale processes; most of the equipment is tailored to meet specific production standards. Raute's services offering covers the whole machinery life-cycle, including spare parts, maintenance and modernizations. The company is based near Lahti, Finland and serves a global customer base of hundreds of plywood and LVL mills with the help of its worldwide sales and services network.

In our opinion Raute has achieved a strong position in a niche market driven by volatile capital investment cycles

In our view Raute is a global market leader technologically as well as commercially. We estimate Raute's project-driven equipment market share north of 15%, while we see the services market share currently at below 10%. As we assess the new equipment market and the services market are roughly the same size (and together amount to some EUR 1.0-1.5bn in terms of annual revenue), it follows that Raute has a global market share of around 10%. We note Raute's positioning is stronger within the more developed markets such as Europe (where we estimate Raute has approximately a third of the market) since the company's offering is currently tilted towards pricier high-quality machinery. Although we see services as a good medium-term growth lever, we also stress Raute's long-term upside potential is in the Asian equipment market, where Raute currently has only a very limited presence as its machinery remains too expensive for e.g. Chinese plywood and LVL producers.

We expect plywood and LVL demand to grow at an above GDP rate, however the track is not smooth

We view plywood and LVL highly competitive wood composite materials within a range of applications. However, both products mostly find their end-use in construction and thus demand tends to be cyclical. Plywood and LVL mills' investments in new capacity are significant commitments and therefore many considerations need to be favorable for a project to receive a green light. This means that while we see healthy 3-5% annual demand growth for plywood and LVL, new capacity growth is very likely to occur in cyclical lumps, especially within a given geographic region. Although plywood has a significantly larger market than that for LVL, basically all the market growth has been attributable to China for a while. On the other hand, we see LVL growing a couple of percentage points faster across many different geographies.

Raute's current positioning looks secured long-term

We think Raute has made the correct decision in maintaining its global sales and services network; even though this might look an expensive commitment in lean years, we view it an act highly supportive of the company's differentiated positioning and the ability to provide complete plywood and LVL production processes. We don't see the current competition or the possibility of new competitors as particularly threatening.

Raute's financial results can vary drastically on a quarterly and annual level

A large part of Raute's business is driven by projects, meaning predictability is rather low. Even services sales include business like modernizations, which are somewhat cyclical. Raute is now leaving behind a strong European investment cycle; '18 was a record year with good activity in other key markets as well. Markets cooled considerably in '19 as Raute's revenue and order intake recorded double-digit declines. Order intake would have declined more dramatically without the record-large EUR 58m Segezha order (to be delivered in '20).

Although order levels have declined, the current order book supports '20 well

In our opinion Raute is in a relatively good position for '20 despite the market uncertainty thanks to the huge Russian project; workload is still good and top line should be close to previous year's. Raute says Russian demand continues active and the country is bound to be Raute's most important market this year as European orders remained low throughout '19.

'20 EBIT is burdened by R&D investments

Raute guides revenue to remain flat this year but expects EBIT to decline since the company is ramping up its spending on items like R&D and marketing in order to improve its emerging market positioning. Raute aims to segment its offering to better address lower price points.

We rate Raute HOLD, TP EUR 25 per share

Raute is currently valued at ca. 7x EV/EBITDA and 11x EV/EBIT '20e. We view these multiples relatively high for Raute but still within an acceptable range as the company's earnings can vary widely on an annual level. Our TP is EUR 25 per share; our rating is HOLD.

Company overview

Raute background

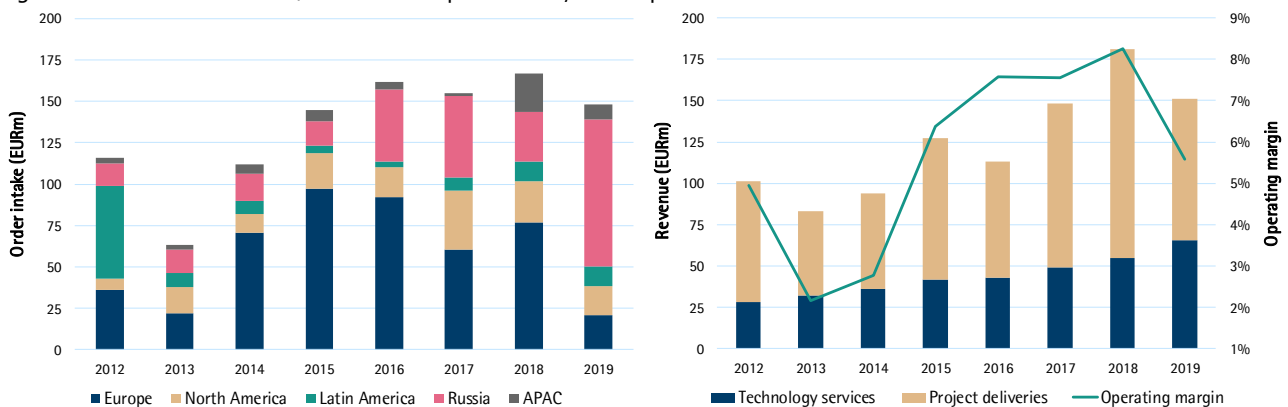
Raute offers machinery and associated services for the manufacturing of engineered wood products; the focus is on supplying entire mill processes, production lines, machinery and services for the manufacturing of veneer and veneer-based products, i.e. plywood and laminated veneer lumber (LVL). Raute delivers its machinery mainly in a tailored project-driven fashion to a wide global customer base of more than 300 plywood and LVL mills. The company's key production plant stands in the vicinity of Lahti, Finland, yet Raute also maintains a global sales and services network as business mostly develops in an unsynchronized manner between the geographical markets.

The company was established in 1908 and was known as Lahden Rautateollisuus ("Lahti's Iron Industry") until 1983. Raute has provided various types of industrial machinery for over a century and was already present in weighing and dosing equipment before establishing the plywood machinery operation in 1931. The company divested the weighing and dosing business in 2004; Raute also engaged in furniture business for half a century prior to its 1994 IPO. Raute tried to carve itself a competitive position in the oriented strand board (OSB) business but decided to fold the attempt in 2003 as it had gained limited traction after an eight-year run. More recently Raute has focused on developing its competency in providing mill-scale plywood and LVL production technology and services to cover the whole production process for a typical customer. This strategy contrasts with the previous more product-focused approach, and Raute now views its key competitive advantage being the exclusive ability to offer entire mill-scale production lines for customers who prefer high-quality manufacturing equipment and production efficiency (and so are willing to pay the higher initial investment cost).

Raute is the market leading plywood and LVL production technology provider especially in the high-end of the quality range. The company has a global presence with a total of some 800 employees on five continents, excluding Africa. Historically Europe has been the most important market for Raute, however as the company operates in a project-driven niche very much dependent on investment cycles that often follow distinct regional patterns, the geographic order snapshot can vary considerably over time.

Raute's business is driven by volatile investment cycles as the company produces capital equipment for a sector that is itself much subject to cyclical demand attributable to the construction industry. In the light of this challenge we view a solid balance sheet to be of crucial importance and see the 88% share of voting rights held by the Mustakallio family as a rather natural state of ownership. Family members continue to hold board directorship roles. Raute's current CEO, Mr Tapani Kiiski, has acted in the role since 2004.

Figure 1: Raute order intake, revenue and profitability development



Source: Raute

Business model

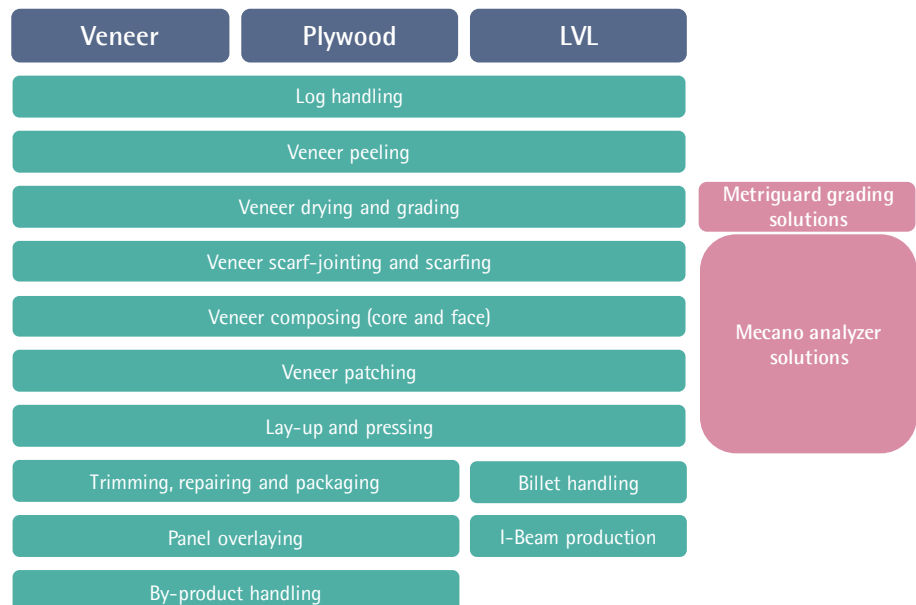
Raute's offering covers the entire veneer production process

Raute thinks in terms of a full-service business concept covering the mill investment's entire life-cycle. Raute's core competence is based on understanding mill-scale plywood and LVL production processes, and so the offering encompasses the whole spectrum of equipment and services. Raute acts as a one-stop manufacturing technology shop for veneer, plywood and LVL producers, supporting the businesses from the early-stage planning of mill investments all the way to mill audits, improvements and modernizations. Raute's role is limited to that of a manufacturing equipment and related services provider as the company does not deliver turnkey construction projects. Mill-scale project deliveries are a significant business driver for Raute, however the company also offers separate production lines and machinery as well as automation and measuring technology. The mix between mill-scale deliveries and separate machinery can vary a lot over time. Raute also provides spare parts and maintenance services.

Raute prices its high-cost offering at a premium

Raute specifies its machinery for the most part to meet exacting customer requirements project by project (due to certain demands of plywood and LVL production), meaning the offering's level of standardization is rather low and thus the cost structure is not the most affordable in terms of initial cash cost. Indeed, Raute is basically always the premium vendor in tender processes. However, in our view such a positioning is not hampering Raute's prospects (at least not in the more established markets) as the company's technological leadership translates to an ability to successfully solicit higher bids. Raute prices its project deliveries on a case-by-case basis and relative to costs, a fact that has helped the company to achieve quite steady gross margins at around 45-50% (with personnel costs included the metric has amounted to 15-20%); the rather small gross margin fluctuations are mostly driven by the share of service sales, which tend to be more profitable than large project deliveries. Raute does outsource engineering and production tasks to a certain extent and the amount can vary anywhere between 10-50% depending on workload and sales mix.

Figure 2: Raute's manufacturing solutions for veneer-based products



Source: Raute

Raute has leading market shares in its chosen niche

Raute's business is premised on offering high-quality manufacturing solutions for such plywood and LVL producers who prize production efficiency. In other words, Raute's customers tend to value consistently high output quality (and so relatively competitive variable costs) over initial investment cost considerations. Raute commands leading

market shares with respect to both plywood (15-20%) and LVL (50%) equipment, especially so in the high-end of the market. Raute tends to book billings from hundreds of customers in any given year (about 330 in 2019), and so is not dependent on single accounts. Largest accounts vary from year to year with project flow. On the other hand, a large project delivery can generate a disproportionate share of revenue in a particular year. Raute's service revenues are not dependent on any single customers either.

The one-stop shop approach is a costly yet sensible strategy

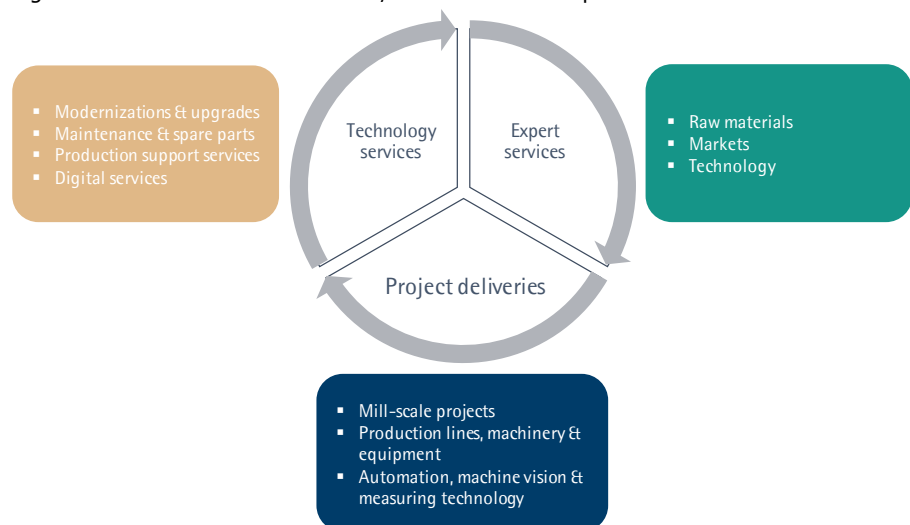
Besides its technological leadership in plywood and LVL equipment, Raute has differentiated itself through the ability to supply entire mill-scale plywood and LVL production processes as well as related services. This one-stop shop strategy means a customer can rely on Raute's expertise in making sure the project is run in the most efficient manner, not to mention the additional assurance that the completed production unit will function smoothly. Raute's quest for large projects, however, poses certain organizational challenges as such capacity-growth investments tend to occur infrequently within a given geography. In other words, Raute needs to be active worldwide and thus operates a global sales and services network. The resulting elevated fixed cost base will inevitably strain profitability in a weaker market environment, however in our view the global presence is a necessary investment for the company to maintain.

Raute books upcoming project deliveries and modernizations (which are recorded under services revenue) as orders after receiving an advance payment. Raute's order book typically turns to revenue within the next 6-12 months; sometimes a large project delivery's full revenue recognition takes closer to two years.

Raute's R&D efforts focus on improving as well as segmenting the company's advanced equipment

Research and development efforts play an important role in Raute's business as the company's strategy relies on technological leadership. We view long-term product design and development as one of Raute's key competencies. Raute's R&D activity focuses on reducing raw material waste resulting from inefficient use of wood and chemicals such as glue and coatings. The development projects also aim to improve energy-efficiency and output quality consistency, in addition to lowering labor costs and introducing digital services. The company holds some patent rights however the filings are not crucially important for the conduct of business. In the long-term perspective Raute's R&D efforts (which have historically amounted to a couple of percentage points of revenue) could help the company to introduce more price-competitive equipment suitable for certain developing markets (e.g. China), yet it's hard to say on what time-scale such developments might materialize.

Figure 3: Raute's full-service life-cycle business concept



Source: Raute

Raute's business model enables high returns on capital

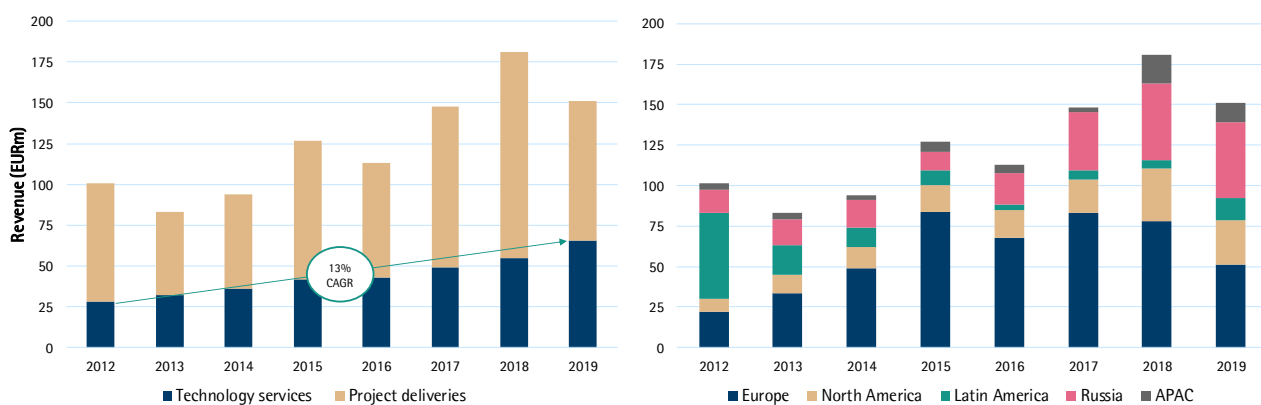
Raute is a capital goods company operating an asset-light business model. Raute's business is based on intangible expertise and production process knowledge. What follows is Raute's need for relatively few fixed assets. Also, net working capital tends to stay low due to project deliveries' advance payments. Although working capital levels can vary dramatically with project flow, most of the positive accumulation is attributable to Raute's services business. Labor outsourcing further helps to restrain any additional capital tie-up. The operations' modest capital-intensity enables more than adequate returns on investment even with relatively low operating margins; Raute can achieve above 20% ROI with relative ease. Raute sees it necessary to maintain a very strong balance sheet in order to cope with large projects' inherent cyclicality. The buffer tends to diminish ROE levels as Raute holds, most of the time, significant net cash positions. The financial profile also allows Raute to commit itself to relatively stable dividend payments. The company has in recent history distributed, on average, close to 60% of annual profits as dividends.

Business segments

Raute reports revenue for two interrelated segments

Raute reports revenue for two business lines, namely project deliveries and technology services. In recent years Raute's revenue split has been roughly two-thirds project deliveries, one-third technology services. Project deliveries are the cornerstone for Raute, however the order flow is inherently volatile due to the investment good nature of the machinery. Technology services generate more stable revenues, yet these streams are not insulated from cycles either as e.g. spare parts sales developed positively with capacity utilization rates. The two business areas support each other. Services sales tend to follow when the installed base of machinery grows. Service relationships, besides providing the company with information about customer needs and market developments, can also help Raute to capture new project deliveries orders.

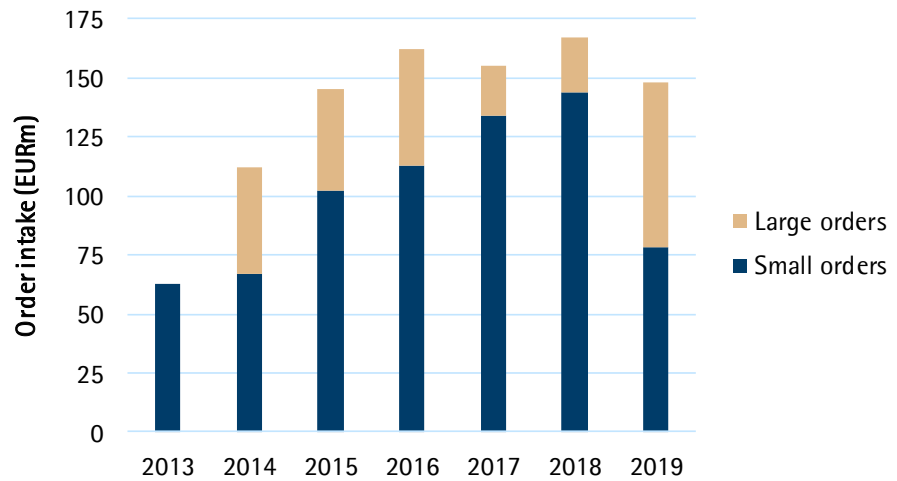
Figure 4: Raute segmental and geographical revenue development, 2012-19



Source: Raute

Project deliveries include orders for mill-scale processes and relevant machinery, in addition to separate production lines as well as individual equipment. Raute designs, assembles and delivers the machinery, although certain parts of the process are outsourced. Project deliveries orders can address new capacity investments, expansions of existing mills, or equipment replacements.

Figure 5: Raute order intake by order size, 2013-19



Source: Evli Research

Project deliveries vary greatly in size as the smallest individual units of machinery are priced at a few hundred thousand euros while complete production lines amount to tens of millions of euros in value. Raute has established a policy of separately reporting any larger orders it receives, i.e. the company issues a stock exchange release when it books an order with a value, at a minimum, somewhere in the tens of millions.

Raute's technology services cover the entire machinery life-cycle, including spare parts, maintenance and modernizations as well as consultation for investment and production planning. We note a large share of services revenue is attributable to equipment and components deliveries. The amounts can vary a lot, but roughly half of technology services revenue is attributable to spare parts and maintenance; the other half is generated by modernizations and equipment upgrades. Raute also does mill-scale modernizations, yet such orders are quite rare and done piecemeal.

Raute derives most of its services revenue from customers who have Raute's machinery installed, yet Raute also offers modernizations for competitors' equipment. Such practice allows the expansion of Raute's installed base, which then further supports maintenance and spare parts sales growth.

Modernizations are the largest services revenue stream, followed by spare parts

Modernizations orders tend to be the most significant source of Raute's services revenue (we estimate Raute's annual modernization sales at some EUR 20-40m). Should a modernization project lead to the sale of a completely new piece of equipment, the revenue generated would be recorded under project deliveries. The second largest source of services revenue, after modernizations, is in spare parts sales, which we estimate to amount to EUR 5-20m annually. We also estimate spare parts to be the most profitable revenue stream within Raute's technology services. Maintenance is the smallest of the three services revenue streams (our estimate is EUR 5-10m in annual revenue). Raute has signed a maintenance service agreement for some 300 units of equipment (the 2019 figure was 254 lines in 49 mills). We understand an annual maintenance contract typically generates 10-30 thousand euros in terms of direct sales; maintenance contracts also generate additional spare parts sales as well as upgrades and so an individual contract can be responsible for significant amounts of revenue. Raute does maintenance work almost exclusively on its own equipment. In more practical terms, Raute's maintenance contracts tend to cover a few specialist visits per year. Raute's customers assume responsibility for the day-to-day maintenance of the machinery.

Service revenue also includes consultation related to investment-decision making and production planning. It should be noted that services such as these generate relatively

little revenue and sometimes Raute's customers resort to third-party engineering and consulting services for help.

Veneer production and Raute's offering

Veneer-based products, such as plywood and LVL, are highly durable and sustainable wood composites

Veneer refers to thin slices of wood obtained by peeling a tree trunk with a rotary lathe which turns the log against a very sharp blade and so peels off the fiber into a sheet. Veneer itself is not marketed in meaningful numbers (apart from America and China, where the industry has evolved to accommodate unintegrated veneer manufacturers who sell their output forward to plywood and LVL producers); rather, veneer is defined as an intermediate produce used for the manufacturing of veneer-based products i.e. wood composites made of sheets of veneer glued together. The advantages of veneer-based products over unrefined wood elements are mostly related to issues of durability. As veneer-based products are made of multiple thin layers of wood the chances of cracking or splitting are reduced. Wood's natural defects are dispersed in small randomized fragments across the veneer. Temperature and humidity fluctuations can cause solid lumber to expand or contract, and thus certain types of wooden buildings cannot be constructed from such primal elements. Veneer-based products have an additional advantage in terms of resource efficiency, as e.g. furniture made of veneer uses less wood than an equivalent piece made of solid wood. What also follows is that the dimensions of the final veneer-based product are not limited by the dimensions of the wood. Plywood and LVL are the most widespread veneer-based products, while a veneer composite known as parallel-strand lumber also exists.

The veneer production process is comprised of multiple steps. When the logs arrive from the forest, they are first handled into a log yard and classified by species and kept in optimal humidity conditions by spraying or by soaking in water. This prevention of drying is done to combat a log's degrading. In the following phase the bark is peeled off the log in the so-called debarking process. The logs are then submerged in a very hot body of water for an extended period in order to soften the fibers, a necessary condition for uniform slicing. The next step involves the cutting of logs, preferably within an hour following the hot bath. The exact type of cut depends on the method of slicing used to produce veneer.

Figure 6: Steps involved in the veneer production process (illustrative)



Source: Raute

Next the logs are peeled into slices of veneer, which are then dried, graded (i.e. the sheet quality is evaluated) and taken through the scarf-jointing (enabling the flexible production of a variety of sheet sizes) as well as composing and patching (enabling the control of veneer quality) processes. The resulting sheets of veneer are passed on to the lay-up stage, after which the stacked panels are hot pressed either into plywood or LVL.

Raute's offering includes production line machinery for the manufacturing of veneer, plywood and LVL as well as visual analyzer (Mecano) and grading technology (Metriguard) solutions. The offering includes a full range of machinery, systems and technology for processes such as log handling, peeling, drying, veneer handling, plywood layup and pressing, panel handling as well as automation and control. Raute offers visual, moisture and density analyzers plus associated digital tools for the provision of real-time data, which helps to maximize both resource efficiency and mill up-time.



Source: Raute

Raute can supply mills and equipment for the refining of all wood species, however most common types are hardwoods such as birch and poplar, and softwoods like pine and spruce. Raute can not only provide optimized solutions for the processing of temperate hardwoods like birch and poplar, but also for tropical heavy hardwoods and plantation woods like eucalyptus.

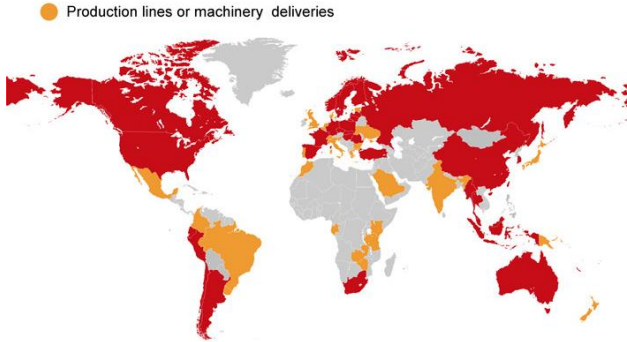


Source: Raute

Raute largely tailors its machinery deliveries according to customer specifications, since the available wood raw material, targeted production capacity, desired panel dimensions and end-user requirements determine the appropriate production technology. However, Raute has also made its plywood mill solutions available in three product families, namely RautePro, RauteSelect and RauteSmart. Within this context, RautePro is the entry-level product and is targeted for plywood producers with limited product varieties. By contrast, RauteSelect solutions target customers who process several wood species and produce a variety of panel sizes on the same production line. The RauteSmart customers produce large volumes and efficiently utilize the latest automation and measuring technologies. Raute has developed these product families in order to find the most useful features for different types of producers and to combine them into easily adaptable solutions for project deliveries around the world.

Plywood references

- Mill-scale deliveries
- Production lines or machinery deliveries



LVL references

- LVL deliveries



Source: Raute

Raute has installed roughly 15-20% of plywood production capacity worldwide (typical mill sizes vary from 20,000 cubic-meter hardwood mills to 500,000 cubic-meter softwood mills), in addition to which the company has delivered several LVL production lines globally (the LVL mills' annual production capacity varies between 20,000 and 190,000 cubic meters). In total Raute has installed LVL machinery to the tune of some 2m cubic meters in terms of annual production capacity, equating to approximately 50% of global LVL production.

Company structure

Raute's headquarters and main production plant (as well as the R&D center) are located in Nastola, a district belonging to the city of Lahti. The company also has production plants in Kajaani (Finland), Vancouver, Shanghai and Pullman, WA. Raute maintains a global sales and services network, and is increasingly committed to supporting its local services presence. The Raute parent company wholly-owns its ten subsidiaries.

Figure 7: Raute's geographical presence



Source: Raute

Raute's five production plants have very limited amount of functional overlap. The company produces its key equipment (e.g. veneer peeling and pressing machinery) in Nastola, while Kajaani is responsible for machine vision and analyzer solutions. The two North American plants primarily serve in building modernization-related equipment to meet the local standards (the Pullman plant houses Metriguard grading solutions). The Chinese plant is mostly used to craft components for Raute's proprietary equipment. In addition to certain equipment marketed exclusively in China, Raute also assembles veneer drying machinery in Shanghai (the engineering happens under Finnish supervision).

Raute has increasingly resorted to outsourcing production in order to reduce risks stemming from the cyclical nature of its business. Raute tends to outsource a meaningful share of production work hours, somewhere between 10-50% depending on order book and sales mix. In general, Raute views the paucity of personnel overseeing installation and commissioning as the most pressing production bottleneck. While such tasks can be outsourced to a certain extent, labor availability nevertheless remains an issue.

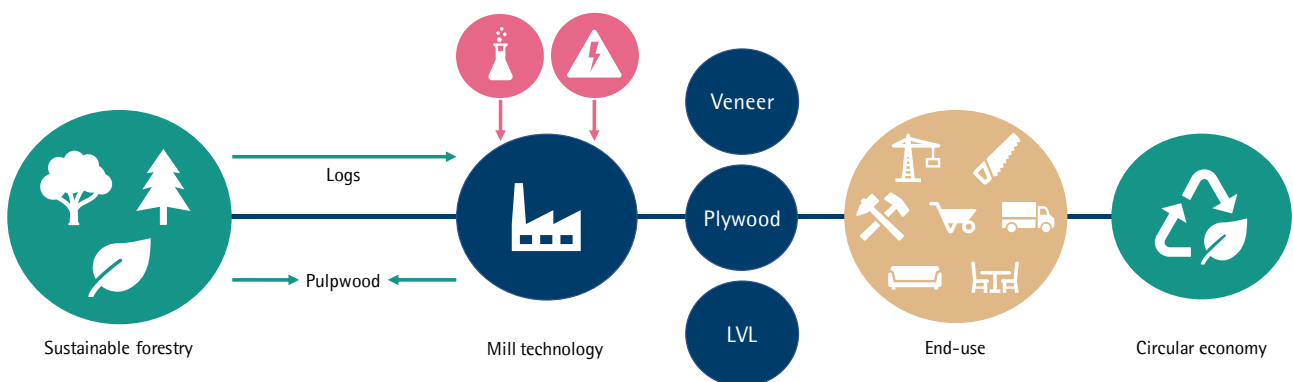
Raute recently updated its management team structure to better help the company navigate the contemporary market environment. Raute now has four customer-focused responsibility areas: Power (strengthening technology leadership in established markets), Grow (improving positioning in emerging markets by developing the Lite Solutions), Metrix (digital solutions as well as Mecano and Metriguard measurement technologies) and Basic Services (extending traditional service offering as well as adding digital services). In our view Raute is acting sensibly in trying to better address certain emerging markets and customer segments with more basic solutions at a time when a large portion of demand seems to be shifting away from developed markets. However, despite such developments, Raute also needs to reinforce its market-leading position within regions like Europe.

Any larger project delivery demands the involvement of Raute's CEO from early on, prior to any signing. Such a sales process, including preliminary dialogue and final negotiations, can become a prolonged undertaking and extend over many months, even years.

Strategy and financial targets

Raute's solutions help its customers refine wood resources in the most efficient manner. Raute says its mill technology can deliver up to 15% better raw material utilization.

Figure 8: Raute's mill technology in the wood value chain



Source: Raute

In our view Raute is the leading company both technologically and commercially within its relatively niche market of plywood and LVL manufacturing solutions. Raute's smaller competitors are all unlisted, so we can't say for sure, but we would expect Raute's over-the-cycle profitability to compare favorably to that of the average competing manufacturing technology vendor.

Raute's recent performance has matched its long-term strategic goals

Raute hasn't formulated specific numerical long-term financial targets, however the company has established long-term strategic goals. First, Raute says it aims to grow at a rate above that of the market (we estimate the relevant market growth rate north of 3%), expecting most of the growth to be attributable to technology services, emerging

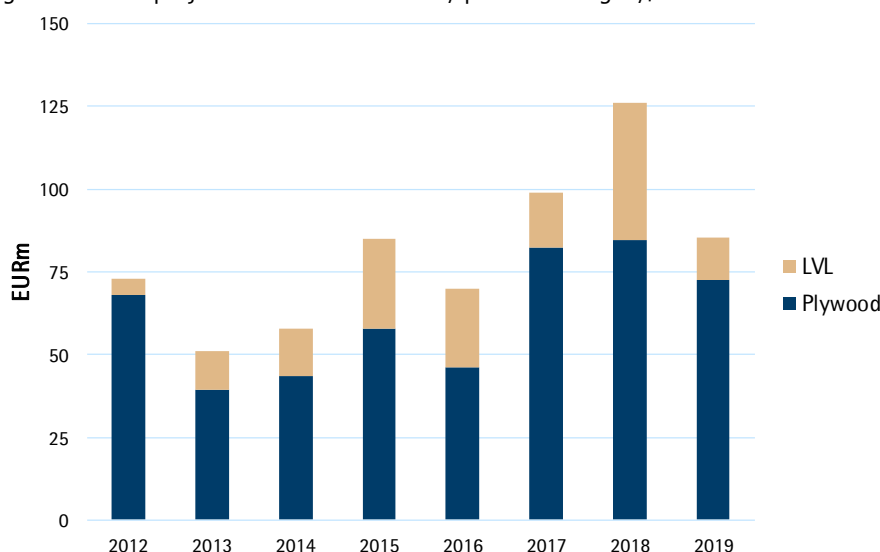
markets and new technologies. In our opinion Raute has ample scope for growing at an above-market rate as the company currently holds roughly a 10% share of the total addressable market (including both project deliveries and technology services). Second, Raute targets improved profitability, and more specifically maintaining a good profitability level over the business cycle (in our view an operating margin of roughly 7% is a realistic level of expectation long-term). Profitability management depends on determining a suitable outsourcing rate in order to be able to adapt to varying levels of market demand. Third, Raute is committed to maintaining a strong balance sheet. This is crucial for achieving operational flexibility (project deliveries' order book and related advance payments can vary widely over quarters) and the capacity to execute possible investments. With these building blocks in place, Raute should be able to generate competitive returns to its shareholders. In our opinion Raute's recent performance has met these goals.

Markets, customers and competition

We see Raute maintaining its high developed market shares; there is further growth potential beyond the core

Raute is a technology leader in veneer, plywood and LVL manufacturing solutions with particularly strong market shares across the more developed markets. Raute's solutions offering serves the engineered wood products end-markets, and more specifically those for plywood and LVL. We view these two veneer-based products as highly competitive materials for a range of applications. Speaking generally, the demand growth potential for such products looks healthy, although Raute's customer-base is unlikely to procure equipment in a smooth manner. We see two key areas of strategic consideration. First, Raute must strive to maintain its high market shares in the more technologically sophisticated regions; in our view Raute is well-positioned for extended market leadership within such geographies. Room for additional market share gain is limited in Europe as Raute already commands more than a third of the local market. Nevertheless, we see scope for an expanded Raute installed base within other developed regions such as North America, Russia and Latin America. In our opinion project deliveries for these geographies form the core of Raute's business. The second consideration we would like to highlight concerns further long-term revenue potential within areas that fall outside of Raute's traditional core. These include significantly higher project deliveries to Asian (and especially the Chinese) markets, in addition to the potential capture of further services market share.

Figure 9: Raute project deliveries revenue by product category, 2012-19



Source: Raute

Raute's project deliveries have addressed plywood capacity, on average, to the tune of EUR 65m in recent years (or 75% of project deliveries), while LVL capacity projects have generated around EUR 20m in annual revenue (the remaining 25%).

Engineered wood products

Engineered wood products are materials made of various intermediate fibers, such as veneer

Engineered wood products (EWP) are composite materials derived by binding or fixing wood fibers (like veneer) together with adhesives or other modes of fixation. The resulting wood elements tend to be considerably more durable than standard sawn lumber. Engineered wood can be manufactured from different intermediate elements, including veneer, wood chips and strands of wood. Veneer-based products include plywood and laminated veneer lumber as well as parallel-strand lumber. Other engineered wood products include, to name a few, medium-density fibreboard (made by combining wood fibers with wax and a resin binder and applying high temperature and pressure), particle board (made from wood chips, sawmill shavings, or sawdust, bind with a synthetic resin, and then pressed and extruded), oriented strand board (similar to particle board, but made from wood strands and thus more durable) and cross-laminated timber (made by gluing at least three single-layer panels of solid-sawn lumber together crosswise). All engineered wood products have higher production costs compared to sawn timber, yet the gains in physical properties, such as strength, nevertheless tend to turn these materials into an attractive value proposition.

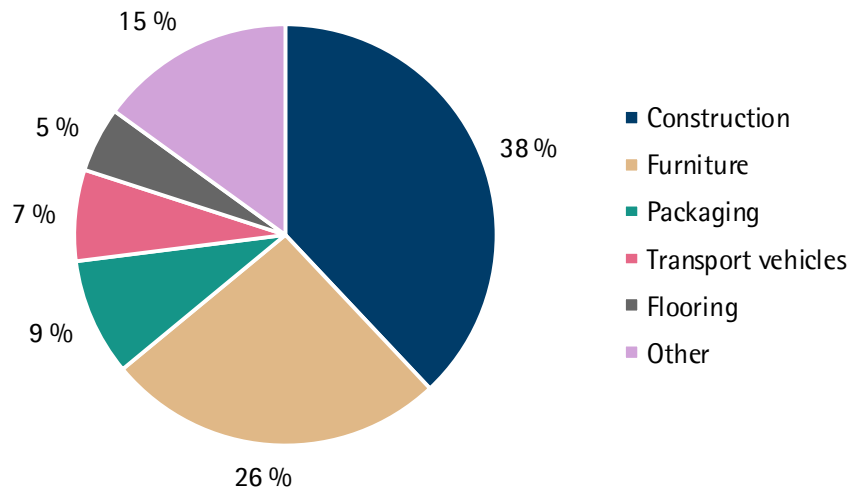
In our view both plywood and LVL are highly competitive wood composites within their specific application ranges. Plywood's main competitor, especially in North America, is oriented strand board. Laminated veneer lumber is to some extent challenged by cross-laminated timber; both products hold features that make them attractive construction materials. Parallel-strand lumber also presents an alternative to LVL in certain contexts.

Plywood

Plywood's history traces back to ancient Egypt; yet the wood composite's contemporary prominence is due to certain technological advances at the turn of the twentieth century, namely rotary peeling and synthetic waterproof adhesives. Together these two developments allowed industrial-scale production and binding of wood veneers. Plywood is the original veneer-based product.

Plywood refers to a stack of veneer sheets (at least in three layers) glued together with the adjacent layers positioned at alternating angles (cross-grained at 90 degrees). Such a composite is hot pressed to form a solid panel of plywood. Plywood is manufactured in many different varieties and can be made from both softwood and hardwood.

Figure 10: Plywood end-use applications



Source: Indufor

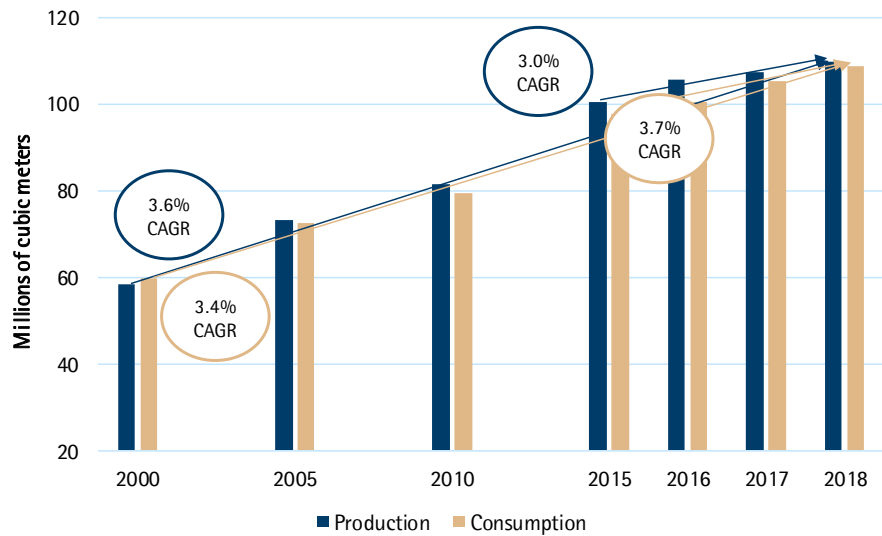
Plywood is applied in contexts demanding high-quality, high-strength sheet material, where resistance to cracking, breaking, shrinking, twisting and warping is considered particularly important. Plywood can also well withstand subzero conditions and can be used to create curved surfaces as the material bends easily. Plywood is used e.g. in trailer flooring, buses, marine construction (LNG carriers) and forming work. Almost two-thirds of plywood demand is attributable to construction and furniture.



Source: UPM Plywood

The global plywood market has grown at an above 3% annual rate this century. The market now amounts to roughly 110m cubic meters in annual production and consumption, which translates to some USD 90bn in value (thus pricing a cubic meter of plywood at about USD 800). BCC Research has produced a forecast according to which the plywood market would grow at a CAGR of 7.8% in 2017-22 with the help of a global economic tailwind, supported by trends in wood construction and furnishing.

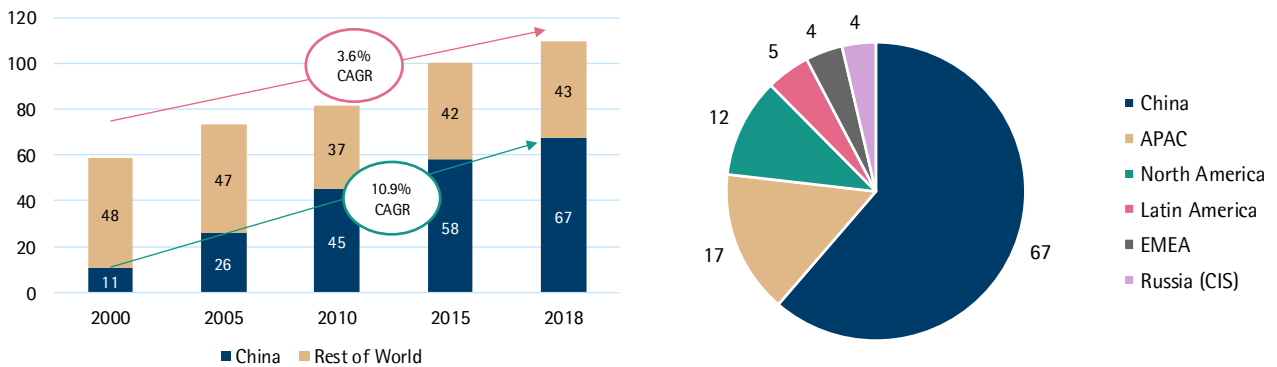
Figure 11: Global plywood production and consumption



Source: Raute, Evli Research

Some three-quarters of global plywood production happens in Asia, and around 80% of that in China. In recent history most of the global plywood market growth has been attributable to Chinese demand; Chinese production has grown at an 11% CAGR this century. Indeed, even if the global plywood market has been growing at a rather steady rate during the last couple of decades, in most geographies the market has flatlined. For example, in North America the levels are still clearly below the peak years prior to the global financial crisis. Indufor estimates China and Russia are among the few countries which have increased their production volumes steadily during the 2000s.

Figure 12: Global plywood production volume development, 2000-18 (millions of cubic meters)



Source: Indufor via Raute

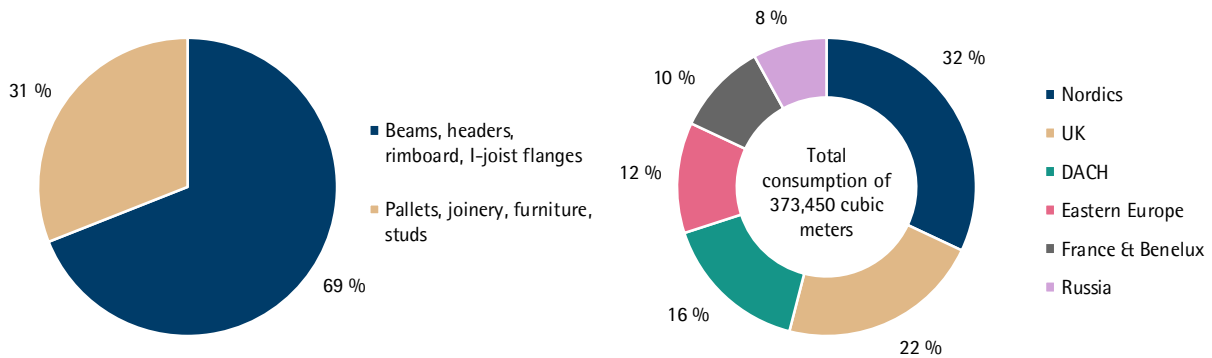
Raute expects emerging markets' share to continue to grow for the foreseeable future. Southeast Asia, Latin America and Russia all have abundant resources yet to be exploited. Raute estimates its plywood production equipment market share at around 15-20%.

Laminated veneer lumber

Laminated veneer lumber was originally developed in the 1950s but has really started to gain traction as a construction material only during the last few decades. LVL's popularity has continued to grow steadily owing to its many attractive features and benefits such as strength, lightness, workability and sustainability.

LVL consists of 3mm-thick veneers glued together with weather-resistant phenolic adhesive to form a continuous sheet. The veneer in LVL is stacked with the wood grain parallel to the length of the board. LVL is cut to length and sawn into beams, planks or panels in sizes required by customers.

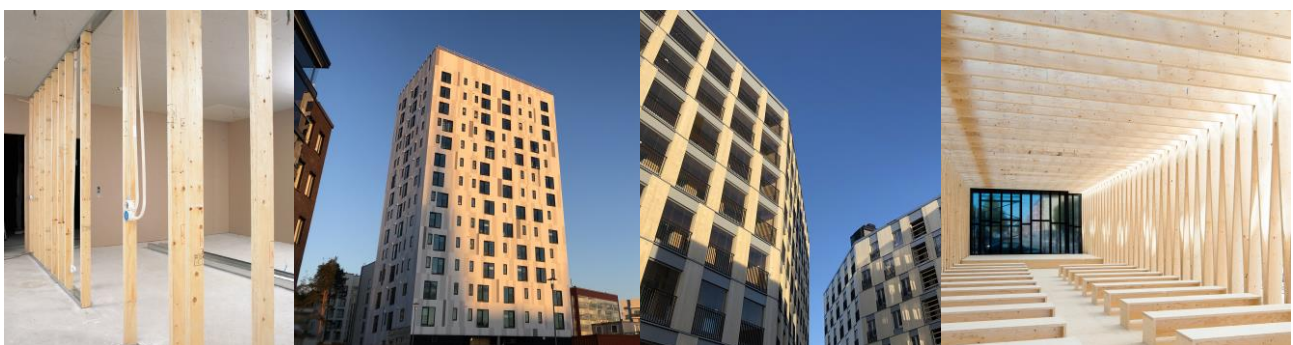
Figure 13: LVL end-use and consumption in Europe, 2017



Source: Raute

LVL is a competitive construction element, yet is not restricted to structural applications

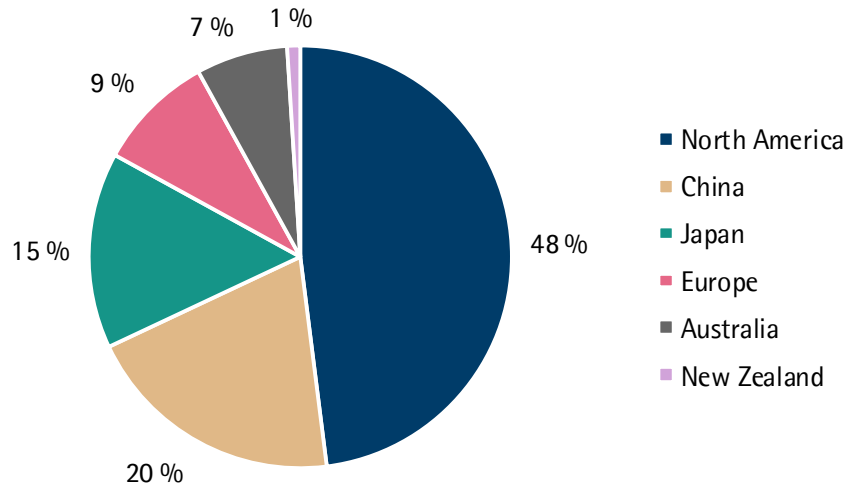
LVL is mainly used for structural applications (such as studs, post-and-beam frames, wall, floor and roof panels) in the building and construction industry, being suitable for new build as well as repair. The material is often utilized in high load-bearing structures as LVL's engineering and subsequent lack of sizeable defects mean it is relatively stronger than steel yet lighter than concrete (twice as strong as steel on a pound for pound basis, and some five times lighter than concrete). LVL can be produced in long spans and thus often works in large-scale construction elements, but as LVL is easy to drill, cut, fasten and fit the material also adapts to smaller, crafted components. Moreover, LVL has a consistent quality and is dimensionally stable due to reduced shrinkage and swelling. Warps, splinters or splits are also much less likely compared to traditional sawn timber, a fact which saves construction companies costly callbacks on job sites. Although LVL is mostly used in construction elements, there are some additional industrial applications such as concrete formwork, scaffolding, furniture components and packaging solutions.



Source: Metsä Wood, Stora Enso Wood Products

LVL is a very sustainable construction material as cross cutting and sawing waste are minimized because panels are manufactured to exact dimensions. Since LVL production happens off-site the actual construction time is reduced, a fact further helped by LVL's high portability and compatibility with other construction products in a wide range of building types. For example, Stora Enso says its Wood Products division's solutions (we note LVL is only one of many products the business offers) can deliver up to 70% faster construction time, 80% fewer truck deliveries on site, 75% cut in carbon emissions as well as other benefits like safer and quieter construction and healthier indoor climate.

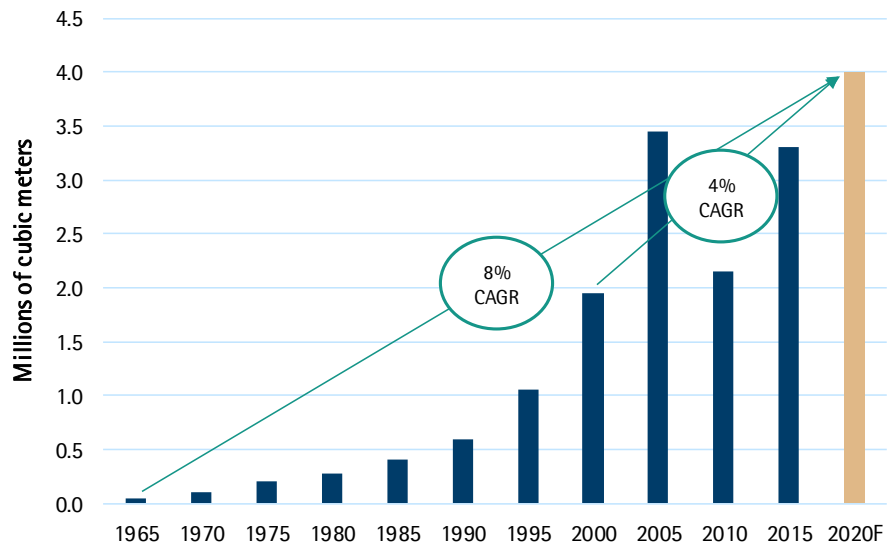
Figure 14: LVL production by geography, 2017



Source: Raute

LVL production really took off only in the 1980s and 1990s; production volumes have grown at around a 4% CAGR during the last couple of decades. Raute estimates the global LVL market now amounts to some 4.5m cubic meters annually (structural LVL figuring at almost 4m cubic meters). These volumes translate to a value of ca. USD 2.5bn (meaning a cubic meter of LVL is priced at USD 550).

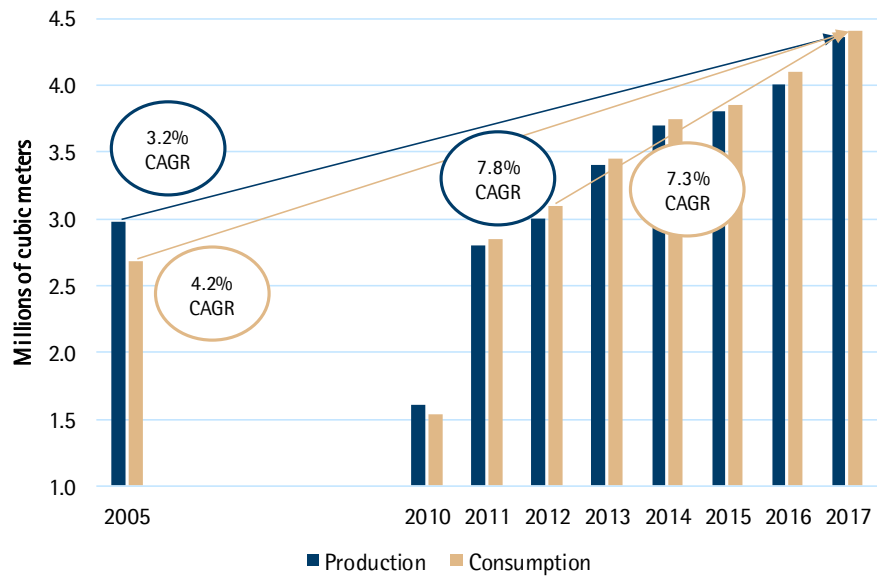
Figure 15: Global structural LVL production development, 1965-2020



Source: Raute

LVL production volumes collapsed as construction activity fell off a cliff in the wake of the global financial crisis. There has been a subsequent strong rebound in LVL production since 2010. Raute says the North American, European and Japanese markets have grown fastest during the past decade, whereas growth in China has been subdued. The rise of pre-fabricated construction has helped to boost LVL production in recent years and is expected to provide further lift going forward.

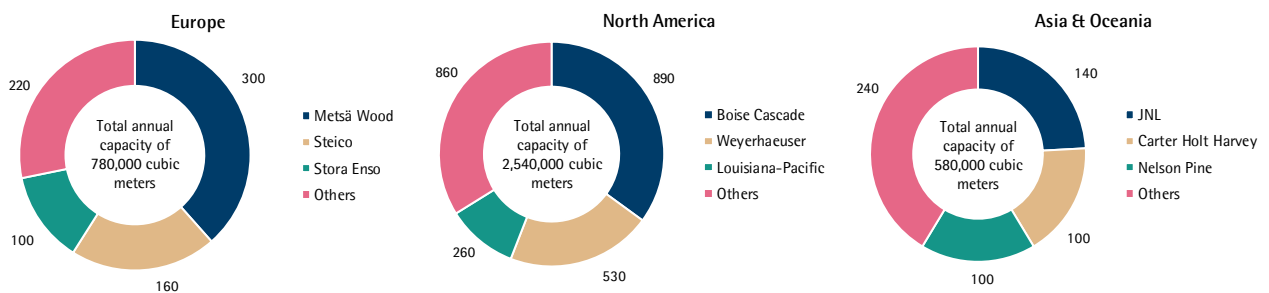
Figure 16: Global LVL production and consumption



Source: Raute, Evli Research

While some 50% of global LVL production and use happens in North America, Europe has registered a sharp increase in LVL popularity during the past decade, with consumption growing at a CAGR of 11% over the period 2011-17 (the growth rate has been similar since the beginning of the century).

Figure 17: Global structural LVL production capacities (thousands of cubic meters per year)

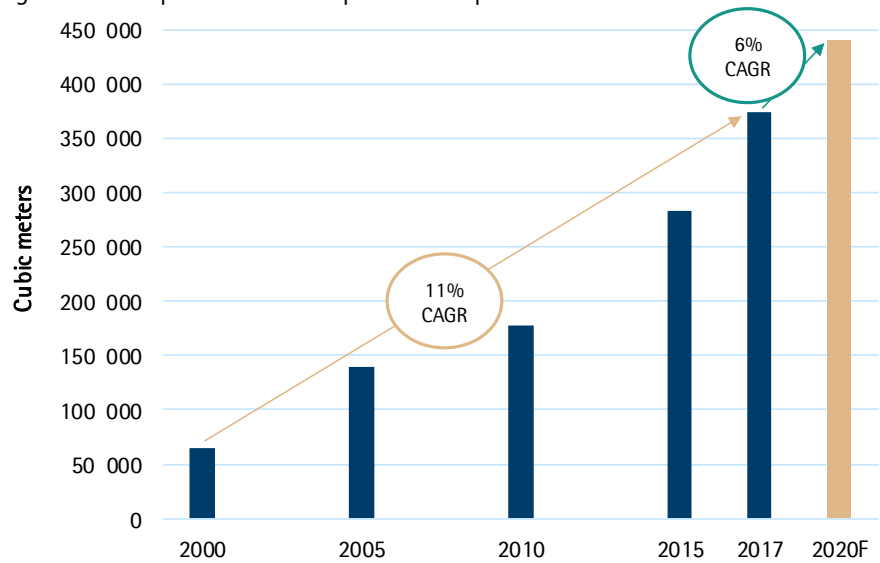


Source: Raute

The long-term consumption outlook for LVL remains favorable even after a recent surge in popularity

The strong European growth is due to several interrelated factors. First, European housing starts have been robust at a time when timber-frame construction is gaining ground. Second, prominent new producers, such as Pollmeier, Steico and Stora Enso, have raised LVL's profile as a competitive building solution. Many important European construction markets are increasingly using pre-fabricated components and modules, and a product like LVL, with its high strength and long spans, fits the bill perfectly. Pre-fabricated construction helps to keep costs as well as schedules in check without compromising on issues of quality, and thus the long-term outlook for such a building approach remains favorable.

Figure 18: European LVL consumption development



Source: Raute

Raute says LVL demand in Europe is forecast to continue to grow at a 6% CAGR in 2018-20. Raute estimates its LVL production equipment market share at around 50%.

Parallel-strand lumber

Parallel-strand lumber (PSL) is made from parallel strips of veneer measuring approximately 3mm in thickness and 15mm in width, usually a couple of meters long. The strips are glued together under high pressure, and as with other veneer-based products, PSL beams achieve uniform quality since wood defects, such as knots, are randomly distributed across the product. PSL members can be bonded together in order to obtain elements with large cross-sections. PSL is a rather recent invention, introduced in the late 1980s. PSL beams are in general more expensive than LVL beams, although both products have rather similar technical specifications.

Oriented strand board & cross-laminated timber

Oriented strand board (OSB) is a multi-layered wood composite. The individual layers of OSB consist of long slender wood strands bonded by a polymeric adhesive. OSB has sturdy physical properties and is therefore widely used in load-bearing construction applications. Indeed, OSB is a popular alternative for plywood particularly in North America, where it is largely used in small house construction. Such convention is probably due to price-consciousness; OSB is cheaper than plywood as it can be produced from trees with smaller diameter and faster growth. Compared to plywood, OSB is heavier and has both lower durability and sturdiness. OSB is also much more susceptible to deterioration from water and less able to breathe than plywood.

Raute says OSB's market potential is restrained by the heavy initial mill investment requirements. We note that a typical plywood mill investment in Europe and Russia tends to be in the EUR 30-100m range, whereas an OSB factory investment might amount to some EUR 100-300m. This consideration might also explain why OSB, despite being relatively cheap, is not that widely used in the price-sensitive Chinese market.

Cross-laminated timber (CLT) consists of at least three single-layer softwood timber planks bonded together crosswise, usually symmetrically so that the outer layers have the same orientation. The panel often has an odd number of layers, however even-number configurations are possible as well.

CLT has been on the market only for a few decades but is gaining popularity as a construction material. CLT is lightweight yet strong, and is therefore replacing concrete, masonry and steel in the construction of residential, industrial and commercial buildings. CLT's structural qualities impose few limits on architectural considerations. Nevertheless, LVL can be used for more technically demanding applications compared to CLT; even though CLT has solid physical properties, LVL is still both lighter and stronger. We note LVL and CLT both have rather weak acoustic insulation properties due to their lightness.

Key market trends

Raute is a global market leader, yet good growth potential still exists








Many global megatrends underpin plywood and LVL demand. Growing climate change awareness favors the use of renewable materials in many applications, while continued urbanization and rising living standards support especially housing construction. Moreover, plywood and LVL are both particularly sustainable and efficient wood-based materials due to their composite structure. Raute is well-positioned for such market trends as its advanced machinery cater to an increasing focus on energy and raw material efficiency. Also, mill automation and digitalization lift demand for Raute's expert services. We estimate Raute's total addressable market (including project deliveries and technology services) at some EUR 1.0-1.5bn. The figure assumes that the equipment and services markets are approximately equal in size. In this context Raute's EUR 125-150m annual revenue would translate to a market share of roughly 10%. In other words, Raute should have plenty of room to grow at an above-market rate.

Besides such wide macro-level trends, there are a few more specific issues to consider regarding Raute's markets. Plywood demand is already mostly attributable to emerging markets, while China is largely responsible for further demand growth. For Raute such a market situation represents both a threat and an opportunity. The outcome depends on Raute's ability to adapt its solutions offering to capture market share. Another shift is the increasing use of plantation wood. Raute is positioned for this development as the company offers veneer peeling equipment optimized for the processing of small-diameter plantation trees. Raute says there are significant amounts of Latin American as well as Southeast Asian plantation trees approaching maturity.

Raute's traditional customers

Raute says the plywood and LVL industries together amount to an annual EUR 45bn market (excluding China). Assuming the sector then invests roughly 1.5% of its annual revenue into capital expenditures in the form of new veneer, plywood and LVL production technology, one can estimate Raute's annual project deliveries target market at around EUR 650-800m. We note that while the sector's investments in new production technology seem to be developing at a rather stable rate, the outlook in Europe (traditionally Raute's strongest market) is decelerating in the wake of a recent boom, during which Raute managed to capture a major share of the capacity expansion projects. We estimate the European plywood equipment market to have amounted to some EUR 50-100m annually during the past two decades.

Table 1: Market for new plywood and LVL equipment (illustrative)

Region	Plywood production, m3 millions, 2018	LVL production, m3 millions, 2017	Technology and price level	General sector investment activity	Raute's market share	Current market size estimate	Sector investment outlook
China	67	0.9	Low	High		Very large (EUR 300m)	Stable
APAC	17	1.0	Moderate	Low		Moderate (EUR 90m)	Accelerating
North America	12	2.2	High	Very low		Moderate (EUR 100m)	Stable
Europe	4	0.4	High	High		Large (EUR 110m)	Decelerating
Latin America	5	n/a	Moderate to high	Low		Small (EUR 60m)	Accelerating
Russia (CIS)	4	n/a	Moderate to high	High		Moderate (EUR 90m)	Stable
Aggregate	110	4.5				ca. EUR 750m	Stable
Source	Indufor via Raute	Raute	Evli Research	Evli Research	Evli Research	Evli Research	Evli Research

Investments in new production equipment tend to materialize in a sporadic fashion. Capacity-increasing investments cannot be done incrementally, and so tend to occur in large chunks in specific places. Yet we can assume investments in plywood production technology to grow, over long timeframes, at a rate equivalent to that of plywood consumption i.e. at a CAGR of some 3-4%. The corresponding rate for LVL machinery would be a couple of percentage points higher.

Raute estimates around 500 plywood and LVL mills are located outside China and India. The company has delivered entire mill solutions, production lines and machinery as well as modernizations and maintenance services to more than 300 of these sites.

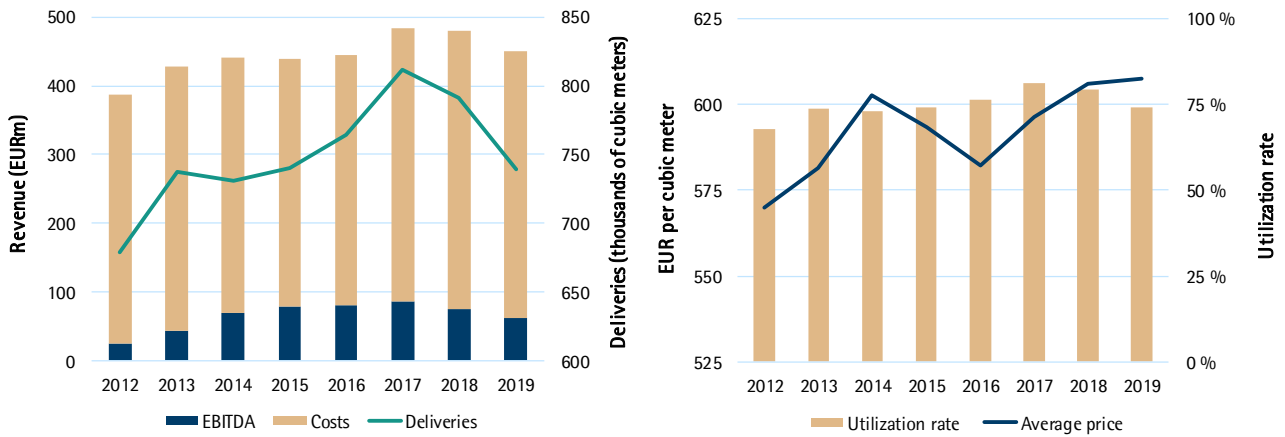
Raute sells equipment and services to a wide range of buyers

A typical buyer for Raute's equipment is a family-owned company generating annual revenues up to around EUR 150m; most of the customers falling into this segment are generating closer to EUR 50m, i.e. they operate only one mill. Raute's customer base also includes wood products divisions of large consolidated forestry groups; these businesses often operate between five and ten mills. Although large forestry groups tend to operate globally, their wood products manufacturing is typically regional as raw materials access determines production locations. Raute's references count large European plywood producers such as UPM Plywood, Metsä Wood and Latvijas Finieris. Other big names include, to name a handful, Arauco, CMPC, Georgia-Pacific, Segezha Group, Weyerhaeuser and York Timbers. Raute is comfortable dealing with such established (if demanding) players because their decision-making processes are rather straightforward. Some companies, like UPM, report their quarterly delivery volumes, and when capacity levels are known utilization rates can be easily calculated (assuming stable inventory levels). Raute also gains relevant market information through spare parts sales, which develop positively with capacity utilization rates. All in all, Raute's customer base holds considerable breadth, and so the significance of any one account tends to be rather small over time (although a large mill-size order can make up a disproportionate share of revenue any given year).

Overall, the Western markets are quite mature. Plywood and LVL producers tend to focus on improving mill efficiency, and investments in new equipment and capacity are rather low. Meanwhile advanced services demand is increasing. Accordingly, Raute has decided to focus on honing technological sophistication and serving mills throughout the assets' life-cycles. Raute sees maintenance services holding the largest growth potential, however an adequate installed base is required for providing a competitive offering within a given geography. One way for Raute to expand its installed base is by modernizing competitors' equipment.

UPM Plywood has an annual plywood production capacity of around 1m cubic meters. The segment produces both birch and spruce plywood, and manufacturing takes place in 9 production plants located in Europe.

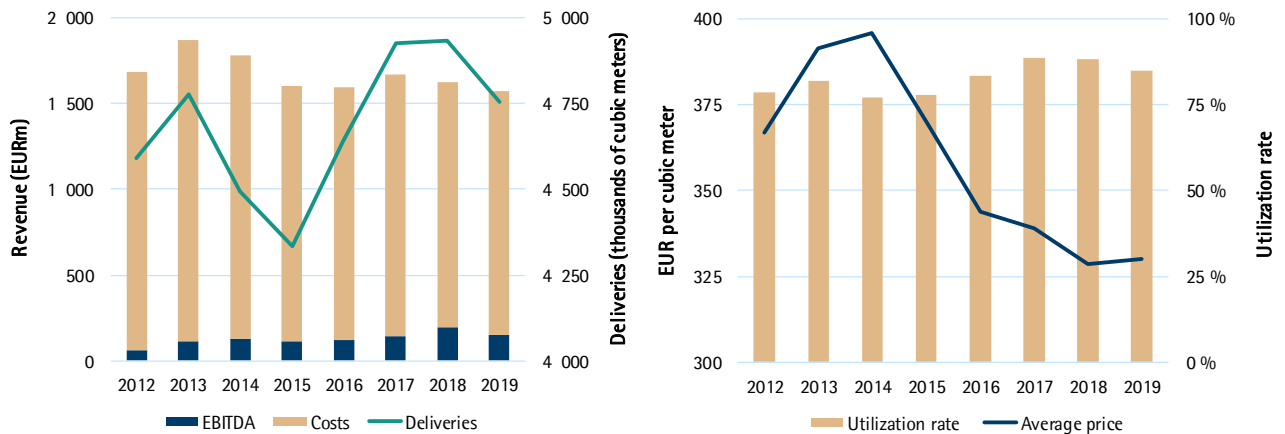
Figure 19: UPM Plywood financial profile



Source: UPM

Stora Enso Wood Products has the capacity to process some 5.6m cubic meters of sawn goods annually. With regards to more refined engineered wood products, the Wood Products division can produce around 200,000 cubic meters of CLT and 100,000 cubic meters of LVL per year. The manufacturing of LVL happens in the Varkaus mill, for which Raute delivered the production technology.

Figure 20: Stora Enso Wood Products financial profile



Source: Stora Enso

Metsä Wood produces both LVL and plywood (spruce veneer-based LVL branded Kerto as well as birch and spruce plywood). With an annual plywood production capacity of some 600,000 cubic meters, we estimate plywood generates roughly 60% of Metsä Wood's revenue. Metsä Wood has 8 production plants located in Finland, Estonia and the UK.

Raute's emerging customers

Raute says the focal point of demand within the industrialized markets is shifting to a new customer base i.e. operations that are smaller than Raute's traditional customers (e.g. UPM and Stora Enso). Some of these new customers have only recently entered the

industry, and Raute is unable to anticipate their decision-making processes to the same extent as those of larger customers.

European plywood and LVL producers have invested heavily in new manufacturing capacity during the last five years or so, the inevitable consequence of which is that the regional demand for additional capital equipment will cool considerably for some time to come. This means the bulk of new equipment demand will shift towards the emerging markets i.e. Latin America, Russia and Asia (especially China). Raute aims to increase its presence in these regions. The company has already established good market share in certain Latin American countries and particularly in Russia; Raute needs to adapt its offering for lower price points in order to better address the Chinese and other Asian markets. The company highlights how the demand in Asia tends to tilt toward equipment that is both cheap and easy to use.

The Chinese market

The Chinese price points are still too low for Raute

The specific challenge in China is that local labor costs are relatively low while raw material costs are high, calling for equipment with reduced automation features. In the long-term perspective China is bound to graduate to higher quality engineered wood products and thus there should be a significant market opening for premium vendors like Raute. Currently the Chinese market is dominated by price-competitive small local equipment suppliers. The Chinese vendors have also begun to export low-price equipment to other nearby emerging markets, particularly Indonesia.

Raute has still gained virtually no traction in China despite having cut automation levels for some of its equipment. Raute is aiming to make inroads in China by keeping its equipment quality (relatively) high, and so targets to capture market share in the future when local quality requirements rise closer to the company's price point. Successful R&D efforts could also help Raute to meaningfully enter the Chinese market should the company be able to bring down its equipment production costs. Indeed, Raute recently communicated its intention to invest more in R&D in 2020 to accelerate entry to emerging markets such as China.

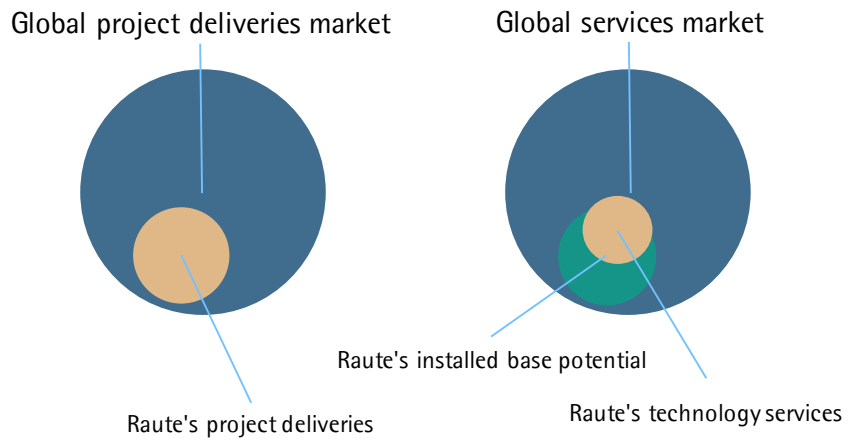
The market for services

The aftermarket services for Raute's equipment can be divided into modernizations, maintenance and spare parts. Modernizations are driven by environmental regulations as well as the improvements in efficiency gained through updated technology. Maintenance services demand depends on the rate at which producers outsource their maintenance operations, in addition to being helped by the digitalization and automation trends. The demand for spare parts, meanwhile, is a function of capacity utilization rates.

We see the services market as roughly the same size as that for project deliveries

It is hard to pin down the exact size of the services market, but our educated guess would be that the annual services market amounts to some EUR 500-800m, a figure based on Raute's EUR 650-800m annual project deliveries market estimate and the fact that capital goods such as gas turbines and electric drives tend to generate annual service revenue to the tune of 4-7% of sales price, as estimated by McKinsey. When one further assumes the average lifespan of plywood machinery at 20 years, it follows the annual services market is roughly equivalent in size to that for new production equipment. Indeed, Raute says the annual market for after-sales services is at least as large as that for project deliveries, and so sees major technology services revenue potential given the business line's current size.

Figure 21: Global project deliveries and services markets (illustrative)



Source: Raute, Evli Research

Note: Large blue bubbles represent the estimated equal-sized EUR 650m equipment and services markets

Raute has a good services market share within its own equipment

We estimate Raute's global services market share, including competitors' equipment, at around 6-10%. The market share is strongest in Europe and for the most part considerably weaker elsewhere. We further estimate Raute's installed machinery base (which we peg at some 2,000 units given the company delivers around 100 units each year and a piece of machinery can be assumed to have a 20-year lifespan) could support an annual services market in the EUR 75-160m range. As Raute conducts a great majority of modernization and maintenance work on its own installed base, it follows that Raute's market share within the domain of its own equipment would amount to somewhere between 30% and 65%. We see the wider services market (i.e. the one beyond its own installed base) representing major revenue potential for Raute.

Raute has achieved critical mass for maintenance services in Europe

With regards to the maintenance services market, it is important that Raute's installed equipment base achieves a certain level of critical mass so that the company can offer a competitive service. When Raute has an adequate installed base within a region, time spent travelling is minimized and so the company can offer maintenance services at a competitive price. Raute has already achieved critical mass in many European regions, whereas in North America the installed base tends to be spread too thin even if the coverage is wide. Meanwhile in Russia the installed base is basically adequate, yet the local market is very price sensitive. Raute's installed base tends to be too thin beyond these three key northern regions. The company's view is that in the long-term developments such as digitalization and Internet of Things could help decrease travel requirements and thus drive growth for maintenance services. We estimate Raute's current installed base of around 2,000 units supports a EUR 20-60m annual maintenance market; according to our calculations this would imply a market share of only some 15% for Raute. We thus see meaningful growth potential for Raute within maintenance services.

Competitive landscape

In our view Raute remains differentiated from competition

Raute has positioned itself strongly for large mill-scale projects and is a well-respected name among the major plywood and LVL producers. Raute has established long-term customer relationships with these market participants. Raute has a solid financial position, in addition to which the company's public listing ensures high compliance and transparency, all factors providing further aid in procurement processes. Raute claims to

be the only vendor capable of supplying proprietary machinery for the entire veneer manufacturing process, although it should be noted some Western and Japanese competitors are expanding their scope through partnerships to cover more comprehensive production solutions; certain competitors can already assemble an entire mill-scale process by bringing together equipment from various third-parties. However, in our view Raute's solutions offering still retains its technological differentiation.

Raute's market share is highest in Europe and Russia, both regions where the company is the leading vendor. Raute's North American market share is strong within LVL equipment and moderate within plywood. With regards to Latin America, Raute has a market leading position in Chile. The company has a low market share in Southeast Asia.

While Raute is committed to a global operating model, a typical competitor operates locally or regionally. These companies tend to be quite limited in size and focus on producing equipment for only a small number of relevant plywood and LVL manufacturing sub-processes. In our view such competition poses only a limited threat to Raute's current industry-leading position. Raute's niche market positioning also means it is unlikely to attract competition from larger global capital goods companies.

Raute faces diffuse competition

Raute's competition includes names like USNR and Angelo Cremona, both of which specialize in wood processing equipment. Some other competitors provide equipment for a broader range of industries. Such names include Altec, Biele, Bürkle, Fezer, Fill, Grenzbach and Siempelkamp. Raute mainly competes with the Japanese companies Hashimoto, Meinan and Taihei in Asian countries beyond China. The Chinese market is mostly supplied by the numerous small local vendors offering equipment at low price points. The companies mentioned are all unlisted, so relevant financial information is limited. It should be noted that within the maintenance market context Raute also competes with the customers' internal maintenance functions. Some of the plywood and LVL producers consider maintenance services as forming a part of their core business and thus will not outsource these functions.

Acquisitions

In our opinion Raute is unlikely to be acquired by a larger capital goods company due to Raute's relatively small niche market. In the light of this lack of strategic fit we view none of the major Nordic capital goods names as potential suitors.

Any potential acquisition is likely motivated by a gain in technology

Raute is also rather unlikely to make acquisitions itself. Any potential acquisition would most likely add some useful measurement technology. This was indeed the case with the 2005 Mecano analyzer solutions purchase and the 2017 Metriguard grading solutions acquisition. We note both deals were quite small in terms of absolute purchase price. The US-based Metriguard's grading technology (the evaluation of veneer strength in order to control the end-product's structural properties) has been integrated into Raute's solutions for many years already, and so the acquisition was a logical partnership extension. Metriguard reported USD 4.6m in revenue and USD 0.8m in operating profit for 2016. The purchase price was approximately USD 4.5m, and in our view the 1.0x EV/S and 5.6x EV/EBIT multiples represent a rather moderate consideration given the unit's sound profitability and synergies, not to mention strategic fit.

In theory Raute should have plenty of opportunities for achieving inorganic growth as the veneer manufacturing equipment market is rather fragmented (Raute's strong balance sheet would also enable acquisitions). Yet the chances for any technology gains through acquisitions are effectively reduced as Raute has already positioned itself at the forefront of veneer manufacturing technology. This is the main reason why the company has made very few acquisitions in recent history, and we don't expect any major changes

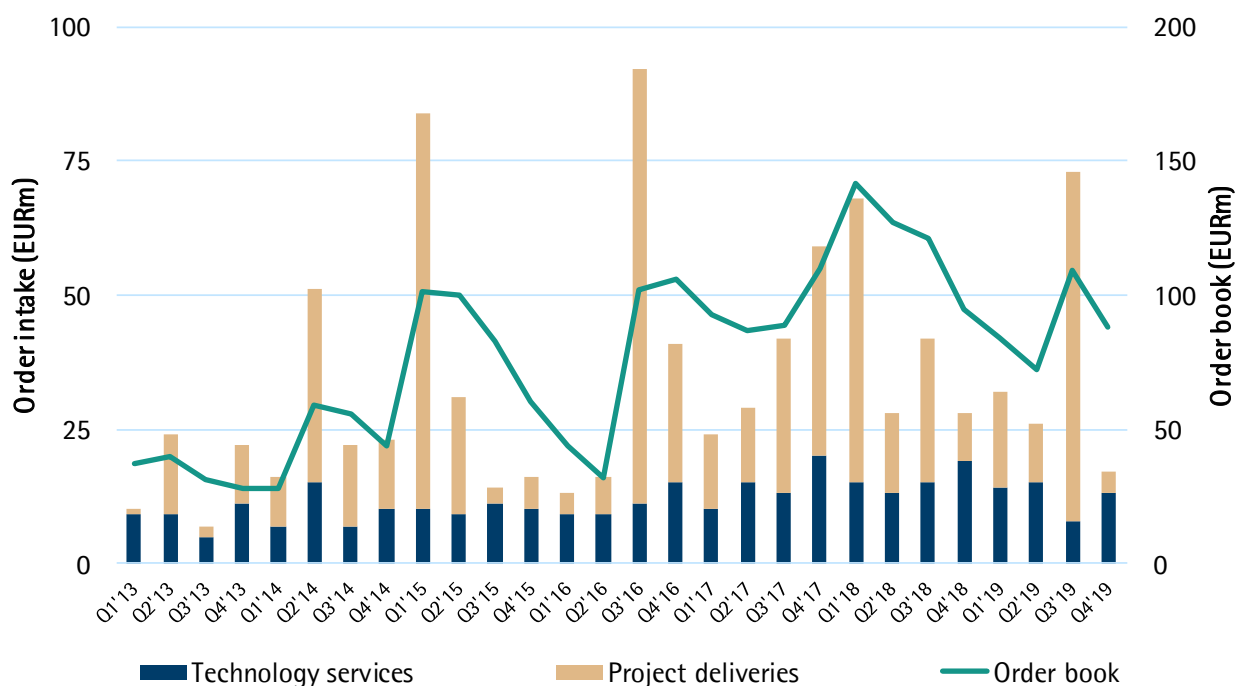
in policy. In this light it probably makes sense for Raute to refrain from acquisitions even if a given target might be purchased at relatively low valuation multiples.

Raute views inorganic growth opportunities in emerging markets as problematic since the company's proprietary equipment tends to be too expensive to gain significant share within those regions. Moreover, Raute does not want to stick its name on local vendors' equipment in the absence of quality guarantees. In our view Raute could potentially acquire some market share in North America; such acquisitions would expand the company's local installed base, and thus help achieve critical mass and support maintenance services.

Financials and estimates

Raute reports order intake and revenue for project deliveries and technology services, in addition to reporting order intake and revenue for geographical regions as well. Raute does not separately disclose information on its current order book composition, however recent order intake should provide a decently accurate idea. The company discloses operating profit on group level, but it can be said the services business tends to achieve higher operating margins.

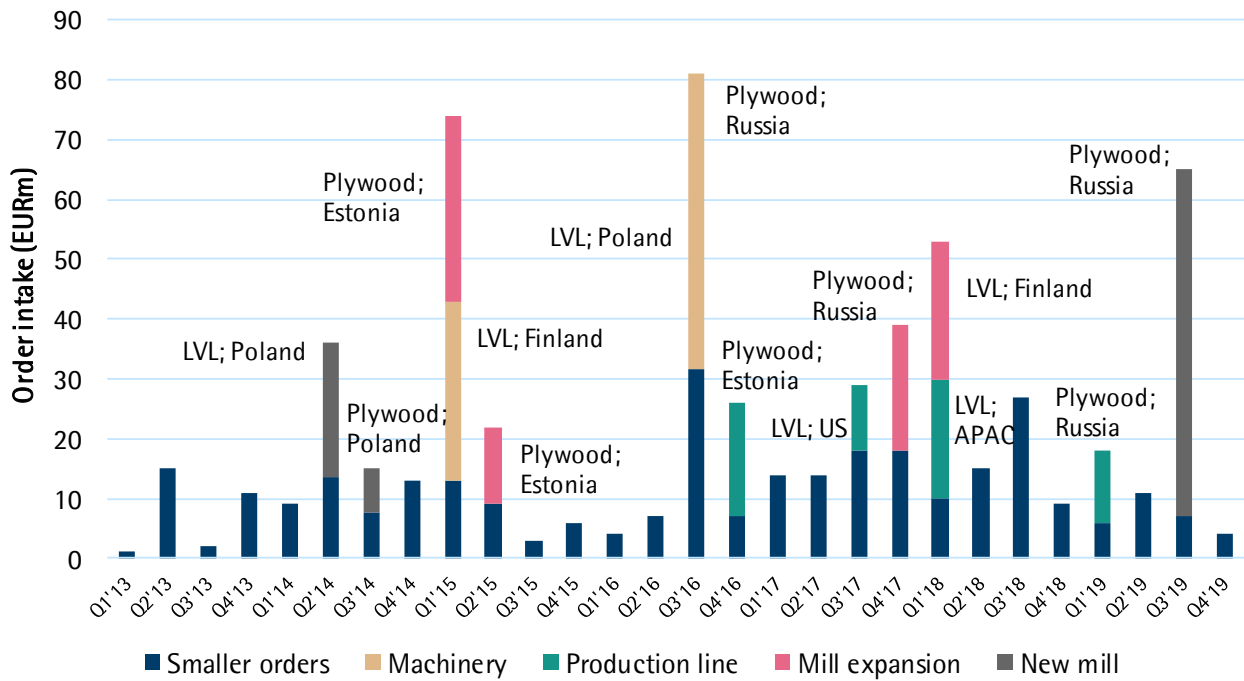
Figure 22: Raute order intake and order book



Source: Raute

Raute's order book began to balloon in 2015-16, mostly due to European and Russian business, and consequently the company went on to achieve a record-strong performance in the following years. The recent European investment boom in new capacity is now cooling down, while Russian order intake and revenue have remained on a good level.

Figure 23: Raute project deliveries order intake by project type

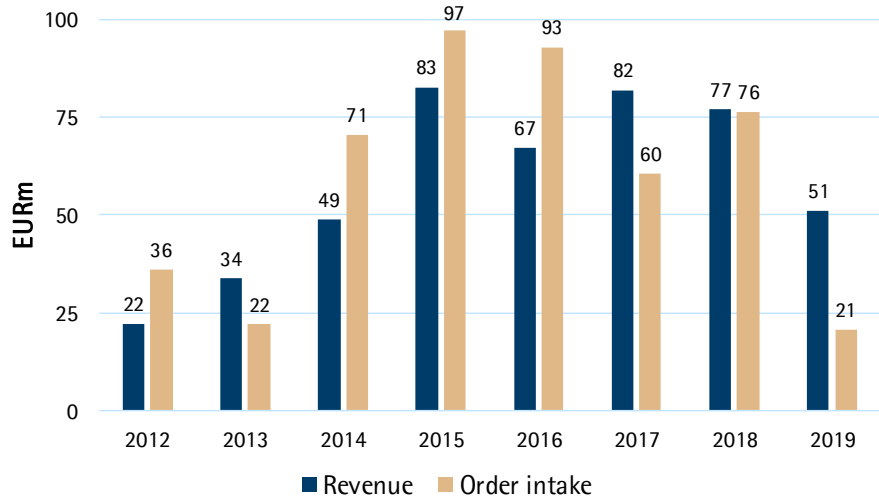


Source: Raute, Evli Research

Activity levels across geographies

Europe has traditionally been the most important market for Raute. European plywood and LVL mills started to invest in new production capacity in significant numbers around 2015, and as Raute was able to capture a large share of the booming order activity the company's annual European revenues basically doubled to around EUR 75m in 2015-18 compared to few previous years.

Figure 24: Raute's European revenue and order intake, 2012-19



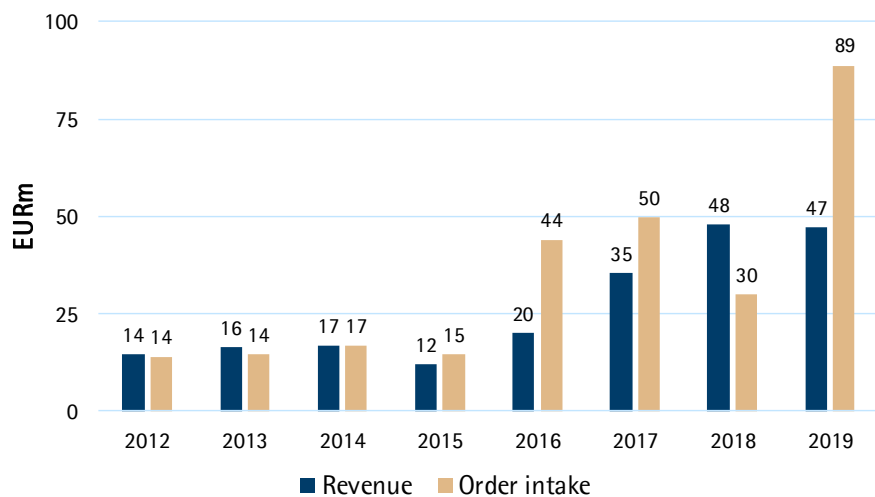
Source: Raute

European order activity weakened considerably in 2019 due to the inevitable cooling in the wake of the new capacity investment boom. Raute's European customer base also

cited growing macro uncertainties, although it should be noted capacity utilization rates remained at good levels. Raute's European order intake amounted to only EUR 21m during 2019 i.e. down by roughly three-quarters compared to 2018's EUR 76m. Raute has a strongly established market position in Europe, and we see no reason not to expect Raute's European orders and revenue to boom again when the business conditions improve. However, given the fact that the sector is only just leaving behind a strong investment cycle, we see a significant risk of prolonged market softness. Raute reported EUR 51m in revenue from Europe in 2019, down by a third compared to previous year.

Russia is now an increasingly important market for Raute. The market development there has been not unlike that seen in Europe, as Raute's Russian business roughly doubled to close to EUR 50m in annual revenue. Unlike Europe, however, the good order activity levels have held up. In fact, Raute's Russian order intake surged in 2019 to EUR 89m (EUR 30m during the previous year), driven by the huge EUR 58m order commissioned by Segezha Group. In other words, even without such an order (which happens to be the largest single order in Raute's history) Raute would still have reported a robust EUR 31m order intake for the year. The big order will be delivered during 2020 and thus provides a good backbone for Raute's operations for the year, making Russia the most important market currently. We would expect Russia to remain Raute's most important market, together with Europe, at least for some time. Raute's Russian revenue, at EUR 47m, remained flat in 2019.

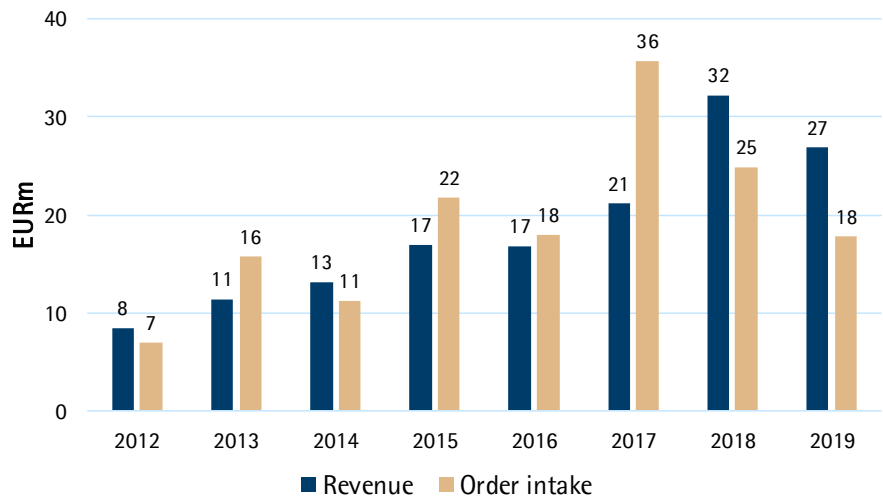
Figure 25: Raute's Russian revenue and order intake, 2012-19



Source: Raute

Raute has established a fair market presence in North America. As in Europe and Russia, Raute's business in the region has almost doubled in recent years in terms of order intake and revenue. North America generated EUR 27m in 2019 revenue, down 16% y/y, while order intake declined by 29% to EUR 18m.

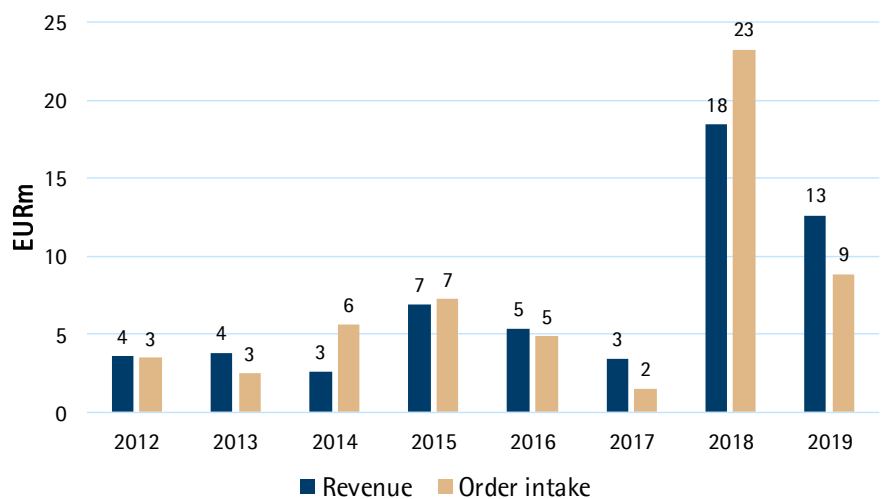
Figure 26: Raute's North American revenue and order intake, 2012-19



Source: Raute

China represents a significant market opportunity for Raute in the long-term even though the company has managed to make few inroads there yet. In general, Asia-Pacific hasn't been a major contributor to Raute's results thus far as annual revenues in the region have only amounted to a few million. Activity jumped significantly in 2018 as investments in new technology gained ground. Both revenue and order intake declined to a level of roughly EUR 10m in 2019.

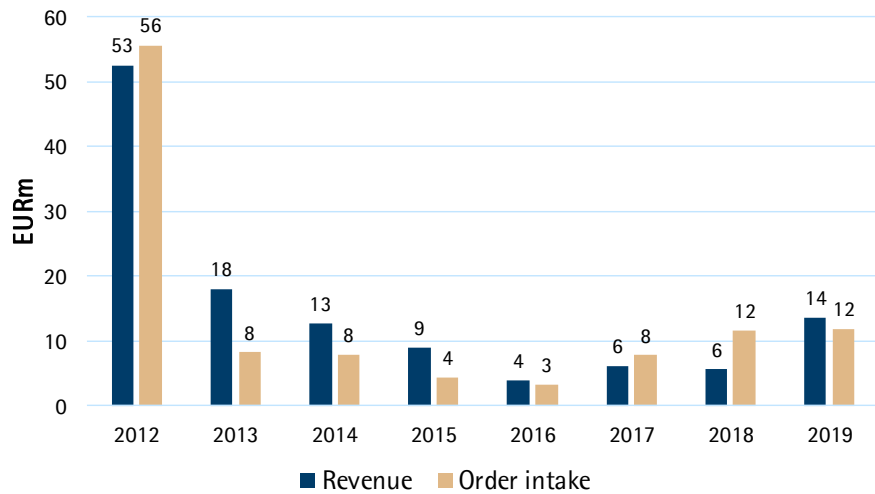
Figure 27: Raute's APAC revenue and order intake, 2012-19



Source: Raute

Raute's activity levels in Latin America have been rather low recently with the region generating some EUR 5-10m in annual revenue. Back in 2012, Raute received new machinery and equipment orders worth more than EUR 50m for the reconstruction of the burned down Paneles Arauco plywood mill in Chile. Although Latin America, where Raute's business is attributable mostly to Chile, is not the most significant market for Raute, the region has been developing steadily in a positive direction. 2019 revenue jumped to EUR 14m, while order intake remained flat at EUR 12m.

Figure 28: Raute's Latin American revenue and order intake, 2012-19



Source: Raute

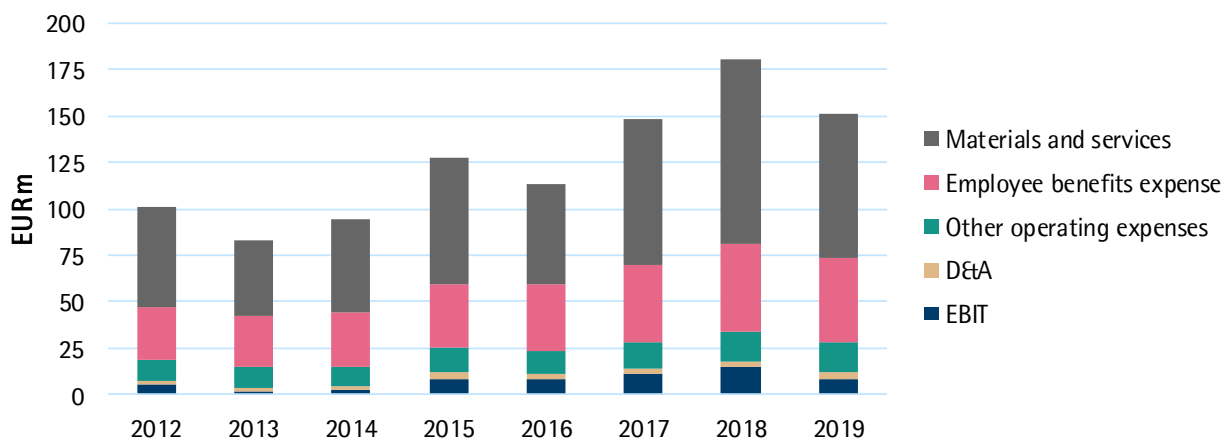
Africa is a market where Raute has no presence. The company has received only a few orders from the region. The market holds long-term potential; regional growth drivers include increasing environmental regulation and plantation wood resources.

Income statement

Raute's order book typically reflects next 6-12 months' revenue. A production line order usually takes 11 months to deliver, while individual machinery can be provided within 6-7 months. Modernization orders tend to turn into revenue within 4 months and spare parts quicker still. The order book does not include maintenance contracts. Raute typically recognizes revenue by percentage of completion based on accumulated costs.

Raute has a relatively stable cost structure. Materials and services tend to amount to 50-55% of revenue i.e. the company achieves gross margins at around 45-50%. Any gross margin fluctuations are most likely driven by sales mix, and more specifically service sales share. Meanwhile employee benefits expense is usually recorded close to 30% of revenue. Other operating expenses have in recent years stood close to EUR 15m, or around 10% of revenue (these costs include items such as SG&A and R&D expenses). Raute tends to book EUR 2-4m in annual depreciation and amortization charges.

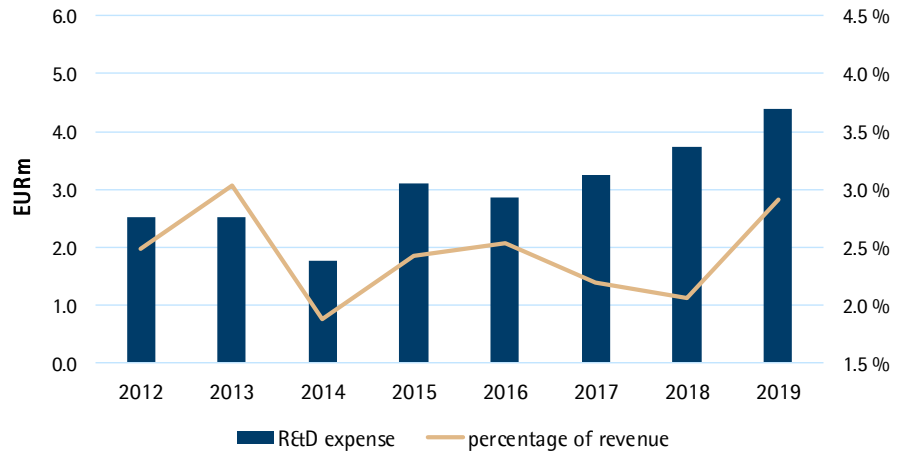
Figure 29: Raute's income statement, 2012-19



Source: Raute

Raute's annual R&D expenditures have typically amounted to EUR 3-4m, or 2.0-2.5% of revenue. The company recognizes basically all the R&D expenses as costs in the income statement. However, we note Raute has lately accelerated its R&D spending in order to segment its equipment offering and so better address lower emerging markets price points. We see Raute on track to spend more than EUR 5m on R&D in 2020.

Figure 30: Raute's research and development costs, 2012-19

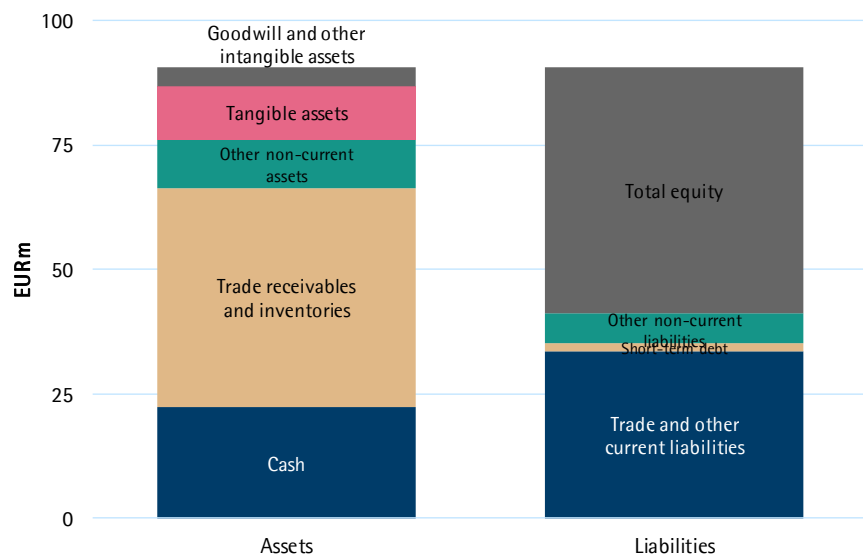


Source: Raute

Balance sheet

Raute operates with an asset-light balance sheet. At the end of 2019, trade and other receivables amounted to EUR 31m, or more than a third of total assets, while inventories stood at EUR 12m. The EUR 11m tangible assets mostly represent the Nastola facility. Other non-current assets include EUR 7m worth of right-of-use assets. Goodwill stood at EUR 1m and was due to the Metriguard acquisition. Raute had a EUR 22m cash position. Looking on the other side, trade payables were EUR 17m; Raute also had EUR 12m in outstanding advance payments. The company had no existing long-term interest-bearing debt, and thus non-current liabilities were mostly composed of the EUR 5m long-term lease liability. Raute's equity book value amounted to EUR 50m.

Figure 31: Raute's balance sheet composition, Dec 2019



Source: Raute

In addition to large cash positions, Raute's balance sheet also recognizes significant advance payments as liabilities

The balance sheet is strong in terms of liquidity and usually has very little interest-bearing debt; Raute has tended to carry, on average, a few million euros worth of short-term interest-bearing liabilities on its balance sheet. The company's net cash position has hovered around EUR 15-20m in recent years, but it should also be noted these cash amounts have closely been matched by advance payments received, which are recognized on the liabilities side (the first advance payment usually amounts to 20% of a given project's value). Both cash assets and advance payments can vary considerably between quarters, and occasionally the advance payments line can even top the cash amount, but on average Raute has maintained a few million-euro positive cash position net of advance payments. We expect no significant changes to these capital structure and cash management policies going forward as we view solid balance sheet a necessity given the cyclical nature of Raute's business.

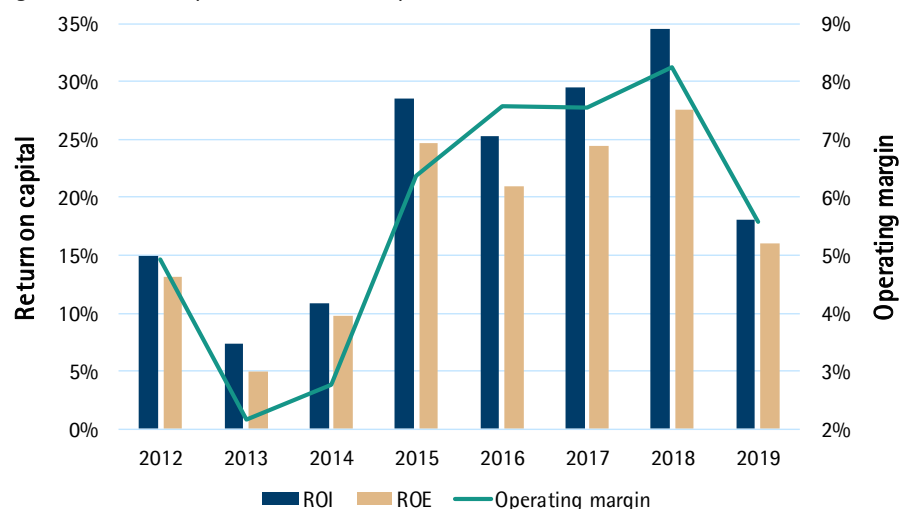
Project deliveries drive variation in NWC position

Although Raute's net working capital tends to be rather modest, averaging some 5% of annual revenue, the net working capital position can vary widely, and the variation is mostly attributable to accounts receivables on the assets side and advance payments on the liabilities side. Receivables may well amount to anywhere between EUR 20-50m while advances usually land between EUR 10-20m. By contrast, inventories and trade payables tend to be relatively stable, the former averaging close to EUR 10m while the latter is usually somewhere between EUR 15-20m. All in all, Raute's net working capital tends to be positive and in the EUR 5-10m range, yet there can be brief periods when the position turns either significantly negative or considerably higher than on average. The variation is due to the project deliveries business cycles, as project deliveries basically fund themselves through customers' advance payments. Meanwhile the services business tends to tie some relatively stable positive amount of working capital.

Financial performance in the Nordic capital goods context

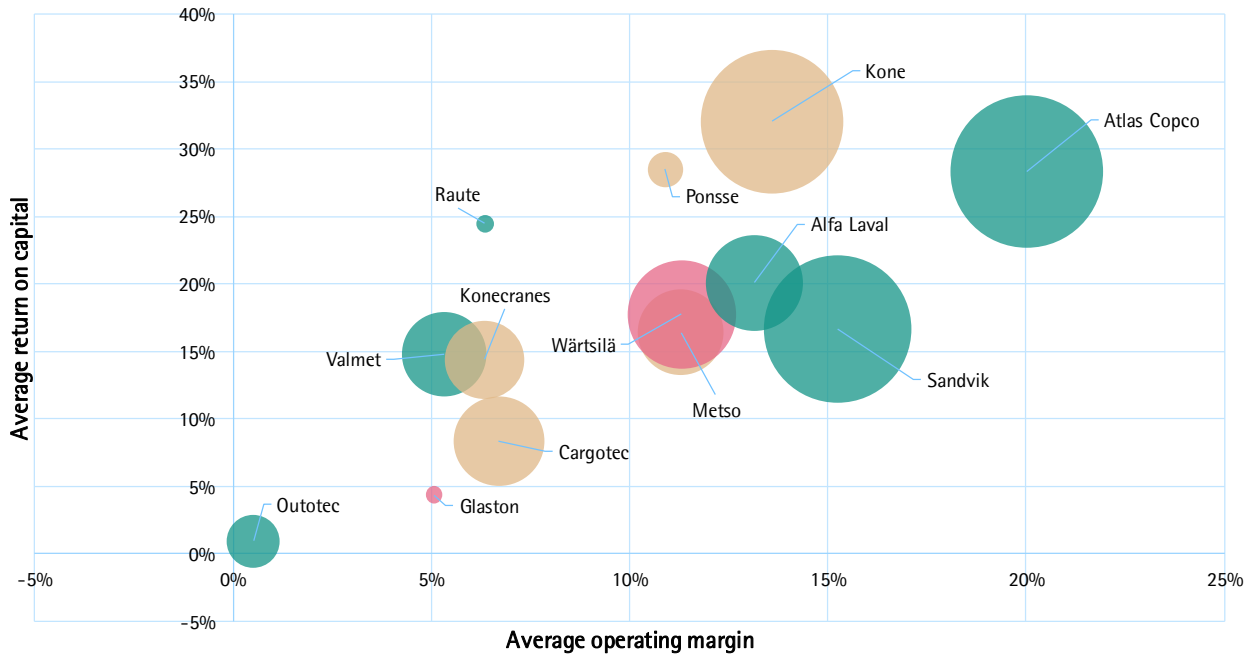
Raute is rather small in absolute size when compared to a typical listed Nordic capital goods company. We have compiled a sample of 12 such peers; a typical representative generated, on average, more than EUR 3bn in annual revenue during the years 2014-19, posted an above 10% operating margin, and achieved returns on capital slightly above 15%. Raute, meanwhile, managed average revenue of EUR 136m, a 6.4% operating margin and 25% ROI. A typical Nordic capital goods company derived 40% of its revenue from services, while Raute's service revenue share averaged 36%.

Figure 32: Raute's profitability development, 2012-19



Source: Raute

Figure 33: Listed Nordic capital goods companies' average financial performance, 2014-19



Source: Company reports

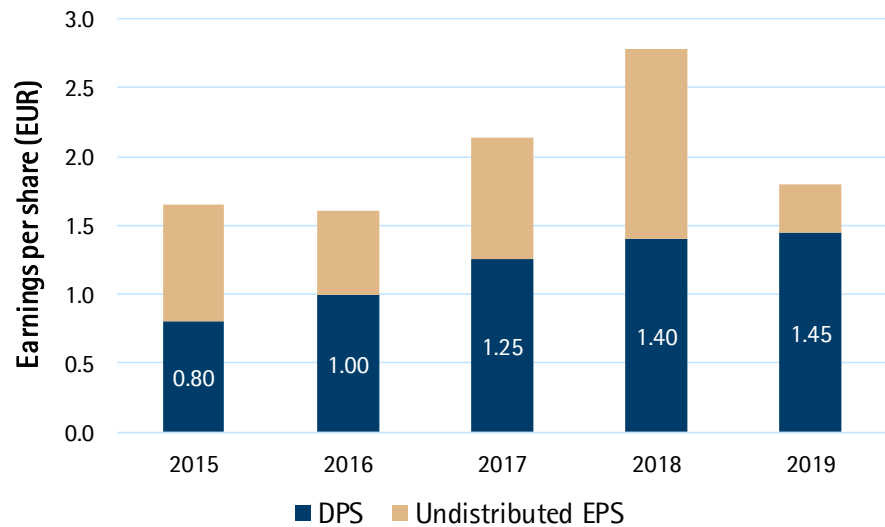
Note: Bubble size indicates average revenue during fiscal years 2014-19; bubble color indicates the general direction of financial and profitability development during the period; operating margins and returns on capital based on FY figures

Raute's financial profile is unlikely to change meaningfully

Raute is a project-driven capital goods company, a fact which restricts its operating margin potential relative to certain other Nordic capital goods companies, such as Ponsse and Kone, who offer more standardized solutions. While Raute might be able to achieve some incremental improvement in its operating margin, in our view the company is already able to generate returns on capital more than adequate relative to risks. In fact Raute's performance compares favorably with that of Valmet, another project-driven company; although the pulp and paper machinery supplier's financial profile has improved steeply in recent years, the 23% ROCE Valmet managed to post along with its 7.9% operating margin in 2019 still doesn't quite match Raute's 26% average comparable figure. With regards to Raute's financial performance going forward, we would not expect significant improvement to the company's project deliveries' operating margin, however we see scope for a slightly more stable financial profile as greater installed base of machinery could support higher annual service revenues (especially in the form of maintenance and spare parts).

Raute has typically spent some EUR 3-4m on annual capital expenditures, or around 3% of revenue. These modest capital expenditure needs, coupled with generally low levels of net working capital, mean Raute's earnings tend to translate well into cash flows. However, there can be significant differences between reported earnings and cash flows in any given year due to the project-driven nature of the business and the consequent irregular timing of payments.

Figure 34: Raute's earnings and dividends



Source: Raute
Note: 2019 DPS represents the BoD's proposal

Dividend payments are not directly tied to Raute's annual earnings due to the fluctuating nature of the business. Raute aims to keep its dividend distributions on an increasing track, or at the minimum stable, and has indeed managed to do so since 2010. During the past decade or so Raute has paid out on average ca. 60% of its annual net earnings.

Raute has two share classes, namely the A and K series. Each A share holds one vote while each K share comes with 20 votes. The A shares represent 77% of all shares and 14% of all voting rights, and conversely the K series amounts to 23% of all shares and 86% of votes. The A series have been quoted on the Helsinki Stock Exchange since 1994, while the K shares are closely held by the extended Mustakallio family.

Estimates

Raute achieved a very strong performance in 2016-18 as busy European order activity drove the company's revenues and operating profits to record highs. The record-high EUR 14.9m '18 EBIT decreased to EUR 8.5m in '19 as top line declined by 16%. In our view revenue will hold relatively good in '20 since Raute was able to book a record-large EUR 58m greenfield plywood mill order. Excluding that particular project, order intake was slow during the latter half of '19. Should there be no meaningful recovery in new orders this year, we would expect Raute's top line to be under further pressure next year. We are expecting some rebound in orders in '21 and relatively stable revenue development going forward.

Table 2: Estimates summary, EURm

Raute	2017	2018	Q1'19	Q2'19	Q3'19	Q4'19	2019	Q1'20e	Q2'20e	Q3'20e	Q4'20e	2020e	2021e
Order intake	155	166	32	26	73	17	148	21	23	23	18	85	125
Project deliveries	97	104	18	11	65	4	98	9	10	13	6	38	68
Technology services	58	62	14	15	8	13	50	12	13	10	12	47	57
Europe	60	76	5	4	5	6	21	6	5	7	5	23	36
Russia	50	30	18	8	60	2	89	6	8	10	7	31	35
North America	36	25	6	6	2	3	18	5	6	4	3	18	19
Latin America	8	12	1	7	0	3	12	2	3	1	2	8	15
Asia-Pacific	2	23	1	1	5	2	9	2	1	1	1	5	20
Order book	110	95	84	72	109	88	88	73	57	46	34	34	19
Revenue	148	181	41	37	34	39	151	39	40	33	30	142	140
Project deliveries	99	126	27	18	17	24	86	25	20	15	14	73	68
Technology services	49	55	15	19	17	15	66	15	20	18	16	69	72
Europe	82	77	19	15	9	8	51	7	6	6	5	24	32
Russia	35	48	11	10	14	13	47	21	22	19	19	81	61
North America	21	32	7	6	7	7	27	5	4	4	2	15	19
Latin America	6	6	3	4	3	4	14	4	5	2	2	13	15
Asia-Pacific	3	18	3	2	2	6	13	2	3	2	2	9	13
EBITDA	14	17	4	3	3	3	12	3	3	3	3	12	13
<i>EBITDA margin</i>	9.3 %	9.6 %	8.7 %	9.1 %	7.9 %	6.9 %	8.1 %	7.2 %	8.0 %	8.6 %	9.0 %	8.1 %	9.5 %
EBIT	11	15	3	2	2	2	8	2	2	2	2	8	9
<i>EBIT margin</i>	7.5 %	8.2 %	6.3 %	6.3 %	5.1 %	4.6 %	5.6 %	4.7 %	5.5 %	5.6 %	5.7 %	5.3 %	6.7 %

Source: Evli Research

Raute guides flat revenue while expecting operating profit to decrease in 2020 compared to 2019. We estimate FY '20 top line to decline by 6% and expect EBIT to fall by 10%.

Valuation

We value Raute with the help of both peer group multiples and DCF valuation approaches. We also look at how Raute's own valuation multiples have developed over time. Our TP is EUR 25 per share; we rate the shares HOLD.

Figure 35: Raute's trailing twelve-month valuation multiples



Source: Raute, Bloomberg

We calculate Raute's trailing twelve-month EV/EBITDA and EV/EBIT multiples have averaged 5.1x and 6.6x during the last five years, while EV/Sales averaged 0.5x. The averages for the last three years are 5.9x EV/EBITDA and 7.3x EV/EBIT.

Since Raute's annual earnings can be rather volatile, we also view a relatively wide range of valuation multiples as acceptable; depending on the point of the cycle, we see an appropriate valuation landing within the ranges of 5.5-8.0x in terms of EV/EBITDA and 7.0-12.0x in terms of EV/EBIT (on a next twelve-month basis).

In our view there is no one particularly relevant peer company on which to base appropriate valuation multiples for Raute. The companies we have included in our peer group produce equipment for sectors that are unlike the plywood and LVL industry; these peers also tend to be significantly larger than Raute. The peer multiples are often meaningfully higher than Raute's, which we find, on balance, to be reasonable: The listed Nordic capital goods companies tend to be leaders within their own markets, and their sectors are not usually quite as cyclical as the plywood and LVL industry. On the other hand, we find Raute's strong positioning within its niche market to positively support higher valuation multiples: In our view Raute is unlikely to lose its edge to current competition while larger capital goods companies probably do not have any strong incentive to expand into plywood and LVL machinery.

Table 3: Peer valuation multiples

RAUTE PEER GROUP	MCAP MEUR	EV/EBITDA			EV/EBIT			EBIT-%		
		19	20	21	19	20	21	19	20	21
Alfa Laval AB	8549	11.8x	10.8x	10.7x	14.9x	13.5x	13.2x	15.4 %	15.8 %	15.9 %
Cargotec	1720	7.4x	6.6x	6.0x	11.0x	9.1x	8.3x	7.2 %	7.4 %	8.0 %
Glaston	85	9.1x	5.8x	4.8x	18.0x	9.8x	7.7x	3.4 %	5.2 %	6.1 %
Kone	26348	19.7x	15.8x	14.8x	23.3x	18.5x	17.3x	12.4 %	12.7 %	13.1 %
Konecranes Oyj	2080	7.6x	6.6x	6.1x	12.1x	9.5x	8.6x	7.1 %	8.1 %	8.8 %
Metso	4373	10.9x	7.5x	7.2x	13.2x	8.9x	8.5x	11.9 %	12.5 %	12.6 %
Outotec	842	7.8x	5.3x	4.9x	11.0x	7.0x	6.4x	9.1 %	10.2 %	10.5 %
Ponsse	760	10.4x	8.9x	8.2x	13.7x	11.6x	10.4x	10.1 %	10.3 %	11.0 %
Sandvik	19059	9.1x	8.9x	8.4x	17.9x	11.4x	10.6x	13.3 %	18.6 %	19.4 %
Valmet	3175	8.5x	7.1x	6.8x	11.3x	9.2x	8.6x	8.2 %	8.7 %	9.2 %
Wartsila	5547	10.9x	8.9x	8.5x	14.7x	11.2x	10.7x	9.0 %	10.8 %	11.2 %
Peer Group Average	6594	10.3x	8.4x	7.9x	14.6x	10.9x	10.0x	9.7 %	11.0 %	11.4 %
Peer Group Median	3175	9.1x	7.5x	7.2x	13.7x	9.8x	8.6x	9.1 %	10.3 %	11.0 %
Raute (Evli est.)	102	8.1x	7.2x	6.1x	11.8x	11.0x	8.7x	5.6 %	5.3 %	6.7 %

Raute prem./disc. to peer median

-12 % -4 % -16 % -14 % 12 % 1 % -39 % -48 % -40 %

Source FactSet, Evli Research

In our opinion DCF is useful for Raute's valuation in the sense that the company has secured a strong competitive positioning with its market share already quite high across most Western markets. We also believe in Raute's ability to maintain an adequate level of profitability, as measured by the operating margin and corresponding return on invested capital, in many market environments. On the other hand, we find it hard to forecast how the plywood and LVL industry investment outlook will develop.

VALUATION RESULTS	BASE CASE DETAILS	VALUATION ASSUMPTIONS	ASSUMPTIONS FOR WACC	
Current share price	24.00 PV of Free Cash Flow	50 Long-term growth, %	2.0 Risk-free interest rate, %	2.25
DCF share value	26.33 PV of Horizon value	46 WACC, %	9.6 Market risk premium, %	5.8
Share price potential, %	9.7 Unconsolidated equity	0 Spread, %	0.5 Debt risk premium, %	2.8
Maximum value	27.9 Marketable securities	22 Minimum WACC, %	9.1 Equity beta coefficient	1.35
Minimum value	25.0 Debt - dividend	-7 Maximum WACC, %	10.1 Target debt ratio, %	20
Horizon value, %	47.7 Value of stock	112 Nr of shares, Mn	4.2 Effective tax rate, %	20

DCF valuation, EURm	2019	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	Horizon
Net sales	151	142	140	145	151	156	159	163	167	170	174	177
<i>Sales growth, %</i>	-16.5	-6.1	-1.8	4.0	4.0	3.0	2.5	2.3	2.3	2.3	2.0	2.0
Operating income (EBIT)	8	8	9	10	11	11	10	11	11	11	11	12
<i>Operating income margin, %</i>	5.6	5.3	6.7	7.1	7.2	7.2	6.5	6.5	6.5	6.5	6.5	6.5
+ Depreciation+amort.	4	4	4	3	3	4	4	4	4	4	4	4
EBITDA	12	12	13	13	14	15	14	15	15	15	15	16
- Paid taxes	-1	-1	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2
- Change in NWC	10	1	0	0	0	0	0	0	0	0	0	0
<i>NWC / Sales, %</i>	7.0	6.9	6.9	6.9	7.0	7.0	7.0	7.0	7.1	7.1	7.1	7.1
+ Change in other liabs	-2	0	0	0	0	0	0	0	0	0	0	0
- Operative CAPEX	-3	-2	-2	-5	-5	-4	-4	-4	-5	-5	-5	-5
<i>opCAPEX / Sales, %</i>	2.1	1.3	1.7	3.3	3.3	2.9	2.8	2.8	2.8	2.8	2.8	2.8
- Acquisitions	0	0	0	0	0	0	0	0	0	0	0	0
+ Divestments	0	0	0	0	0	0	0	0	0	0	0	0
- Other items	0	0	0	0	0	0	0	0	0	0	0	0
= FCFF	16	9	9	6	7	8	8	8	8	8	8	113
= Discounted FCFF		8	8	5	5	5	4	4	4	4	3	46
= DFCF min WACC		8	8	5	5	5	5	4	4	4	4	52
= DFCF max WACC		8	8	5	5	5	4	4	4	4	3	41

INTERIM FIGURES

EVLI ESTIMATES, EURm	2019Q1	2019Q2	2019Q3	2019Q4	2019	2020Q1E	2020Q2E	2020Q3E	2020Q4E	2020E	2021E	2022E
Net sales	41.3	37.0	33.7	39.3	151.3	39.3	39.5	33.4	29.8	142.0	139.5	145.2
EBITDA	3.6	3.2	2.6	2.9	12.3	2.8	3.2	2.9	2.7	11.6	13.3	13.2
<i>EBITDA margin (%)</i>	<i>8.7</i>	<i>8.6</i>	<i>7.7</i>	<i>7.3</i>	<i>8.1</i>	<i>7.2</i>	<i>8.0</i>	<i>8.6</i>	<i>9.0</i>	<i>8.1</i>	<i>9.5</i>	<i>9.1</i>
EBIT	2.6	2.3	1.7	1.8	8.4	1.8	2.2	1.9	1.7	7.6	9.3	10.3
<i>EBIT margin (%)</i>	<i>6.3</i>	<i>6.2</i>	<i>5.0</i>	<i>4.6</i>	<i>5.6</i>	<i>4.7</i>	<i>5.5</i>	<i>5.6</i>	<i>5.7</i>	<i>5.3</i>	<i>6.7</i>	<i>7.1</i>
Net financial items	0.1	0.0	0.0	0.7	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pre-tax profit	2.7	2.3	1.7	2.5	9.2	1.8	2.2	1.9	1.7	7.6	9.3	10.3
Tax	-0.6	-0.4	-0.3	-0.3	-1.6	-0.3	-0.3	-0.3	-0.3	-1.2	-1.9	-2.1
<i>Tax rate (%)</i>	<i>22.2</i>	<i>17.4</i>	<i>17.6</i>	<i>10.6</i>	<i>17.0</i>	<i>16.4</i>	<i>13.8</i>	<i>16.0</i>	<i>17.8</i>	<i>15.9</i>	<i>20.0</i>	<i>20.0</i>
Net profit	2.1	1.9	1.4	2.2	7.6	1.5	1.9	1.6	1.4	6.4	7.4	8.3
EPS	0.49	0.45	0.33	0.53	1.80	0.36	0.44	0.37	0.33	1.50	1.75	1.95
EPS adjusted (diluted no. of shares)	0.49	0.45	0.33	0.53	1.80	0.36	0.44	0.37	0.33	1.50	1.75	1.95
Dividend per share	0.00	0.00	0.00	0.00	1.45	0.00	0.00	0.00	0.00	1.47	1.50	1.52
SALES, EURm												
Project deliveries	26.8	18.2	16.5	24.1	85.6	24.5	19.8	15.4	13.8	73.5	67.5	69.6
Technology services	14.5	18.8	17.2	15.2	65.7	14.8	19.8	18.1	16.0	68.6	72.0	75.6
Total	41.3	37.0	33.7	39.3	151.3	39.3	39.5	33.4	29.8	142.0	139.5	145.2
SALES GROWTH, Y/Y %												
<i>Project deliveries</i>	<i>8.5</i>	<i>-40.7</i>	<i>-50.7</i>	<i>-35.6</i>	<i>-32.2</i>	<i>-8.5</i>	<i>8.6</i>	<i>-6.9</i>	<i>-42.6</i>	<i>-14.2</i>	<i>-8.1</i>	<i>3.0</i>
<i>Technology services</i>	<i>37.0</i>	<i>44.6</i>	<i>18.5</i>	<i>-9.5</i>	<i>19.7</i>	<i>2.0</i>	<i>5.1</i>	<i>5.0</i>	<i>5.0</i>	<i>4.4</i>	<i>5.0</i>	<i>5.0</i>
Total	17.1	-15.3	-29.7	-27.5	-16.5	-4.8	6.8	-0.8	-24.2	-6.1	-1.8	4.0
EBIT, EURm												
Project deliveries	1.1	0.5	0.2	0.3	2.1	0.5	0.4	0.3	0.3	1.4	2.0	2.8
Technology services	1.5	1.8	1.5	1.5	6.3	1.3	1.8	1.6	1.4	6.2	7.3	7.6
Total	2.6	2.3	1.7	1.8	8.4	1.8	2.2	1.9	1.7	7.6	9.3	10.3
EBIT margin, %												
<i>Project deliveries</i>	<i>4.1</i>	<i>2.7</i>	<i>1.2</i>	<i>1.2</i>	<i>2.5</i>	<i>2.0</i>	<i>2.0</i>	<i>1.6</i>	<i>1.8</i>	<i>1.9</i>	<i>3.0</i>	<i>4.0</i>
<i>Technology services</i>	<i>10.3</i>	<i>9.6</i>	<i>8.7</i>	<i>9.9</i>	<i>9.6</i>	<i>9.0</i>	<i>9.0</i>	<i>9.0</i>	<i>9.0</i>	<i>9.0</i>	<i>10.1</i>	<i>10.0</i>
Total	6.3	6.2	5.0	4.6	5.6	4.7	5.5	5.6	5.7	5.3	6.7	7.1

INCOME STATEMENT, EURm	2015	2016	2017	2018	2019	2020E	2021E	2022E
Sales	127.3	113.1	148.6	181.1	151.3	142.0	139.5	145.2
<i>Sales growth (%)</i>	<i>35.4</i>	<i>-11.1</i>	<i>31.4</i>	<i>21.9</i>	<i>-16.5</i>	<i>-6.1</i>	<i>-1.8</i>	<i>4.0</i>
EBITDA	11.6	10.9	14.2	17.4	12.3	11.6	13.3	13.2
<i>EBITDA margin (%)</i>	<i>9.1</i>	<i>9.6</i>	<i>9.6</i>	<i>9.6</i>	<i>8.1</i>	<i>8.1</i>	<i>9.5</i>	<i>9.1</i>
Depreciation	-2.1	-2.3	-2.6	-2.5	-3.9	-4.0	-4.0	-2.9
EBITA	9.5	8.6	11.6	14.9	8.4	7.6	9.3	10.3
Goodwill amortization / writedown	-1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EBIT	8.1	8.6	11.6	14.9	8.4	7.6	9.3	10.3
<i>EBIT margin (%)</i>	<i>6.4</i>	<i>7.6</i>	<i>7.8</i>	<i>8.2</i>	<i>5.6</i>	<i>5.3</i>	<i>6.7</i>	<i>7.1</i>
Reported EBIT	8.1	8.6	11.6	14.9	8.4	7.6	9.3	10.3
<i>EBIT margin (reported) (%)</i>	<i>6.4</i>	<i>7.6</i>	<i>7.8</i>	<i>8.2</i>	<i>5.6</i>	<i>5.3</i>	<i>6.7</i>	<i>7.1</i>
Net financials	0.1	0.0	0.0	0.0	0.8	0.0	0.0	0.0
Pre-tax profit	8.2	8.6	11.6	14.9	9.2	7.6	9.3	10.3
Taxes	-1.4	-1.5	-2.1	-3.2	-1.6	-1.2	-1.9	-2.1
Minority shares	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Net profit	6.7	7.0	9.4	11.7	7.6	6.4	7.4	8.3
Cash NRIs	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Non-cash NRIs	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BALANCE SHEET, EURm								
Assets								
Fixed assets	11	12	13	15	16	15	13	15
Goodwill	0	0	1	1	1	1	1	1
Right of use assets	0	0	0	7	7	7	6	7
Inventory	10	10	11	14	12	12	11	12
Receivables	35	24	30	52	32	30	29	30
Liquid funds	7	24	31	13	22	25	28	28
Total assets	62	70	87	103	91	88	89	92
Liabilities								
Shareholder's equity	30	34	39	47	50	50	51	53
Minority interest	0	0	0	0	0	0	0	0
Convertibles	0	0	0	0	0	0	0	0
Lease liabilities	0	0	0	7	5	7	6	7
Deferred taxes	0	0	0	0	0	0	0	0
Interest bearing debt	2	3	1	1	2	0	0	0
Non-interest bearing current liabilities	28	29	43	46	31	29	29	30
Other interest-free debt	0	1	1	1	3	3	3	3
Total liabilities	62	70	87	103	91	88	89	92
CASH FLOW, EURm								
+ EBITDA	12	11	14	17	12	12	13	13
- Net financial items	2	17	7	0	1	0	0	0
- Taxes	-1	0	-3	-3	-1	-1	-2	-2
- Increase in Net Working Capital	-3	12	6	-23	10	1	0	0
+/- Other	-3	-19	-6	0	0	0	0	0
= Cash flow from operations	8	21	18	-8	21	11	12	11
- Capex	-2	-3	-7	-4	-3	-2	-2	-5
- Acquisitions	0	0	0	0	0	0	0	0
+ Divestments	0	0	0	0	0	0	0	0
= Free cash flow	5	18	11	-11	18	9	9	6
+/- New issues/buybacks	0	1	0	1	1	0	0	0
- Paid dividend	-2	-3	-4	-5	-6	-6	-6	-6
+/- Other	-2	2	0	-2	-4	-1	0	0
Change in cash	2	17	7	-17	9	3	3	0

KEY FIGURES	2016	2017	2018	2019	2020E	2021E	2022E
M-cap	70	123	91	114	102	102	102
Net debt (excl. convertibles)	-21	-29	-5	-15	-18	-21	-21
Enterprise value	50	94	85	99	84	81	81
Sales	113	149	181	151	142	140	145
EBITDA	11	14	17	12	12	13	13
EBIT	9	12	15	8	8	9	10
Pre-tax	9	12	15	9	8	9	10
Earnings	7	9	12	8	6	7	8
Equity book value (excl. minorities)	34	39	47	50	50	51	53
Valuation multiples							
EV/sales	0.4	0.6	0.5	0.7	0.6	0.6	0.6
EV/EBITDA	4.6	6.6	4.9	8.1	7.2	6.1	6.1
EV/EBITA	5.8	8.1	5.7	11.8	11.0	8.7	7.8
EV/EBIT	5.8	8.1	5.7	11.8	11.0	8.7	7.8
EV/OCF	2.3	5.1	-11.2	4.7	7.5	6.9	7.6
EV/FCFF	2.7	7.4	-7.2	6.3	9.5	8.8	13.2
P/FCFE	3.9	10.8	-8.1	6.4	11.1	11.0	17.4
P/E	10.0	13.1	7.7	15.0	16.0	13.7	12.3
P/B	2.1	3.1	1.9	2.3	2.1	2.0	1.9
Target EV/EBITDA	0.0	0.0	0.0	0.0	7.6	6.4	6.4
Target EV/EBIT	0.0	0.0	0.0	0.0	11.6	9.1	8.2
Target EV/FCF	0.0	0.0	0.0	0.0	9.5	9.1	14.5
Target P/B	0.0	0.0	0.0	0.0	2.1	2.1	2.0
Target P/E	0.0	0.0	0.0	0.0	16.7	14.3	12.8
Per share measures							
Number of shares	4,206	4,249	4,249	4,249	4,249	4,249	4,249
Number of shares (diluted)	4,206	4,249	4,249	4,249	4,249	4,249	4,249
EPS	1.68	2.22	2.76	1.80	1.50	1.75	1.95
Operating cash flow per share	5.05	4.33	-1.79	4.96	2.62	2.74	2.52
Free cash flow per share	4.33	2.68	-2.64	4.23	2.17	2.19	1.38
Book value per share	8.13	9.27	10.95	11.65	11.70	11.98	12.42
Dividend per share	1.00	1.25	1.40	1.45	1.47	1.50	1.52
Dividend payout ratio, %	59.7	56.4	50.7	80.7	98.1	85.8	78.1
Dividend yield, %	6.0	4.3	6.6	6.0	6.1	6.3	6.3
FCF yield, %	25.9	9.3	-12.4	15.7	9.0	9.1	5.8
Efficiency measures							
ROE	22.1	25.6	27.3	15.9	12.8	14.8	16.0
ROCE	25.0	29.7	31.3	15.1	13.4	16.4	17.7
Financial ratios							
Inventories as % of sales	8.6	7.4	7.9	8.2	8.2	8.2	8.2
Receivables as % of sales	21.6	20.5	28.9	20.9	21.0	21.0	21.0
Non-interest bearing liabilities as % of sales	26.1	29.1	25.2	20.5	20.5	20.5	20.5
NWC/sales, %	3.1	-1.8	11.1	7.0	6.9	6.9	6.9
Operative CAPEX/sales, %	2.7	4.7	2.0	2.1	1.3	1.7	3.3
CAPEX/sales (incl. acquisitions), %	2.7	4.7	2.0	2.1	1.3	1.7	3.3
FCFF/EBITDA	1.7	0.9	-0.7	1.3	0.8	0.7	0.5
Net debt/EBITDA, book-weighted	-1.9	-2.1	-0.3	-1.3	-1.6	-1.6	-1.6
Debt/equity, market-weighted	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Equity ratio, book-weighted	49.0	45.3	45.1	54.6	56.2	57.2	57.2
Gearing, %	-60.3	-74.4	-11.8	-31.0	-37.0	-42.1	-39.7

COMPANY DESCRIPTION: Raute offers production lines, machinery and services for the entire production process of veneer and veneer-based products, which include plywood and laminated veneer lumber (LVL). The company's strategy is premised on a complementary offering of veneer production technology and services. Raute has differentiated itself through technological leadership and the ability to supply complete plywood and LVL production processes. Raute delivers most of its equipment in a tailored project-driven fashion to a global customer base consisting of hundreds of plywood and LVL mills. Raute has its main production plant in Lahti, Finland, however the company also operates a global sales and services network. Raute is a global leader in its niche market.

INVESTMENT CASE: Raute is the most technologically sophisticated vendor and a market leader within its niche. In our view this set-up will not change as current competition lags quite far behind and larger capital goods companies are unlikely to enter the relatively small market. Predicting Raute's project delivery flow is not easy and a single large project can make up a significant portion of a given calendar year's activity. Services growth might help to smooth financial performance, however project deliveries will always remain crucially important for Raute's success.

OWNERSHIP STRUCTURE	SHARES	EURm	%
Sundholm Göran Wilhelm	500,000	12.000	11.8%
Mandatum Life Unit-Linked	138,302	3.319	3.3%
Laakkonen Mikko Kalervo	119,919	2.878	2.8%
Suominen Pekka	110,429	2.650	2.6%
Siivonen Osku Pekka	104,179	2.500	2.5%
Kirmo Kaisa Marketta	104,021	2.497	2.4%
Suominen Tiina Sini-Maria	100,856	2.421	2.4%
Keskiaho Kaija Leena	84,716	2.033	2.0%
Mustakallio Mika Tapani	83,270	1.998	2.0%
Särkijärvi Anna Riitta	82,489	1.980	1.9%
Ten largest	1,428,181	34.276	34%
Residual	2,821,067	67.706	66%
Total	4,249,248	101.982	100%

EARNINGS CALENDAR	
April 29, 2020	Q1 report
July 23, 2020	Q2 report
October 29, 2020	Q3 report
OTHER EVENTS	
March 31, 2020	AGM

COMPANY MISCELLANEOUS	
CEO: Tapani Kiiski	Rautetie 2, FI-15550 Nastola
CFO: Tarja Järvinen	Tel: +358 3, 82,911
IR:	

DEFINITIONS

P/E	$\frac{\text{Price per share}}{\text{Earnings per share}}$	EPS	$\frac{\text{Profit before extraord. items and taxes} - \text{income taxes} + \text{minority interest}}{\text{Number of shares}}$
P/BV	$\frac{\text{Price per share}}{\text{Shareholders' equity} + \text{taxed provisions per share}}$	DPS	Dividend for the financial period per share
Market cap	Price per share * Number of shares	OCF (Operating cash flow)	EBITDA – Net financial items – Taxes – Increase in working capital – Cash NRIs ± Other adjustments
EV (Enterprise value)	Market cap + net debt + minority interest at market value – share of associated companies at market value	FCF (Free cash flow)	Operating cash flow – operative CAPEX – acquisitions + divestments
EV/Sales	$\frac{\text{Enterprise value}}{\text{Sales}}$	FCF yield, %	$\frac{\text{Free cash flow}}{\text{Market cap}}$
EV/EBITDA	$\frac{\text{Enterprise value}}{\text{Earnings before interest, tax, depreciation and amortization}}$	Operative CAPEX/sales	$\frac{\text{Capital expenditure} - \text{divestments} - \text{acquisitions}}{\text{Sales}}$
EV/EBIT	$\frac{\text{Enterprise value}}{\text{Operating profit}}$	Net working capital	Current assets – current liabilities
Net debt	Interest bearing debt – financial assets	Capital employed/Share	$\frac{\text{Total assets} - \text{non-interest bearing debt}}{\text{Number of shares}}$
Total assets	Balance sheet total	Gearing	$\frac{\text{Net debt}}{\text{Equity}}$
Div yield, %	$\frac{\text{Dividend per share}}{\text{Price per share}}$	Debt/Equity, %	$\frac{\text{Interest bearing debt}}{\text{Shareholders' equity} + \text{minority interest} + \text{taxed provisions}}$
Payout ratio, %	$\frac{\text{Total dividends}}{\text{Earnings before extraordinary items and taxes} - \text{income taxes} + \text{minority interest}}$	Equity ratio, %	$\frac{\text{Shareholders' equity} + \text{minority interest} + \text{taxed provisions}}{\text{Total assets} - \text{interest-free loans}}$
ROCE, %	$\frac{\text{Profit before extraordinary items} + \text{interest expenses} + \text{other financial costs}}{\text{Balance sheet total} - \text{non-interest bearing debt (average)}}$	CAGR, %	Cumulative annual growth rate = Average growth per year
ROE, %	$\frac{\text{Profit before extraordinary items and taxes} - \text{income taxes}}{\text{Shareholder's equity} + \text{minority interest} + \text{taxed provisions (average)}}$		

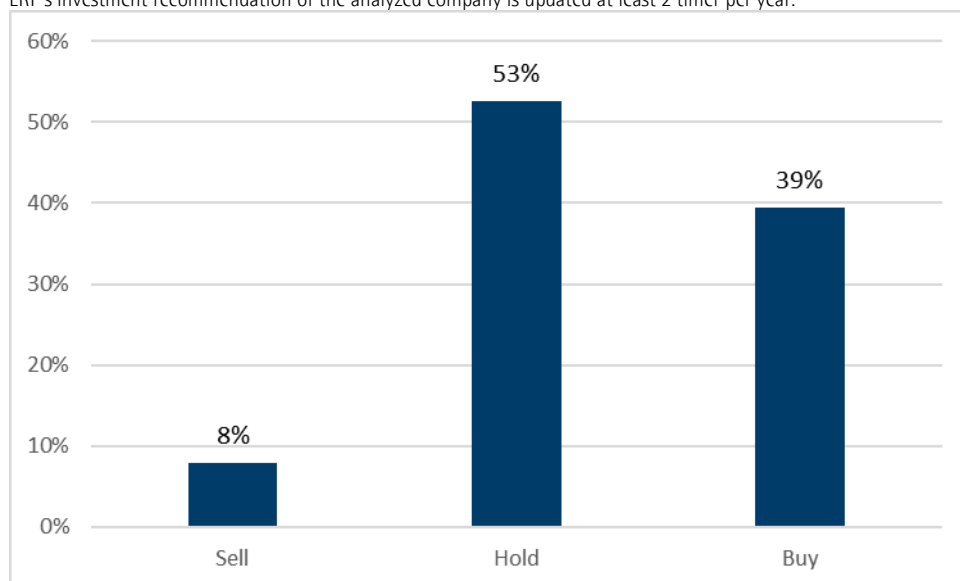
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Target price compared to share price	Recommendation
< -10 %	SELL
-10 – (+10) %	HOLD
> 10 %	BUY

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Name(s) of the analyst(s): Ilvonen

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