

## A most resilient performer

We remain confident towards Scanfil's long-term value chain positioning, however in our opinion recent share price gains have largely neutralized valuation. Our new TP is EUR 6.5 (6.25) and our rating is now HOLD (BUY).

### The performance amid the pandemic testifies to strengths

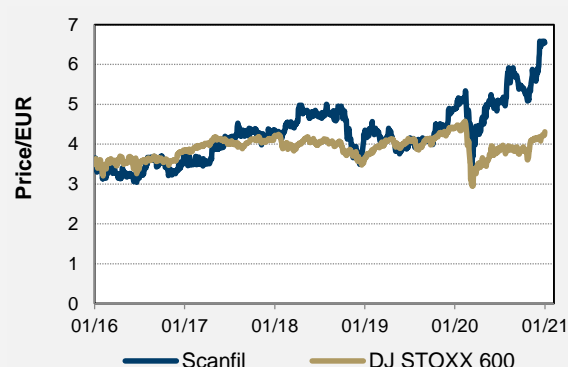
Scanfil's business has remained robust to macroeconomic shocks throughout its 40+ year history. '20 is another testament to this resilience as the pandemic hasn't considerably affected Scanfil's performance. The company has had to make only very small revisions to FY '20 guidance; the latest revenue and EBIT outlook figures are down by respective 2% and 5% compared to the initial figures issued before the pandemic broke out. We now expect Scanfil to achieve some 3% top line growth for FY '20; the increase is due to the 2019 HASEC acquisition. Profitability has remained strong. The Energy & Automation, Industrial and Medtec & Life Science segments have extended their good figures, while Communication and Consumer Applications have been softer. Consumer Applications' revenue is down by ca. EUR 40m since FY '18, however we view the segment still has good long-term outlook. We aren't estimating rapid rebound for the segment yet see Scanfil should be able to post a 4% organic CAGR in the coming years thanks to its three largest ones.

### We expect stellar performance to continue

We see Scanfil remains in top shape overall and is probably one of the best performing decent-sized contract electronics manufacturers globally. In our opinion Scanfil is unlikely to encounter profitability issues going forward and long-term organic growth outlook still appears good despite the pandemic. The company is also in a strong position to do more M&A and we are confident any potential deal, small or large, is likely to further improve Scanfil's competitiveness.

### Multiple expansion was overdue, yet visibility is limited

Scanfil's share has appreciated significantly, and in our view some multiple expansion was long overdue given the company's strong track record. Scanfil now trades in the range of 7-8x EV/EBITDA on our estimates for '20-21, a level we don't consider that challenging, but also view to be enough to curb meaningful additional gains for now since revenue visibility is limited even in the best of times. Our TP is EUR 6.5 (6.25), rating HOLD (BUY).

 Rating HOLD

 Share price, EUR (Last trading day's closing price) 6.54

 Target price, EUR 6.5

 Latest change in recommendation 08-Jan-21

 Latest report on company 28-Oct-20

 Research paid by issuer: YES

 No. of shares outstanding, '000's 63,895

 No. of shares fully diluted, '000's 63,895

 Market cap, EURm 418

 Free float, % 46.6

 Exchange rate -

 Reuters code SCANFL.HE

 Bloomberg code SCANFL.FH

 Average daily volume, EURm 0.1

 Next interim report 18-Feb-21

 Web site www.scanfil.com/investors

 Analyst Joonas Ilvonen

 E-mail joonas.ilvonen@evli.com

 Telephone +358 44 430 9071
+ 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	563.0	37.8	6.7%	18.9	0.44	10.1	0.6	8.5	6.7	0.13
2019	579.4	39.4	6.8%	7.5	0.50	10.4	0.7	9.6	2.2	0.15
2020E	595.0	38.7	6.5%	41.4	0.47	13.9	0.7	11.0	9.9	0.15
2021E	616.6	41.6	6.8%	25.6	0.50	13.1	0.7	9.9	6.1	0.17
2022E	642.9	45.0	7.0%	25.9	0.53	12.3	0.6	8.8	6.2	0.17
Market cap, EURm	418			Gearing 2020E, %	4.3			CAGR EPS 2019-22, %	1.7	
Net debt 2020E, EURm	8			Price/book 2020E	2.2			CAGR sales 2019-22, %	3.5	
Enterprise value, EURm	426			Dividend yield 2020E, %	2.4			ROE 2020E, %	16.8	
Total assets 2020E, EURm	346			Tax rate 2020E, %	18.9			ROCE 2020E, %	16.9	
Goodwill 2020E, EURm	8			Equity ratio 2020E, %	54.8			PEG, P/E 20/CAGR	2.5	

**Investment summary**

Scanfil is a mid-sized contract electronics manufacturer with a global reach

Scanfil is a contract electronics manufacturer based in Sievi, Finland. The company operates with a vertically integrated model, meaning it offers its customers manufacturing services to cover the entire supply chain during the whole lifecycle of a given customer product. Scanfil focuses on industrial electronics and many of its customers are large global companies. Scanfil's current plant network extends three continents. Europe remains Scanfil's most important market since the continent accounts for some three-quarters of revenue. Scanfil is particularly committed to the Nordic and Central European markets. Besides organic growth prospects, the company continues to look for acquisition targets in these regions. Scanfil now employs some 3,400 personnel.

Value chain positioning remains mostly tough, however Scanfil has a compelling strategic focus

Industrial electronics manufacturing is the mainstay of the European CEM market. The manufactured products are characterized by their low to medium volumes as well as high product mix and complexity features. Electronics manufacturing services providers offer original equipment manufacturers added operational flexibility so that the OEMs can focus more on their core competencies, including marketing and product design. Contract manufacturers have limited scope for differentiating their service, which means pricing needs to remain competitive. There are also no significant scale benefits and thus marginal profitability upside is curbed. Customer accounts typically graduate to large volumes conservatively, while on the positive side the relationships tend to be sticky since quality assurance costs are often high. In our opinion Scanfil achieves very good customer intimacy with the help of its most important strategic choice, namely the segmented manufacturing plant network, which the company harnesses through the vertically integrated model.

Organic and inorganic growth prospects remain good alike

We highlight Scanfil's competitive operating model since it affords the company nimble customer account grasp. Scanfil's success largely depends on its customer account products' end-market demand. Although many important customers operate in rather mature markets the accounts nevertheless tend to represent leaders within their own sectors. We note many Scanfil reference customers target long-term annual growth rates of some 5% or more. In our view a 5% organic CAGR remains a highly relevant long-term target for Scanfil as there is still some further room for increase in outsourced manufacturing share. M&A has also been an important Scanfil strategy tool; even if no transformative deal is on the cards, we are confident Scanfil can continue to create value with more precise smaller purchases.

The market is vast and growing

The global CEM market is very large, fragmented and competitive. The most relevant European market is approximately EUR 30bn; Scanfil's ca. EUR 600m annual revenue means the company is a mid-sized player in the global context. Scanfil is one of the largest EMS providers in the Nordics and has plenty of expansion potential especially in Central Europe.

In our opinion the mix of five segments works well

Scanfil's Energy & Automation, Industrial and Medtec & Life Science segments have continued to perform strong in recent years. Meanwhile there has been softness in Communication and Consumer Applications. Scanfil's organic growth has thus been flat in 2019-20. Consumer Applications has struggled with some account-specific demand issues lately, but we remain optimistic about the segment's long-term prospects with customer products such as reverse vending machines and smart-home and access control solutions.

FY '20 numbers reflect very limited amounts of pandemic adverse effects

Scanfil is bound to achieve close to EUR 600m in FY '20 revenue with an operating margin of some 6.5%. This translates to ROCE in the high teens given the company's asset-light business model. Organic growth is likely to be flat and the couple percentage-point increase is due to the HASEC acquisition. Scanfil has only made very small revisions to its FY '20 guidance after the pandemic broke out, which testifies to the overall resilience.

The company is in top shape, however macroeconomic uncertainty limits multiples

In our view Scanfil's EUR 700m (i.e. 5% organic CAGR) revenue and 7% operating margin targets for FY '23 remain highly relevant despite the pandemic, but naturally the current order curbs multiples potential as revenue visibility is limited even in the best of times. We estimate Scanfil to achieve approximately 4% organic CAGR in the coming years.

We rate Scanfil HOLD (BUY), TP EUR 6.5 (6.25) per share

Scanfil now trades ca. 7-8x EV/EBITDA (vs 7x historical avg.) on our estimates for '20-21. We view the current valuation neutral. Our TP is EUR 6.5 (6.25) and our rating HOLD (BUY).

## Company overview

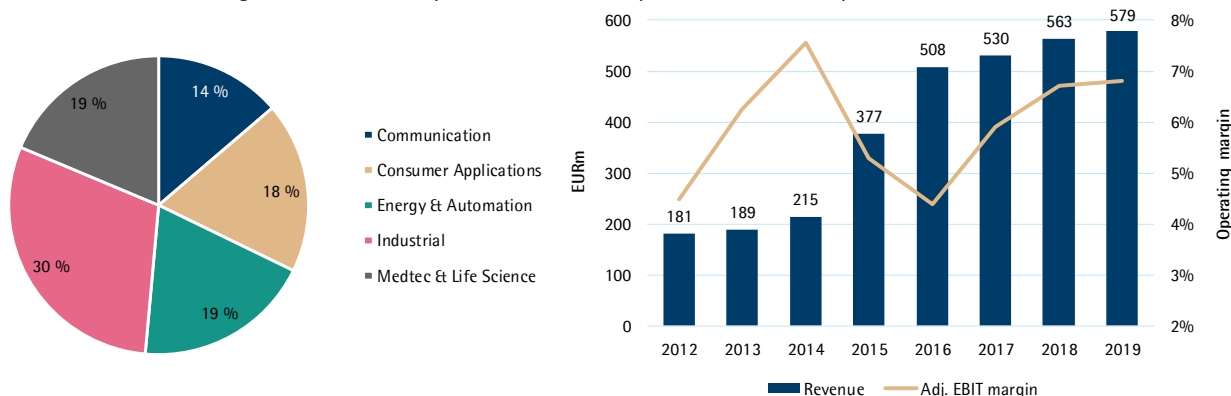
### Scanfil background

Scanfil began as a manufacturer of sheet metal mechanics for the electronics industry in 1976 when Mr Jorma J. Takanen founded the company in Sievi, Finland. The company's first products were industrial filters (the Scanfil name derives from Scandinavian Filters) and the manufacturing efforts initially took place in a garage. Expansion into contract electronics manufacturing happened in the 1980s and the company quickly gained technology and market share. Scanfil's plant network had expanded beyond Sievi by 1990. The Oulu plant supported rapid growth in the 1990s as revenue grew from EUR 5m to above EUR 220m, driven by applications like base station mechanics. Scanfil had developed its capacity to act as a systems supplier to major telecommunications equipment and industrial electronics companies by the turn of the millennium. Nokia was a crucial customer account and contributed more than three-quarters of revenue at its peak. Scanfil noted how industrial manufacturing was moving to low-cost countries and responded by establishing operations in countries such as Hungary, Estonia and China during the early 2000s. Scanfil's domestic personnel were outnumbered by staff employed within international operations by 2005. Scanfil also started to direct its own focus away from telecommunications equipment towards industrial electronics.

Scanfil has been a publicly traded company since 2002. The current structure was established in 2012 when the partial demerger with Sievi Capital took place. The acquisition of PartnerTech, a Swedish contract manufacturer, in 2015 was another milestone as the deal doubled Scanfil's size. The company has always aspired to grow both organically and through M&A. Scanfil has continued to perform strong even amid the pandemic; in our opinion the outlook has not changed meaningfully as the company retains long-term relationships with leading industrial customers and has a strong balance sheet ready for carefully planned M&A transactions. Scanfil has never posted an annual operating loss since the first year of operation, a fact that testifies to its agile and lean culture as well as impressive cost control.

Today Scanfil manufactures a variety of customer products including automation system modules, frequency converters, lift control systems, pulp analyzers, reverse vending machines, medical technology and meteorology equipment as well as video surveillance systems. The current plant network comprises nine sites located in seven countries across three continents and the company now employs some 3,400 staff. Scanfil remains headquartered in Sievi and the extended Takanen family still owns about 50% of all shares. No Takanen representative anymore serves in an executive capacity but the family continues to exert influence through board directorships. Mr Petteri Jokitalo has acted as the CEO of Scanfil since 2013 and has been with the company for more than a dozen years.

Figure 1: Scanfil FY '19 segmental revenue split and revenue & profitability development



Source: Scanfil

**Business model**

Scanfil provides electronics manufacturing services for industrial customers

Scanfil provides global contract manufacturing and supply chain services for its original equipment manufacturer (OEM) customers. Scanfil's offering centers on electronic products manufacturing as well as printed circuit board (PCB) assembly, however the company operates with a vertically integrated model which aims to service the entire supply chain during the whole lifecycle of a given customer product. Scanfil aspires to retain a fast, flexible and reliable operating model by keeping tabs on the entire supply chain.

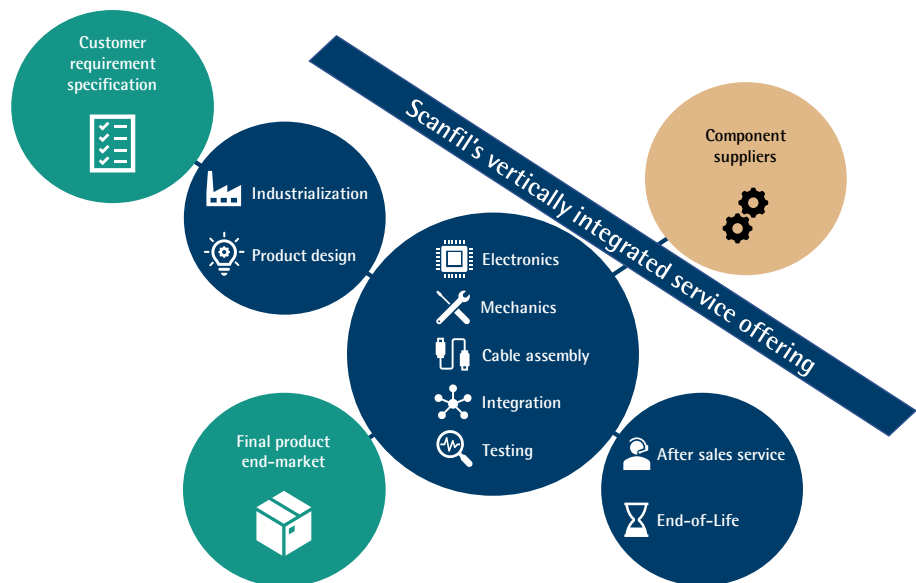
Scanfil's offering covers the entire supply chain

Scanfil's core competence is in vertically integrated manufacturing process know-how. The company's in-house service offering includes product development, prototype and pre-serial production and testing, supply chain management and logistics, cable assembly and volume manufacturing of products, final assembly and after-sales services such as maintenance and spare parts.

Outsourced manufacturing services create value beyond simple unit economics savings

Potential Scanfil customers usually outsource product manufacturing in their pursuit of cost reductions, gains in efficiency and reliability as well as improved operational flexibility and time-to-volume. Scanfil's plant network is consistently manufacturing a diversified portfolio of products. Capacity utilization rates are sustainably high as a result and manufacturing unit economics remain cost-competitive relative to customers' in-house manufacturing activities. A contract electronics manufacturer (CEM) like Scanfil can also be in a position of greater purchasing power; Scanfil says it can usually achieve some savings in terms of component procurement costs (the 2015 PartnerTech acquisition, which doubled the company's size, magnified this purchasing leverage). Product manufacturing process outsourcing allows Scanfil's customers more focus and resources on their own core competencies. Such activities are typically corporate functions like product innovation and development as well as sales and marketing. Scanfil can likewise help its customers with product design and engineering issues, and this kind of collaboration might lead to an improvement in product performance in addition to easing manufacturing, speeding up time-to-market and lowering costs. Scanfil's global manufacturing plant network facilitates a flexible and potentially rapid scaling up of production in tune with changing market conditions.

Figure 2: Scanfil service offering and role in the manufacturing value chain



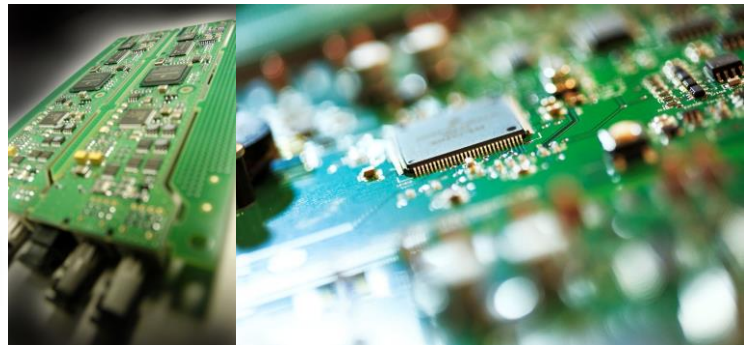
Source: Scanfil

Supplier quality is important and OEM relationships tend to be sticky

Contract electronics manufacturing operations are usually run along standardized production lines. This means a single manufacturing service supplier has very limited potential to gain any technological edge or stand out from the competition through superior processes. Supplier quality is nevertheless a key consideration for many industrial OEMs since production issues can prove costly. The kinds of OEM customers electronics manufacturing services (EMS) providers like Scanfil target are indeed looking to partner with reliable and flexible suppliers since the costs of switching can be quite high. The very nature of the product segments Scanfil is active in (low to medium volumes and high product mix as well as complexity) also requires close coordination with the customer and often leads to familiarity with the OEM's research and development processes. In practice the EMS supplier relationships thus tend to be long-lived even if the supplier competition dynamics remain tough. While companies such as Scanfil have hard time gaining any technological differentiation from the competition it's also worth noting customers are rarely lost (Scanfil has in fact practically never lost a remarkable customer account). The flip side is that large customer accounts are difficult to sign organically.

It often takes time to develop large accounts organically

EMS customer accounts usually graduate to large volumes only at a relatively conservative pace. A typical large industrial OEM customer account proceeds to generate a few million euros in annual revenue within a period of 2-3 years (Scanfil's key accounts generate annual revenues in the tens of millions whereas the very largest customers amount to more than EUR 50m, the number one recording EUR 75m in 2019). A fresh account might produce maybe a few hundred thousand euros of revenue during its first year, while the figure typically increases to EUR 2-3m within the first 12-24 months. Smaller technology companies' revenue development profile is subject to much higher uncertainty.



Source: Scanfil

Scanfil expects positive gross margin from new customer accounts during the first year. Scanfil's group-level gross margin has remained steady at around 32%. For a given account the gross margin however usually declines a bit when the corresponding order volume increases substantially.

Major customers' products drive Scanfil's performance

Long-lived quality-conscious OEM customer relationships are the cornerstone for Scanfil's success since the vertically integrated model's full potential typically materializes in an incremental fashion. The customer accounts' low churn rate essentially means the underlying products' demand development is the main factor that drives Scanfil's business. The success of customer products often breeds additional manufacturing opportunities for Scanfil as well. Scanfil is positioned to capture the OEM product upside potential mostly through higher volumes as pricing needs to remain competitive.

In our opinion Scanfil is managing overall customer risks well

Scanfil is still somewhat reliant on a certain number of key customer accounts. We see the risk of Scanfil losing these customers' business rather low given the company's solid long-term operational track record as well as the relationships' long history. It should



nevertheless be noted how any larger negative demand surprise for one or more such customers' products means Scanfil is bound to fail its short-term financial guidance given that a single key account contributes somewhere in the 5-15% range (i.e. roughly EUR 25-75m) of Scanfil's annual revenues. Besides hitting revenue and absolute profitability, such a scenario would also hurt relative profitability as the key customer accounts tend to be slightly more profitable than smaller accounts in terms of operating margin. The big accounts' higher profitability usually stems from the more efficient factories where these names are mostly served. Together the ten largest customer accounts usually contribute around 50-60% of Scanfil's revenue in any given year. The PartnerTech acquisition deconcentrated the customer base risk to a certain extent, at least in terms of customer industries, and as we believe Scanfil is likely to act as a consolidator also in the future the situation is likely to improve further in the long-term.



Source: Scanfil

Scanfil essentially carries its customers' product volume risk

Limited revenue visibility is a defining characteristic of contract manufacturing since industrial customers rely on the service to cushion end-market demand fluctuations' impact on their own operations. Scanfil works with its customers to best anticipate demand and volumes for the next few quarters. Scanfil nevertheless does not generally secure any long-term purchase commitments. The company is in fact required to procure the necessary components before receiving a firm order. The associated inventory risk is neutralized by the fact that the prospective customer is obliged to fully compensate Scanfil for the purchases should the actual order fail to materialize. The order forecasts typically turn to binding commitments about 4-6 weeks prior to delivery. Scanfil usually has rather good visibility on the next two to four quarters, while any budgeting efforts beyond that timeframe must rely on the company's own assumptions. Scanfil thus carries the risks related to manufacturing plant capacity and adequate staffing (the company says around 10-20% of its workforce is outsourced). Proactive cost control remains a crucial element in long-term financial success.

Contract manufacturing is an asset-light business

Contract electronic manufacturing's low capital intensity is another essential feature of the business. The manufacturing plants scale in incremental steps. New production lines can be added within the walls of an existing plant in some three months' time while it takes about a year to construct a greenfield facility. Both equipment and staff can be redeployed in a smooth manner should a negative demand shock affect certain line of production. The smooth incremental asset dynamic contrasts with heavier manufacturing sectors such as the pulp and paper industry, where new production capacity can only be added in large and expensive chunks. Such capital-heavy investments also come with long lead times and challenging repurposing prospects. Contract electronic manufacturing capacity thus tends to match with demand quite well at any given point of time and the industry is not prone to violent cycles the likes of which are relatively common in e.g. natural resources sectors. The flip side is that barriers

to entry are somewhat low (although there are considerations such as customers' reluctance to enter business with greenfield plants that raise entry barriers), the business is labor-intensive and does not offer significant scale benefits that could translate to big operating margin upside potential.

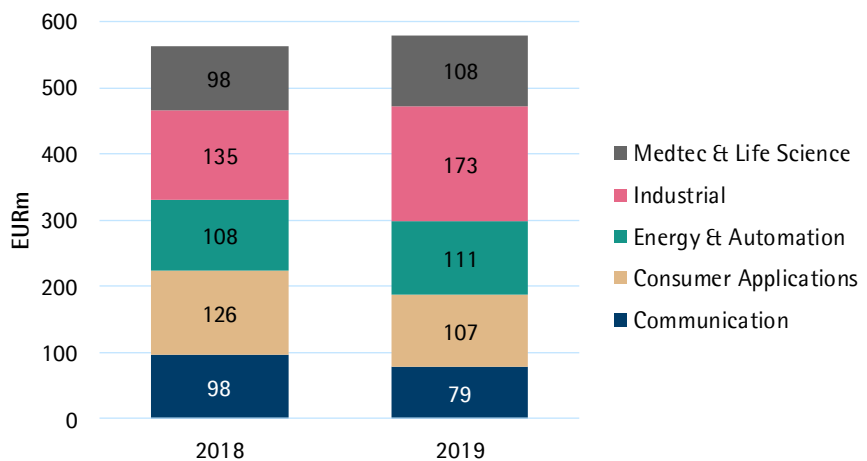
Sudden big profit margin gains are unlikely

The lack of pronounced investment cycles also means there are no windfalls in contract electronic manufacturing. Should a certain customer product line enjoy unexpectedly brisk demand, Scanfil would need to add equipment and labor force to participate in the upside. Any positive demand surprises thus have a rather muted positive impact on operating margin. Favorable customer end-market demand therefore allows only a stable, at best an incrementally positive operating margin development. Absolute volume gains are the main value driver; Scanfil's absolute operating profit is driven by its customers' product market success.

**Scanfil segments and customers**

Scanfil reports revenue for five customer industry segments. All the segments tend to rely on large global industrial OEM customers for most of their business. Each customer segment's demand and subsequent performance is very much dependent on the specific products they have been contracted to manufacture.

Figure 3: Scanfil customer segment revenues

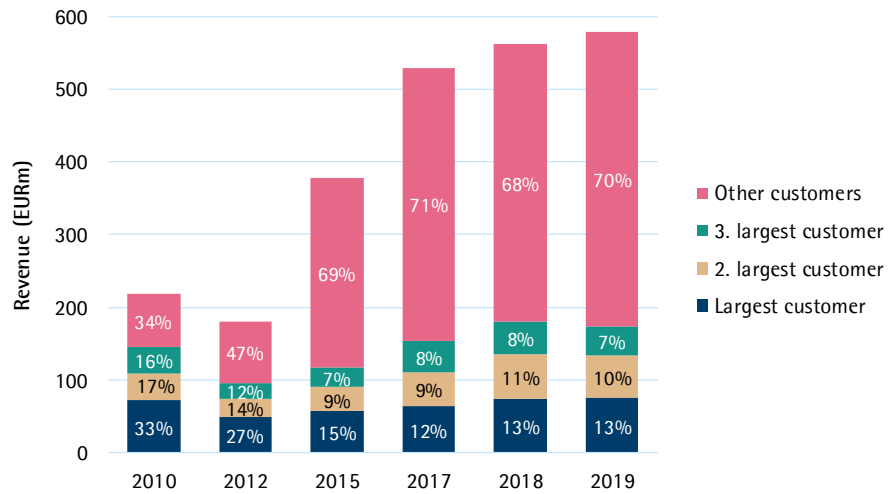


Source: Scanfil

The company's top ten customers now account for roughly 60% of revenue, while the three largest make up some 30%. Scanfil has been successful in deconcentrating its customer base away from the past rather challenging situation in the early 2010s when the largest account, back then Nokia, generated some 30% of all business (Nokia contributed more than three-quarters of Scanfil revenue at its peak around the turn of the century). The single largest customer account today represents some 10-15% of Scanfil revenue in any given year. We believe the elevator and escalator company KONE is now Scanfil's largest customer.

Scanfil has in total about 80 customer accounts. Scanfil says it's still not quite happy with its current level of customer account concentration and looks to further deconcentrate the base in the long-term perspective. The main tools for achieving this goal are M&A and organic growth through smaller high-growth company accounts.

Figure 4: Scanfil revenue and customer account concentration

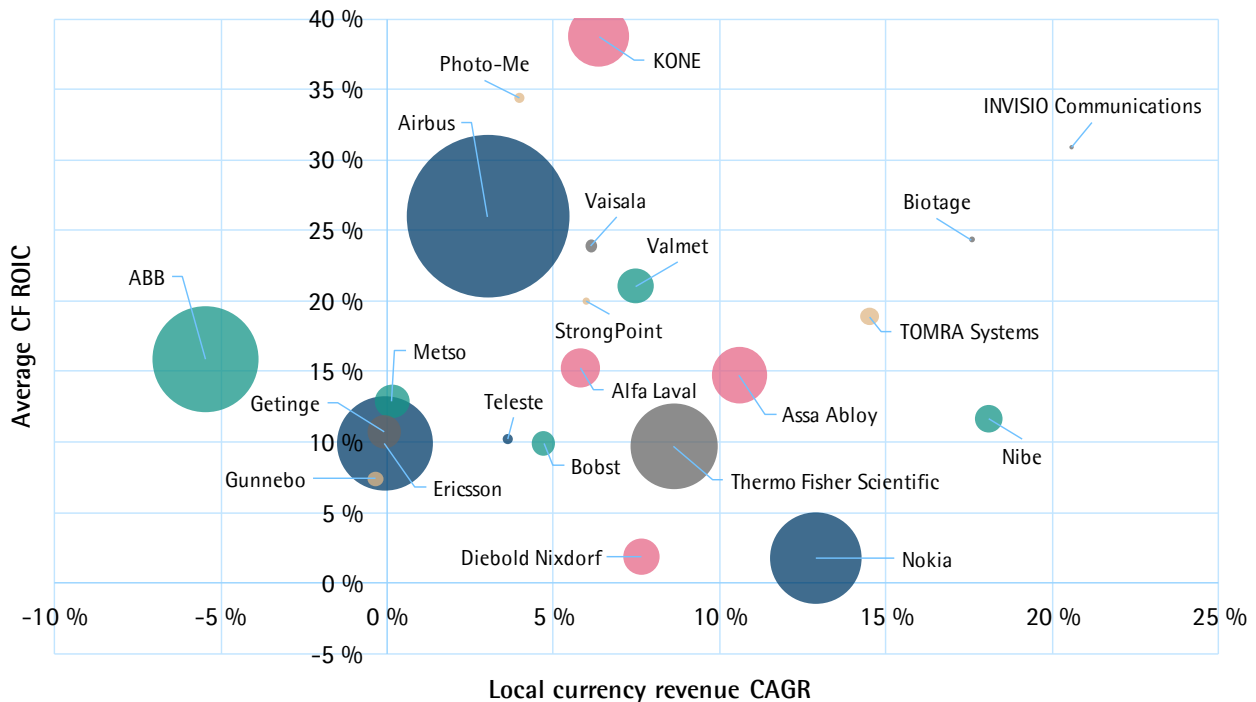


Source: Scanfil

In our view Scanfil has a good overall customer segment mix

According to Scanfil its top ten customers are all different businesses in the sense that they engage in direct competition with each other only to a very limited degree. Meanwhile the five Scanfil customer segments share between them a high level of synergies since electronics manufacturing is mostly a universal process. There are nevertheless some country-specific certificates that complicate manufacturing processes (especially so in applications like medical technology), while these certificates also serve as barriers to entry and can thus help protect margins. There are no legal or ethical restrictions that prevent Scanfil from contracting with two directly competing customer companies, however Scanfil is committed to serving each account with the most intimate terms possible.

Figure 5: Scanfil reference customers' size and financial performance, 2015-19



Source: FactSet

Note: Bubble size indicates average revenue during the fiscal years 2015-19; blue color refers to Communication customers, yellow to Consumer Applications, green to Energy & Automation, red to Industrial, and brown to Medtec & Life Science



Scanfil customers tend to exhibit strong financial performance

We view Scanfil's customer portfolio rather well diversified across many different sectors. We also find Scanfil's reference customers vary greatly in terms of size, growth prospects and profitability. Scanfil's smallest accounts may represent companies with annual revenues of only around EUR 10m (or even less), while Scanfil also serves players with revenues in the tens of billions. We calculate Scanfil's reference customers averaged revenue CAGR of some 7% for the period 2015-19. Meanwhile a typical customer averaged cash flow return on invested capital at 16%. Scanfil's customers can thus be characterized as companies with strong growth as well as profitability track records, regardless of their respective size. In our opinion this typical customer profile is one of the main Scanfil investment attractions. Based on our survey of Scanfil reference accounts, we would describe a typical customer to be a differentiated OEM with an annual long-term growth target of some 5% or more.

Although Scanfil's customer accounts tend to represent vibrant OEMs we nevertheless note many of the underlying sectors are often driven by marked investment cycles. This inherent business cyclicality in fact is the very reason why many such companies usually outsource significant shares of their manufacturing footprint to players like Scanfil. The respective customer sectors' business cycles however are not particularly correlated.

Many products Scanfil manufactures are characterized by extended lifecycles (typically some 10 years) with long ramp-up phases. Quality standards are precise and regulatory know-how can be important. The customer companies often operate in markets that are already mature and so it is unlikely Scanfil will be able to significantly benefit from any further outsourcing rate increases. The long-standing customer relationships are more likely to deliver somewhat incremental absolute profitability gains through higher business volumes.

The current segment structure was established in the beginning of 2019 when Scanfil acknowledged a need to make certain adjustments to better reflect the present customer base and the segmentation used more widely in contract electronics manufacturing. The updates to reporting structure weren't that substantial. The current Communication, Energy & Automation and Medtec & Life Science segments largely retained their previous form except for a few customer reassignments. A more significant move was the retirement of Urban Applications and Other Industries segments, whose accounts were mostly transferred under the new Consumer Applications and Industrial segments.

## Communication

The Communication segment accounts for some 16% of Scanfil revenue (Q3'20 LTM) and serves customers such as telecommunications equipment companies. The segment manufactures e.g. broadband equipment and video surveillance systems. Many of the segment's customer markets have been challenging lately, although it seems the top line is stabilizing in 2020 after a weak preceding year.

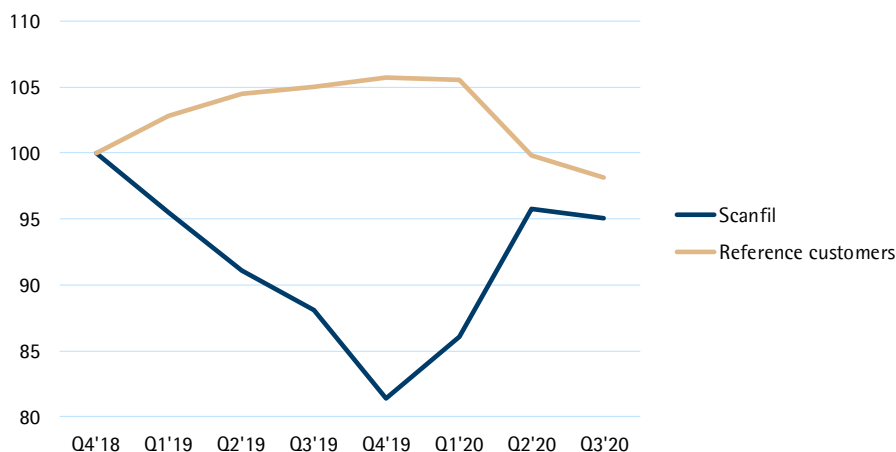
Table 1: Communication segment trends, products and customer examples

Market trends	Offering and product examples	Potential customers
<ul style="list-style-type: none"> <li>• Digitalization</li> <li>• Increasing significance of information</li> <li>• 5G</li> <li>• Wireless solutions</li> <li>• The Industrial Internet</li> </ul>	<ul style="list-style-type: none"> <li>• Broadband, communications and mobile network equipment and systems</li> <li>• Video surveillance systems</li> <li>• Base stations, exchanges and amplifiers</li> <li>• Defense applications</li> </ul>	<ul style="list-style-type: none"> <li>• Nokia</li> <li>• Ericsson</li> <li>• Airbus</li> <li>• Teleste</li> <li>• Axis Communications</li> <li>• INVISIO Communications</li> </ul>

Source: Scanfil

The segment's accounts are characterized by shorter product life cycles compared to other Scanfil segments. The network equipment business is particularly cyclical by nature and equipment prices have been on a secular decline path for some two decades now.

Figure 6: Communication indexed LTM revenue performance



Source: FactSet, Scanfil

We estimate Communication revenues to have slightly underperformed relative to the reference customer group development during the period Q4'18–Q3'20 (in terms of LTM figures). While a typical Communication customer posted a mildly negative top line development during the period the Communication segment's revenue declined by 5%.

### Consumer Applications

The Consumer Applications segment generates about 15% of Scanfil revenue (Q3'20 LTM). The segment's customers operate in quite varied industries; typical products include applications aimed directly at consumers, such as reverse vending machines and photo booths as well as self-service laundromats. We see there could be especially strong long-term growth potential in smart-home and access control technologies. The segment's top line is not particularly cyclical as such, yet quarterly and annual revenue can fluctuate a lot due to certain customer account idiosyncrasies.

Table 2: Consumer Applications segment trends, products and customer examples

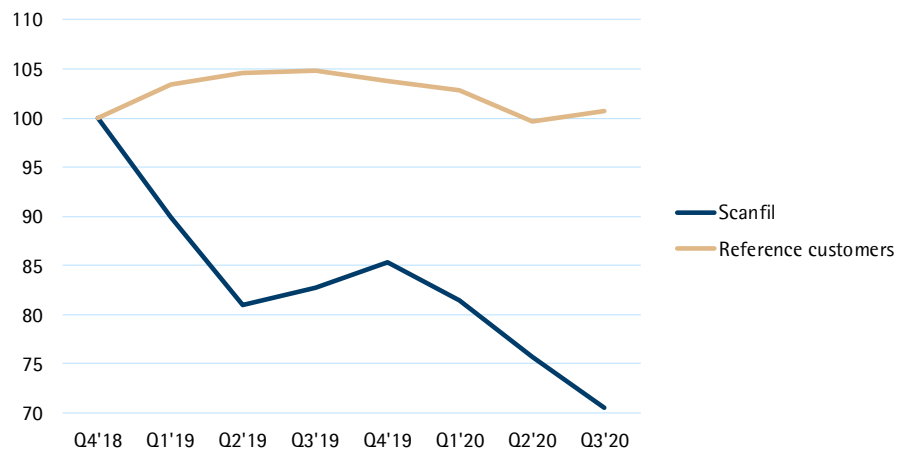
Market trends	Offering and product examples	Potential customers
<ul style="list-style-type: none"> <li>• Urbanization</li> <li>• Growing middle class</li> <li>• Ageing population</li> <li>• IoT</li> </ul>	<ul style="list-style-type: none"> <li>• Urban solutions close to consumers</li> <li>• Reverse vending machines</li> <li>• Smart-home and access control</li> <li>• Self-service laundromats</li> <li>• Photo booths</li> <li>• Other self-service equipment</li> </ul>	<ul style="list-style-type: none"> <li>• TOMRA Systems</li> <li>• Veikkaus</li> <li>• Gunnebo</li> <li>• Photo-Me</li> <li>• Plejd</li> <li>• StrongPoint</li> </ul>

Source: Scanfil

The segment's business volumes are highly sensitive to rapid changes in end-market demand and indeed recently the segment's top line has suffered some double-digit annual decline rates. We view the segment's long-term demand drivers sound despite the recent soft performance.

The segment has lately clearly underperformed relative to the reference customer group. Consumer Applications' LTM top line declined by almost 30% during Q4'18-Q3'20 while a typical segment customer developed flat. The underperformance was attributable to certain specific customer account demand issues.

Figure 7: Consumer Applications indexed LTM revenue performance



Source: FactSet, Scanfil

Although the segment has performed quite soft recently many of the reference customers nevertheless have rather high long-term growth targets, typically some 10% on an annual basis.

**Energy & Automation**

The Energy & Automation segment accounts for 20% of Scanfil revenue (Q3'20 LTM). The segment manufactures applications like electricity production and distribution systems. Many strong megatrends underpin the segment's long-term growth outlook; however, the top line can be volatile since customer demand depends largely on capital investments. We note the segment does not manufacture solar panels and Scanfil does not intend to include them in its business.

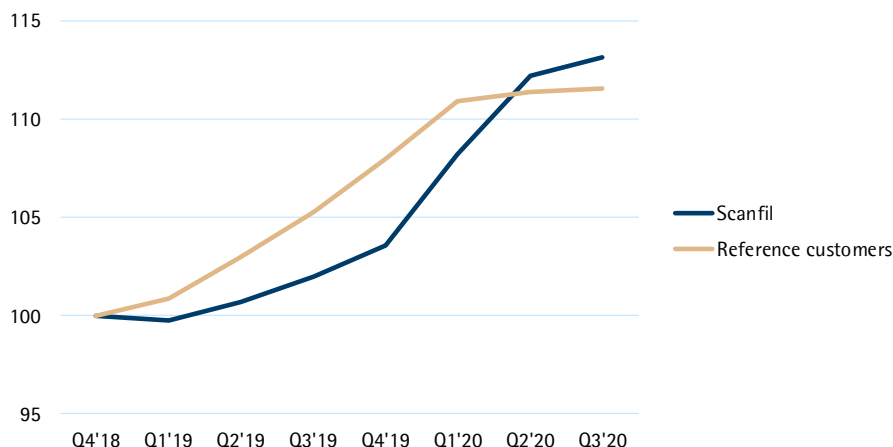
Table 3: Energy & Automation segment trends, products and customer examples

Market trends	Offering and product examples	Potential customers
<ul style="list-style-type: none"> <li>• Energy efficiency</li> <li>• Renewable energy production</li> <li>• Urbanization</li> <li>• Industrial automation</li> </ul>	<ul style="list-style-type: none"> <li>• Power production and electricity transmission systems</li> <li>• Process control systems</li> <li>• Energy efficiency systems</li> <li>• Frequency converters, inverters, switches and automation systems</li> </ul>	<ul style="list-style-type: none"> <li>• ABB</li> <li>• Danfoss</li> <li>• Metso Outotec</li> <li>• Valmet</li> <li>• Bobst</li> <li>• Nibe</li> <li>• The Switch</li> </ul>

Source: Scanfil

The segment has performed stable positive recently and we estimate the segment revenues have developed closely in line with the reference customer group. Energy & Automation's LTM top line grew by about 13% during the period Q4'18-Q3'20 while a typical segment customer posted pretty much the same increase. Energy & Automation's growth during the period was basically all organic.

Figure 8: Energy & Automation indexed LTM revenue performance



Source: FactSet, Scanfil

Scanfil's Energy & Automation reference customers tend to have long-term growth targets of about 5% or more.

## Industrial

The Industrial segment is easily the largest of the five and is now responsible for about 31% of Scanfil revenue (Q3'20 LTM). The segment's current portfolio includes a wide range of products manufactured for different industrial customers.

Table 4: Industrial segment trends, products and customer examples

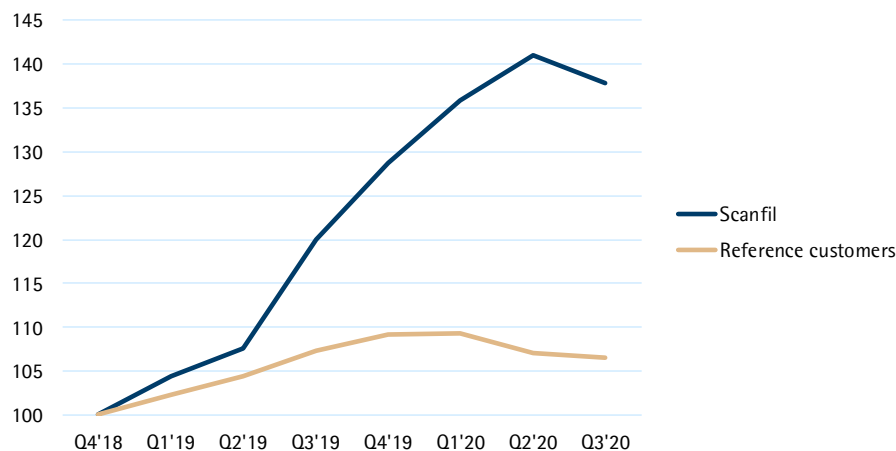
Market trends	Offering and product examples	Potential customers
<ul style="list-style-type: none"> <li>• Urbanization</li> <li>• Growth of e-commerce</li> <li>• Natural resources conservation</li> <li>• Industrial automation</li> <li>• Internet of Things</li> </ul>	<ul style="list-style-type: none"> <li>• Forklift control systems</li> <li>• Elevator and escalator control systems</li> <li>• Smart lighting systems</li> <li>• Entrance access systems</li> <li>• Water cleaning systems</li> </ul>	<ul style="list-style-type: none"> <li>• Alfa Laval</li> <li>• Assa Abloy</li> <li>• KONE</li> <li>• Toyota Material Handling</li> <li>• Diebold Nixdorf</li> </ul>

Source: Scanfil

The segment resembles Energy & Automation in the sense that many strong megatrends fuel the customer products' end-market demand. In our opinion the Industrial segment's customer demand is however less subject to large capital investments.

We estimate a typical Industrial customer grew by some 7% during the period Q4'18-Q3'20. Meanwhile the Industrial segment top line increased by almost 40%. The HASEC acquisition contributed a significant share of the increase, however we estimate the segment would have outperformed even excluding the deal with organic growth clearly above 10%.

Figure 9: Industrial indexed LTM revenue performance



Source: FactSet, Scanfil

Scanfil's Industrial customers have quite similar growth profiles compared to those of Energy & Automation i.e. they target long-term annual growth rates of some 5% or more.

### Medtec & Life Science

The Medtec & Life Science segment contributes some 18% of Scanfil revenue (Q3'20 LTM). The segment's growth prospects remain healthy and demand relatively stable since manufactured products include different kinds of medical technology equipment. Some of the segmental products may even generate Scanfil higher-than-average profitability. Scanfil also says there is potential to achieve significantly higher volumes with current customer accounts like Thermo Fisher Scientific. We note the 2015 PartnerTech acquisition added many new customer accounts.

Table 5: Medtec & Life Science segment trends, products and customer examples

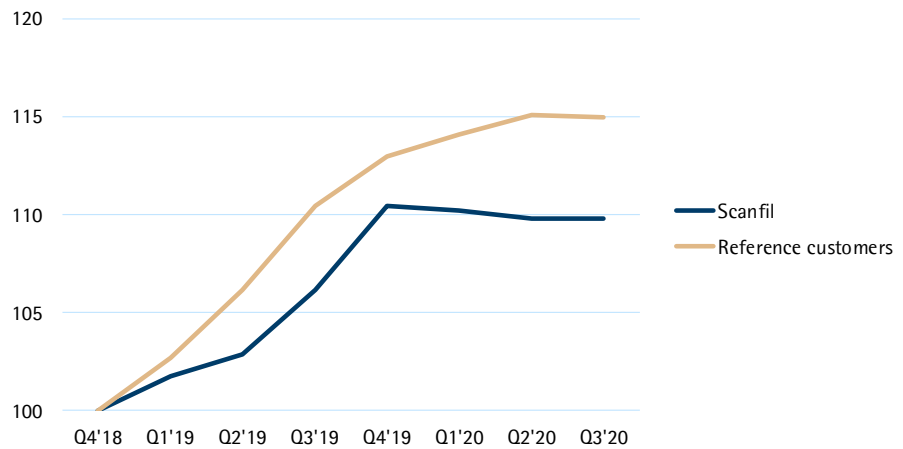
Market trends	Offering and product examples	Potential customers
<ul style="list-style-type: none"> <li>Ageing population</li> <li>Emerging markets healthcare needs</li> <li>Food, water and air quality monitoring</li> <li>Weather phenomena forecasting</li> </ul>	<ul style="list-style-type: none"> <li>Medical technology, research, climate and environmental monitoring equipment</li> <li>Dental chairs</li> <li>Analysers and sample storage systems</li> <li>Mass spectrometers</li> <li>Cloud height indicators</li> </ul>	<ul style="list-style-type: none"> <li>Thermo Fisher Scientific</li> <li>Planmeca</li> <li>Vaisala</li> <li>Getinge</li> <li>Biotage</li> <li>Jolife</li> </ul>

Source: Scanfil

In our opinion the segment's product and customer portfolio looks very attractive and long-term demand megatrends perhaps the most promising of all Scanfil segments.

We estimate the segment has slightly underperformed relative to the reference customer group. A typical customer's top line increased by about 15% during the period Q4'18-Q3'20 while the segment managed to grow by 10%. Medtec & Life Science grew exclusively in organic terms during the period.

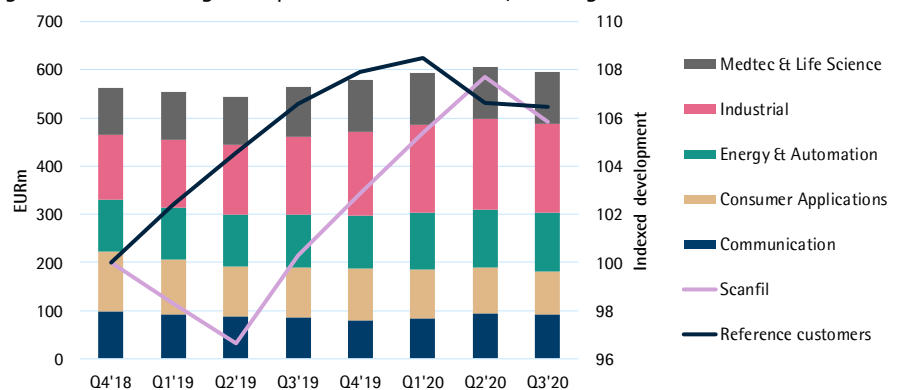
Figure 10: Medtec & Life Science indexed LTM revenue performance



Source: FactSet, Scanfil

Scanfil's Medtec & Life Science reference customers tend to target long-term annual growth rates of about 5% or more.

Figure 11: Scanfil segment performance summary (rolling LTM revenue)



Source: FactSet, Scanfil

All in all, we estimate Scanfil's revenue development (including acquisitions) was in line relative to the reference customers during the period Q4'18-Q3'20, however on an organic basis the company could not quite keep up. We estimate the company did not grow meaningfully on an organic basis during the period while a typical customer grew by 6%. We see this shortfall was mostly due to Consumer Applications' softness.

### Scanfil plant network

Scanfil operates a network of nine manufacturing plants located in seven countries on three continents. The four Western European sites are in Sweden, Germany and Finland, while the remaining five are in Eastern Europe (Poland and Estonia), China and the US.

Scanfil's plants play two types of roles

Scanfil manufacturing plants play roles that can be defined twofold. The Western European plants focus on close work with customers. The sites have a flexible offering, including product design services, and are near Scanfil's customers' R&D units. The plants in Eastern Europe, China and the US in contrast emphasize manufacturing efficiency. The efficient sites strive to manufacture high product volumes and are thus in convenient locations to serve the large global customers' main markets. All Scanfil plants have floor



area somewhere in the 10,000-25,000 square meter range and employ a few hundred personnel each.

Figure 12: Scanfil current manufacturing plant network



Source: Scanfil

M&A is an essential tool for shaping current manufacturing footprint

Scanfil gained its current sites in Sweden, Poland and the US through the PartnerTech acquisition. The 2019 HASEC purchase brought the plant in Wutha-Farnroda (valued at ca. EUR 10m, or 0.3x EV/S). Scanfil also added the Hamburg plant (now in the process of being shut down) inorganically through the 2014 Schaltex Systems deal (which was valued at ca. EUR 7m, or 0.3x EV/S). Scanfil got its Estonian and Chinese sites with the help of acquisitions in the early 2000s, however the company has since made major additional local facility investments. Scanfil has closed its own site in Hungary and either shut or sold off several plants in connection with the PartnerTech acquisition. Scanfil will close the Hamburg site in 2021, while the company already sold the one in Hangzhou in 2020. We view these latest changes as evidence Scanfil is taking good care of its plant network's competitiveness.

In our opinion the existing network is running efficiently

Scanfil could expand its current manufacturing capacity by adding production lines to its existing plants. Scanfil says there's room to expand production at every single current plant. A rough estimate puts the expansion potential at some 10-20% across the network, depending on various assumptions such as product mix. In our opinion all the plants are now being employed with sufficiently large volumes.

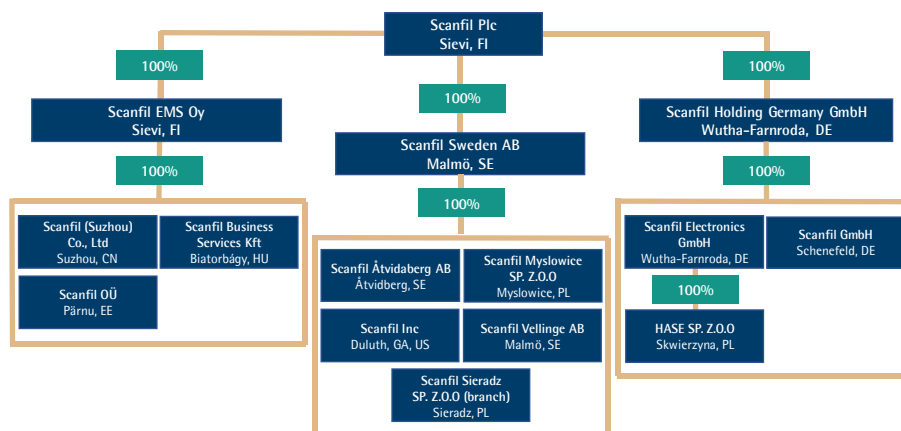
**Company structure and organization**

Scanfil comprises the parent company, Scanfil Plc, which wholly-owns three subgroups i.e. Scanfil EMS Oy, Scanfil Sweden AB (former PartnerTech AB) as well as Scanfil Holding Germany GmbH. The Finnish subgroup includes, in addition to the Scanfil EMS Oy parent, three subsidiaries that operate in three countries. The Swedish subgroup counts five subsidiaries that operate in three countries. The German subgroup parent wholly-owns two German subsidiaries.

Scanfil acquired an unprofitable business at a modest valuation

Scanfil announced the PartnerTech acquisition in Q2'15 through a public tender offer for all of the Swedish contract electronics manufacturer's shares. Debt financing facilitated the acquisition which valued the target at ca. EUR 76m, or some 0.3x FY '14 EV/S. PartnerTech AB has been effectively consolidated into Scanfil Plc accounts since July 2015. PartnerTech posted an operating loss for FY '14 due to the deeply unprofitable Metal Precision business. Scanfil then restructured the operations and closed the Metal Precision activity in late 2016. PartnerTech would have achieved a 3% operating margin in H1'15 with Metal Precision and group-level adjustments excluded.

Figure 13: Scanfil group legal structure



Source: Scanfil

Scanfil's restructuring efforts made the deal a success

At the time of the acquisition Scanfil announced it was targeting annual cost synergies to the tune of EUR 5m by 2017. Scanfil saw cost synergies in e.g. administration and sourcing as well as plant-level overlap trimmings. Scanfil consequently either closed or sold off numerous sites in the UK, Norway, China, Finland and Sweden. The measures were implemented during 2016 and Scanfil completed the restructuring in Q2'17 when operations belonging to Scanfil Vantaa Oy (Finland) and Scanfil Kft (Hungary) were shut down. The equipment that previously belonged to the now-closed sites have been transferred to the remaining operational plants. The integration of PartnerTech was a success in our view and Scanfil managed to achieve the targeted cost synergies. We estimate Scanfil has been able to improve PartnerTech's operating margin by several percentage points (however we assume the business' profitability remains slightly below that of old Scanfil operations).

In our view the acquisition was an adept move

The PartnerTech acquisition doubled Scanfil's revenue and customer account number as well as employee count and manufacturing plant network. The transaction widened Scanfil's services offering and improved competitiveness through e.g. higher procurement volumes. Since there were no overlapping customer relationships the enlarged customer base translated to new growth opportunities through cross-selling while individual customer account risks also decreased.

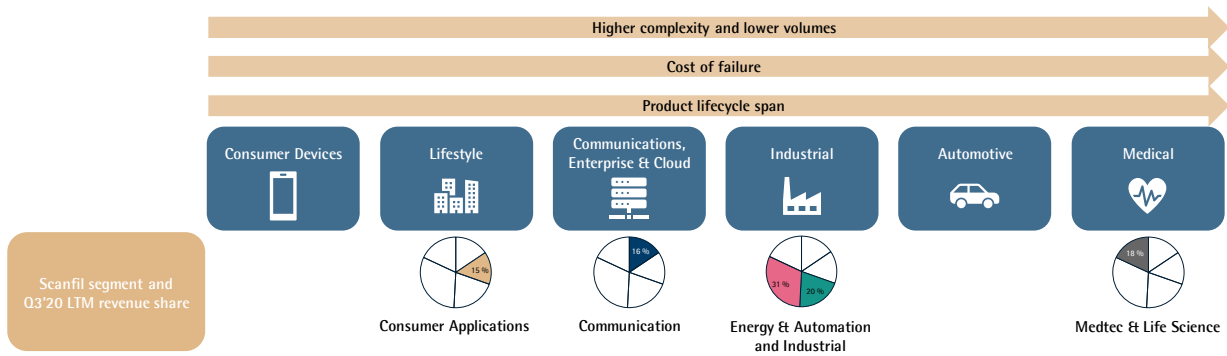
## Strategy and financial targets

Scanfil's strategic premise is to be a key manufacturing partner for attractive sectors

Scanfil has positioned itself more towards customer products that are associated with relatively high complexity and low volumes. Although we view all five segments competitive in their own markets, currently more than two-thirds of Scanfil's revenue is attributable to the three product segments (i.e. Energy & Automation, Industrial and Medtec & Life Science) that are underpinned not only by high manufacturing quality standards but also by favorable long-term end-market demand outlooks. The three customer segments' relatively large weight means Scanfil's positioning is exceptionally strong in the contract electronics manufacturing context since these products are associated with high costs of failure as well as long lifespans. It's unlikely such customers are going to replace Scanfil as their manufacturing partner.

We note the Communication and Consumer Applications segments have been the soft performers recently. In our opinion this softness has less to do with Scanfil's competitiveness in those sectors than with the specific customers' and their end-markets' idiosyncratic challenges. Contract manufacturing companies such as Scanfil also need to continuously fine-tune the balance between profitability and volumes.

Figure 14: Contract electronics manufacturing end-markets and Scanfil's positioning

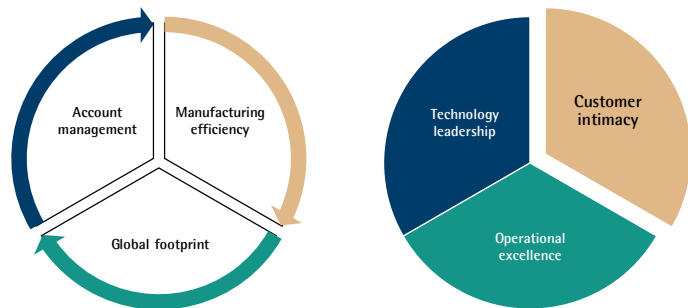


Source: Scanfil, Flex, Evli Research

In our view Scanfil has been managing customer segment exposures well

We identify three key strategic points essential for Scanfil. In our opinion the most important consideration is proactive customer account management. Scanfil should have a good grasp of any account's distinct characteristics and end-market demand prospects. The Communication segment has been notoriously challenging for quite some time while many Industrial and Medtec & Life Science customers have flourished. M&A can be a highly useful tool in managing customer sector exposures; Scanfil added many new Medtec & Life Science customer accounts with the Schaltex Systems and PartnerTech acquisitions, while the HASEC purchase was almost entirely about Industrial customers.

Figure 15: Scanfil strategy keys and value chain position emphasis



Source: Evli Research

M&A remains an essential multi-purpose strategy tool

Cost and quality competitiveness are equally important for contract electronics manufacturing operations. The quality dimension is in Scanfil's case somewhat accented by the fact that many of its customer segments' products carry elevated costs of failure. Scanfil thus needs to hold an overall efficient balance between manufacturing cost and quality considerations. The HASEC deal in our view also addressed the manufacturing efficiency question since Scanfil was later able to restructure its plant network by deciding to close the Hamburg site and transferring the local business from there to two other plants, including the one gained through the acquisition. The Hamburg plant was not that competitive in terms of cost and quality, while its customer business (predominantly integrated Life Science products) is better served by the HASEC site. Global manufacturing footprint meanwhile remains essential since Scanfil customers are mostly European companies with global sales. We note M&A is the main tool for managing the plant network's geographic reach as well. Indeed M&A is a very useful tool for most of Scanfil's strategic purposes.

Scanfil's strategy emphasizes the vertically integrated model

Although technological ability as well as operational efficiency are both important for Scanfil, in our opinion the company particularly wants to emphasize its closeness to customers. The strategic choice is evident in the company's vertically integrated know-how that covers the entire manufacturing value chain. According to Scanfil there are a few customer products where the company is the sole contract manufacturer. These cases do not dominate Scanfil's manufacturing by any means and the vertical integration choice should not be interpreted to mean the company especially seeks to gain exclusive manufacturing partner status within its customer accounts.

Scanfil has segmented its plant network to better serve customers over their product lifecycles

Scanfil deploys its nine-strong plant network for two broad types of manufacturing needs. The four smaller development-focused Western European sites are close to customers' R&D functions and have been thus designated to produce initial limited-size prototype batches; manufacturing can be graduated closer to the end-use locations (i.e. to the five volume-oriented plants in Eastern Europe, China and the US) once the products are ready to scale up to more significant volumes. The two-pronged approach to manufacturing and logistics forms the backbone of Scanfil's strategy by allowing the company to serve its customers throughout their product lifecycles in an efficient manner. The set-up also affords Scanfil its footprint in relatively high cost Western European countries.

The vertically integrated model means Scanfil does not have to offer extremely competitive pricing

The segmented manufacturing strategy approach means Scanfil does not have to reach the lowest overall cost structure in the industry and commensurately low prices. Rather Scanfil can to some degree differentiate itself on the strength of its vertically integrated service offering. Small but fast-growing Central European technology companies might find Scanfil's wide service offering especially valuable, although it must be said additional services such as logistics, product development and spare parts are unlikely to be significantly more profitable than Scanfil's standard assembly offering. Meanwhile large industrial customers often have considerable in-house resources and are thus less likely to need such additional Scanfil services.

Although Scanfil targets higher volumes also through certain smaller high-growth technology accounts the fact remains that the company's current portfolio is quite reliant on large industrial OEMs. The reliance might well decrease in the long-term perspective, but we note how smaller technology companies' revenue profiles are subject to much higher uncertainty. Scanfil's strategy is nevertheless based on long-term customer relationships irrespective of the account type under consideration.

Organic growth is mostly driven by existing large accounts' end-market demand

Contract electronics manufacturer's customer relationships are usually long-lived and sticky. Considerable quality assurance costs prohibit frequent new contract sign-up with large industrial OEMs, while the graduation to high manufacturing volumes often takes many years. Scanfil's current organic growth prospects therefore mostly stem from existing large relationships. Such key accounts are however already likely to rely on Scanfil as a significant manufacturing partner, placing a limit on Scanfil's additional manufacturing share gains since industrial OEMs want to retain a certain amount of operational flexibility by not relying too much on any single contract manufacturer. Scanfil is thus unlikely to receive any major additional volumes thanks to an outsourcing rate increase. Scanfil key customers also operate in relatively mature industries, another cap on major volume upside. Although we view Scanfil's efforts to nurture long-term relationships with smaller technology companies a strategically sound step, inorganic growth nevertheless remains the most relevant way to quickly gain large new account volume.

Inorganic growth is likely to play a major role also in the future

Proximity to customers is essential to Scanfil's strategy and the company remains ready to expand its geographic reach in response to customer needs. Scanfil has historically preferred the M&A route to expansion and we do not expect changes to this orientation. The M&A option is indeed not only a very actionable way to growth (given the

fragmented EMS landscape and generally good range of modestly valued acquisition targets on sale) but also highly preferable to greenfield plant investments since an acquisition target already has its manufacturing capacity up and running. Any given M&A target is more likely than not to generate positive cash flow, while greenfield investments often take years to climb from their initial negative levels. An acquisition can expand Scanfil's customer base, product offering and geographic reach all at the same time.

Scanfil's strong balance sheet would also facilitate larger acquisitions

Scanfil continues to screen the market for M&A targets especially in the Nordics and the German speaking part of Europe (the DACH region). We would expect the largest targets Scanfil is willing to seriously consider to be somewhere in the EUR 50-100m annual revenue range. Such target company sizes would probably translate roughly to some EUR 10-30m in deal value. Scanfil nevertheless says it would still be comfortable with financial leverage somewhere close to 3x NIBD/EBITDA, which would suggest more than EUR 150m in additional debt capacity. We would not therefore completely rule out the prospect for more transformative acquisitions (any larger deal could also rely on fresh equity financing). Scanfil says it usually aims to acquire target companies with earnings-based valuations of no more than 6x EV/EBITDA. We note Scanfil has a track record of making only carefully considered acquisitions and thus we would not expect the company to feel any rush to act despite the current ample dry powder.

Table 6: Scanfil's most recent acquisitions

Year	Target/Seller	Location(s)	Product manufacturing focus	Deal value (EURm)	EV/S
2014	Schaltext Systems GmbH	Hamburg, DE	Life Science and analytical instrumentation	7	0.3x
2015	PartnerTech AB	SE, PL & US	Industrial electronics, Medtec	76	0.3x
2019	HASEC-Elektronik GmbH	Wutha-Farnroda, DE	Industrial electronics	10	0.3x

Source: Scanfil, FactSet

The HASEC deal also shows how M&A can be quite a precise tool as well

A greenfield plant investment would cost about EUR 10-20m and take around a year to complete. New customer acquisition would be bound to be slow and cash flow negative for an extended period. Scanfil indeed purchased the German contract electronics manufacturer HASEC-Elektronik GmbH in 2019 for a total consideration of some EUR 10m, or 0.3x EV/S, and thus gained one German manufacturing site in Wutha-Farnroda and about 200 staff. Scanfil also announced the closure of the Hamburg plant a year after the acquisition. The Hamburg customer volumes are to be transferred to other two plants in Germany and Poland since the respective sites in Wutha-Farnroda and Sieradz can better serve existing customers and are more cost and quality competitive. Although in general any greenfield plant projects are unlikely, Scanfil could consider such a prospect in case a certain sector is growing at a particularly rapid pace.

Scanfil's 5% annual organic growth target remains realistic

Scanfil has established long-term financial targets, last updated in February 2020, according to which the company aims to reach EUR 700m revenue organically in 2023 with a 7% operating margin. The top line target implies some 5% CAGR going forward and we view the growth target still relevant despite the pandemic. The pandemic has so far had only rather modest negative effects on Scanfil's business and volumes. Both Scanfil and its customers have proved resilient performers in 2020 as the overall demand picture has remained good. The pandemic affects different industries' end-market demand in distinct ways, but it seems adversity is limited in the case of Scanfil and its customers. A typical Scanfil customer targets long-term revenue CAGR at a level somewhat above 5%. We thus view Scanfil's 5% annual growth target realistic despite more elevated macroeconomic risks. We don't regard the 7% operating margin target especially challenging.

Scanfil's policy is to distribute around a third of annual net earnings as dividends. We see Scanfil's growth prospects (organic as well as inorganic) dwarfing the resulting dividend yield in importance. In our opinion a somewhat low payout ratio can be highly desirable since this helps preserve strong financial flexibility and so enhances Scanfil's capacity to act on compelling M&A opportunities.

### Contract manufacturing markets and competition

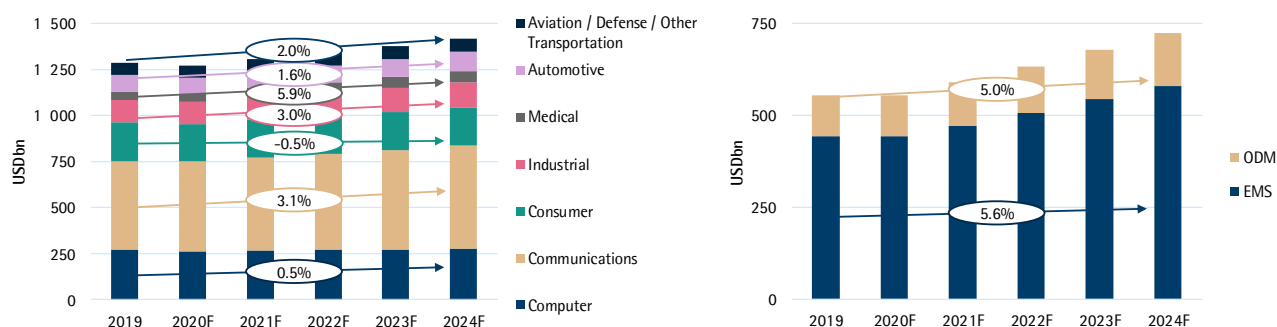
Original equipment manufacturers (OEMs) can either manufacture their own products entirely in a proprietary fashion or decide to outsource manufacturing activities (wholly or partially) to contract electronics manufacturers (CEMs). Such outsourced manufacturing service providers can be further categorized into two broad camps. Original design manufacturers (ODMs) usually own the intellectual property rights for a given product design, whereas electronics manufacturing service (EMS) providers tend not to. This means ODMs may compete with their customers by manufacturing original product copies. The implication is that an OEM customer will find it riskier to engage in an ODM contract, while conversely an EMS provider will bear a higher risk than an ODM as the OEM customer is able to switch between different EMS providers more easily.

### Contract electronics manufacturing markets

CEMs not only manufacture OEM products but also typically offer a wide range of value-added services like design, engineering and supply chain management as well as after-market solutions such as repair and spare parts. EMS providers (e.g. Scanfil) often offer design services with contractual clauses that curb them any gains to intellectual property rights.

The global electronics assembly market is vast and amounts to almost some USD 1.5tn in terms of cost of goods sold. This definition is quite wide and includes the assembly of mass market products such as iPhones. Meanwhile the contract electronics manufacturing part of the market is worth approximately USD 500bn, according to New Venture Research and Benchmark Electronics. The contract electronics manufacturing market is very large and fragmented, and as OEMs are likely to continue focusing on their core competencies there should be plenty of additional growth potential since the outsourced manufacturing rate is set to increase further. In our opinion the pandemic is unlikely to significantly alter this big picture view.

Figure 16: The global electronics assembly and contract electronics manufacturing markets, forecast CAGRs



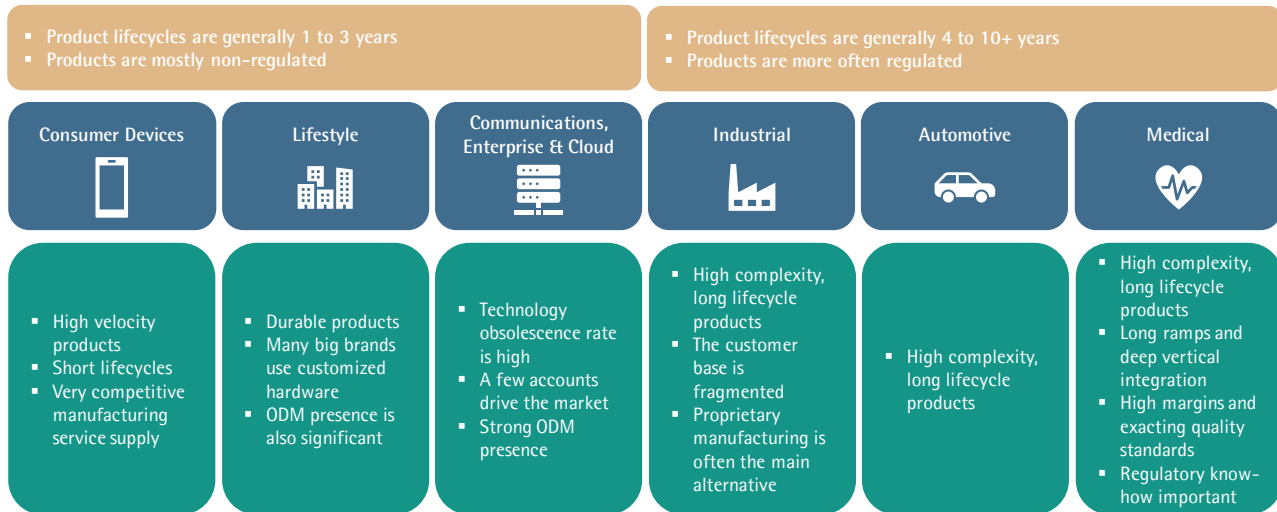
Source: New Venture Research

The global electronics assembly market is dominated by three large sectors: computer, communications and consumer (also known as the 3C sector). Together the three account for about three-quarters of the total electronics assembly market revenue. The



3C sector mainly consists of high volume and low complexity (HVLC) products; these kinds of products are particularly prevalent within the computer and communications sectors. A large share of such products' manufacturing is outsourced due to their highly standardized nature; product lifecycles tend to span only a few years.

Figure 17: Contract electronics manufacturing end-markets' characteristics



Source: Flex

The non-3C sector in contrast is characterized by low volume and high complexity (LVHC) products. Such products are not that highly standardized and their lifecycles can stretch even decades. The non-3C sector comprises the Industrial (including segments like Scanfil's Energy & Automation), Automotive and Medical as well as the Aviation, Defense and Other Transportation subsectors. It is challenging to engage in ODM manufacturing within these subsectors as OEMs typically have an information advantage when it comes to how the underlying technologies are evolving. EMS providers consequently hold a large share of this particular contract manufacturing market.

The pandemic highlights essential CEM business risks, however growth outlook appears quite resilient

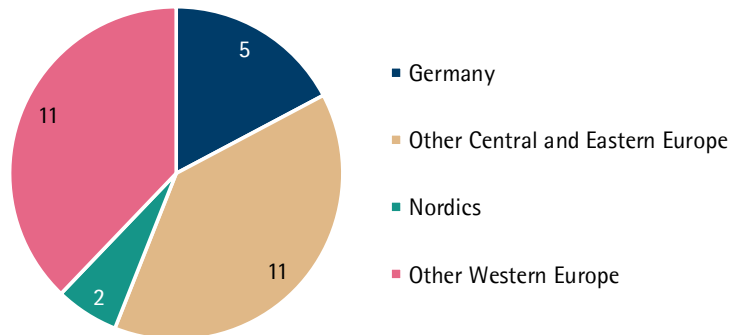
The CEM market grew headstrong in the 1990s, then cooled somewhat in the wake of the deflating IT boom and found stable ground again in 2003. The market has been growing at a healthy and pretty stable rate ever since then (that is excluding the 2008 global financial crisis). The CEM market grew at a 3% CAGR in 2010-15, according to estimates by New Venture Research, who also previously estimated the market would continue to grow from there at a 6.2% CAGR by 2020. Revenues remained flat in 2014-16 but grew dramatically in 2017-18. Total revenue grew by 2.5% in 2019. Although the pandemic renders any growth forecasts even more uncertain than is usually the case, New Venture Research nevertheless estimated (in summer 2020) that the CEM market would continue to expand at a CAGR of about 5.5% in 2020-24. Many things along the supply chain can go wrong and end-market demand might sour in a rapid fashion, however we view the positive revenue growth forecast overall quite realistic given how well several industrial sectors as well as Scanfil have fared so far during the pandemic. The pandemic's negative effects have been felt most strongly in the transportation industry, including automotive and commercial airlines, and the sector will take at least a year or more to fully recover (that is assuming an effective vaccine is found).

China is the manufacturing hub for high volume electronics products (some 40-45% of all electronics equipment is now manufactured in the country). Such tremendous concentration has happened over the past few decades as a result of manufacturing migration to low-cost locations. Low-cost geographies' total manufacturing share amounts to over 70% when other developing countries' manufacturing is added up. The US and Western Europe focus on manufacturing lower volume and higher mix products;

Western European manufacturing is increasingly focusing on the Aerospace, Defense, Automotive, Medical, Control & Instrumentation, Industrial and Telecom (ADAMCIT) sectors, according to Reed Electronics Research.

The Central and Eastern European EMS market (including Germany) now generates almost 60% of the total European EMS revenue, according to Reed Electronics Research, while the remainder is attributable to Western Europe (including the Nordics).

Figure 18: The European EMS market by revenue in 2020 (EURbn), illustrative split



Source: Reed Electronics Research, Evli Research

Scanfil earns its revenue mostly from the non-3C sector, where proximity to customers' R&D units plays a crucial role. Scanfil's Nordic and Central European manufacturing sites are consequently very important for the company. Total European EMS revenue now amounts to close to EUR 30bn, according to Reed Electronics Research. The German market, which is the largest in Europe and dominated by industrial electronics, is roughly some EUR 5bn while the Nordics are close to EUR 2bn. The Western European EMS market remains overall very fragmented.

Nearshoring has gained in popularity in recent years as proximity to end-markets has grown more important. Competitive manufacturing locations like Mexico as well as Central and Eastern Europe have attracted more capacity as a result. The increase in Chinese manufacturing wages has speeded up the nearshoring trend; electronics manufacturing has begun to shift from China to the nearby low-cost countries such as Vietnam, Thailand and Indonesia at a time when Chinese consumers' purchasing power has improved.

Most industrial OEMs still have further room to outsource their manufacturing footprint to EMS providers, whereas consumer electronics companies such as Apple have already outsourced practically all their production activities. Against this backdrop we see the EMS market continues to have good long-term growth potential even in the current highly uncertain end-market demand environment.

**Competitive landscape**

Scanfil has lots of different competitors across the globe

While Scanfil is the largest EMS provider in terms of Nordic revenue, in the wider picture we would describe Scanfil a mid-sized player operating in a vast market; in 2019 Scanfil was the 33rd largest EMS provider globally and the fifth largest domiciled in Europe, according to Manufacturing Market Insider. The global EMS market is both very fragmented and competitive; Scanfil effectively competes with numerous larger and smaller companies. Competition is bound to remain tight across all regions and sectors. Smaller companies might have a regional, product, service or industry-specific focus,

whereas larger manufacturers usually concentrate on the 3C sector. Larger companies can achieve higher economies of scale than Scanfil but often lack the flexibility to manufacture smaller volumes in a competitive fashion. The overall competitive dynamic is probably most intense within the mid-sized company group to which Scanfil itself belongs. Scanfil and its peers also compete with their customers' in-house manufacturing capabilities as large industrial OEMs are constantly assessing whether to outsource or manufacture in-house.

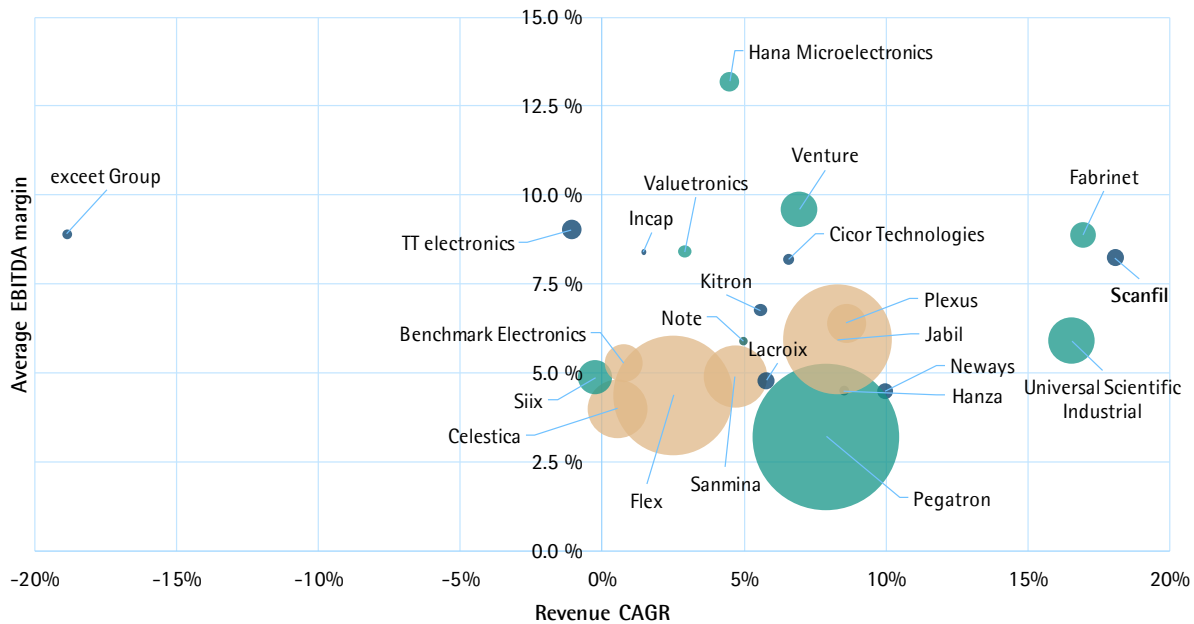
Scanfil's main competitors also focus on the Nordic and Central European markets

In our opinion Scanfil mainly competes with companies that focus on the non-3C sector and operate manufacturing plants in Germany and the Nordic countries. We also include the world's sixth and ninth largest contract manufacturers, namely Sanmina and Celestica, on the list of Scanfil competition. The two North American companies earn major portions of their revenues from the non-3C sector despite their large size (some 55% and 40% respectively). These revenue shares have grown significantly in recent years, and Celestica has set a target to further expand its scope within the non-3C sector. Sanmina is also one of the largest EMS providers in the Nordics. The Wisconsin-based Plexus is another large global competitor since the company derives around 80% of revenue from the non-3C sector.

Scanfil's Nordic competition includes publicly traded names like Kitron (a Norwegian EMS company operating on three continents), Note (a Swedish EMS provider with plants in Europe and China) and Hanza (a Swedish company present in Europe and China) as well as the privately held competitors Enics (a Swiss company with sites in Europe and China) and Orbit One (a Swedish company with manufacturing also in Poland and Russia).

Scanfil's main competitors in the German and Central European markets include the listed companies Lacroix (a French player with sites across Europe as well as in Tunisia), Neways (a Dutch company with operations also in China and the US) and exheet Group in addition to privately owned names such as Zollner (a German company with a global presence), Leesy, TQ-Systems (a German company also present in China and the US), BMK Group and Asteelflash (a French company operating on three continents).

Figure 19: Scanfil's publicly traded competitors' financial performance, 2012-19



Source: FactSet

Note: Bubble size indicates average revenue for the period; blue color implies European market focus, yellow North America and green Asia

Scanfil's global competition, in addition to Sanmina and Celestica, counts companies such as Plexus (the company focuses on complex industrial as well as health care electronics but has a relatively small European presence), Jabil, Flex, Benchmark Electronics, Sparton, Siix (a Japanese company that focuses on Asia), Pegatron and Valuetronics.

We identify Scanfil as one of the best performers

Scanfil has been one of the more profitable contract electronics manufacturers in recent years with an adjusted EBITDA margin slightly above 8%. This is meaningfully higher than the 6.6% average and 5.9% median figures for our sample during the period. Scanfil achieved an 18% revenue CAGR in 2012-19, of which a major part was due to the PartnerTech acquisition. Meanwhile the average competitor posted 4.7% annual growth (5.6% in median terms). M&A plays a big role in most companies' strategies since inorganic growth can be either significantly positive or negative depending on the decision to acquire or divest. Many companies are either clearly larger or smaller than Scanfil.

There is no clear correlation between company size and profitability since higher operating margins are usually achieved through proper customer and product portfolio positioning. There are examples of both larger (e.g. Plexus and Venture) and smaller (e.g. Valuetronics) companies that have achieved higher-than-average profitability levels.

### M&A transactions activity

The large and fragmented global contract electronics manufacturing market generates vibrant volumes of M&A as inorganic growth and manufacturing footprint restructuring remain high on many a company agenda.

Table 7: Contract electronics manufacturing sector M&A deals and valuations

Target	Seller	Acquirer	Announced	Completed	EV (EURm)	EV/S <sub>t</sub> )	EV/EBITDA <sub>t</sub> )	EV/EBIT <sub>t</sub> )
InTiCa Systems AG (70.01% Stake)	Public shareholders	Private investor	Aug-20	Pending	47	0.7x	6.3x	22.1x
Scanfil (Hangzhou) Co., Ltd	Scanfil Oyj	Hangzhou Cabinet Technology Co., Ltd.	Jun-20	Jul-20	18	0.6x	n/a	8.4x
Flatfield Multi Print International B.V.	Standard Investment Management B.V.	NCAB Group AB	Mar-20	Mar-20	17	0.6x	n/a	n/a
AWS Electronics Group Limited	Private investors	Incap Corporation	Jan-20	Jan-20	18	0.4x	6.9x	10.7x
Meadville Electronics assets	TTM Technologies, Inc	AKMMeadville Electronics Co., Ltd.	Jan-20	Apr-20	496	1.0x	6.7x	n/a
AsteelFlash Group	Private shareholders	Universal Scientific Industrial Co., Ltd.	Dec-19	Dec-19	406	0.7x	n/a	n/a
Servatron, Inc.	Private shareholders	Volex Group Plc	Jul-19	Jul-19	26	0.8x	n/a	n/a
PCI Limited	Chuan Hup Holdings Limited	Platinum Equity, LLC	Jan-19	Apr-19	118	0.5x	5.1x	5.9x
Sparton Corporation	Public shareholders	Cerberus Capital Management, L.P.	Dec-18	Mar-19	224	0.7x	11.2x	26.6x
API Defense USA, Inc.	API Technologies Corp.	Kitron, Inc.	Nov-18	Feb-19	14	0.5x	8.0x	n/a
MC Assembly Inc	Cyprium Partners, LLC	SMTC Corp.	Nov-18	Nov-18	59	0.5x	6.4x	11.1x
Precision Inc.	Private shareholders	TT Electronics Plc	Jun-18	Jun-18	20	1.1x	n/a	10.2x
Sparton Corporation	Public shareholders	Ultra Electronics Holdings Plc	Jul-17	Abandoned (DOJ)	279	0.8x	14.5x	41.8x
PKC Group Oyj	Public shareholders	Motherson Sumi Systems Limited	Jan-17	Mar-17	687	0.8x	11.6x	25.9x
Connect Group NV (30.7% Stake)	QuaeroQ cvba	Private investor	Dec-16	Dec-16	42	0.4x	n/a	n/a
Exception EMS Ltd	Private shareholders	Fabrinet	Sep-16	Sep-16	12	0.5x	5.5x	8.3x
Somacis Group SpA (52% Stake)	IMI Fondi Chiusi SGR SpA	Green Arrow Capital SGR SpA	Feb-16	Feb-16	100	0.9x	5.4x	n/a
Multi-Fineline Electronix, Inc.	United Engineers Ltd	Suzhou Dongshan Precision M Co., Ltd.	Feb-16	Jul-16	361	0.6x	4.5x	9.4x
GPV International A/S	Private shareholders	Schouw et Co A/S	Jan-16	Apr-16	54	0.5x	5.4x	7.3x
LaBarge Electronics, Inc.	Ducommun Inc.	Intervala, LLC	Jan-16	Jan-16	36	0.9x	n/a	n/a
Aero Stanrew Limited	WestBridge Capital LLP	TT Electronics Plc	Dec-15	Dec-15	58	2.6x	13.3x	14.2x
<b>Average</b>					<b>147</b>	<b>0.8x</b>	<b>7.9x</b>	<b>15.5x</b>
<b>Median</b>					<b>54</b>	<b>0.7x</b>	<b>6.6x</b>	<b>10.7x</b>

1) Multiples based on latest reported fiscal year  
 Source: Mergermarket, FactSet

The typical M&A target in our sample is significantly smaller than Scanfil while target valuation multiples are either slightly higher or roughly in line, depending on whether one looks at average or median values. Scanfil has in recent years averaged about 0.6x EV/S, 7x EV/EBITDA and 10x EV/EBIT valuation multiples on a trailing twelve-months basis. In the light of typical M&A valuation levels and considering Scanfil's highly selective approach to M&A, we see Scanfil is likely to extend its M&A streak at valuation levels that do not climb above those of its own.

We expect further industry consolidation given the still very fragmented EMS landscape. Especially large global manufacturers are in a good position to acquire smaller competitors (even less profitable ones). Strong mid-sized players like Scanfil are also likely to continue their inorganic expansion. Scanfil's example testifies how M&A can be a very useful tool in incrementally improving the offering's competitiveness.

## Financials and estimates

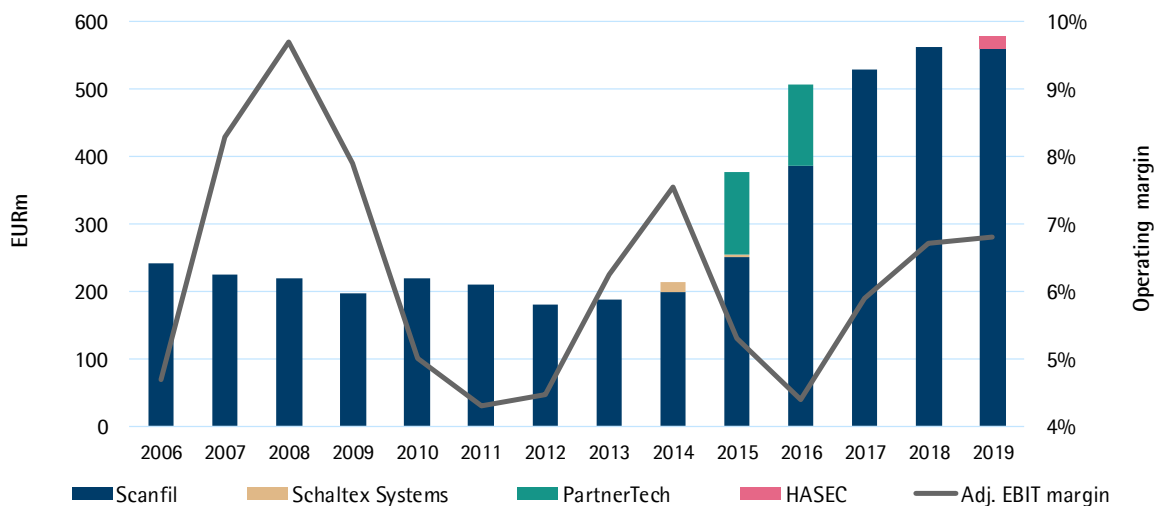
Scanfil's financial performance has remained robust in the contract electronics manufacturing context. In our view the company still has good organic and inorganic growth prospects. We consider the now familiar 6-7% operating margin range sustainable; the profitability range continues to translate to attractive high-teens ROCE figures as the company's business model is relatively asset-light.

### Income statement

Customer product manufacturing volumes largely drive changes in Scanfil's revenue since Scanfil's pricing levels are quite stable, as evidenced by the gross margin. Scanfil's manufacturing volume is itself a function of product-specific end-market demand levels and the extent to which the products' manufacturing is outsourced to Scanfil.

Scanfil's group top line grew at an 18% CAGR in 2012-19. Annual revenue grew from around EUR 200m in 2013-14 to clearly above EUR 500m in 2016-17. The 2015 PartnerTech acquisition added some EUR 240m while organic growth was also strong. 2018 was another good year as the company achieved an organic growth rate of 6%. We see organic growth has been muted in 2019-20 due to softness in the Communication and Consumer Applications segments.

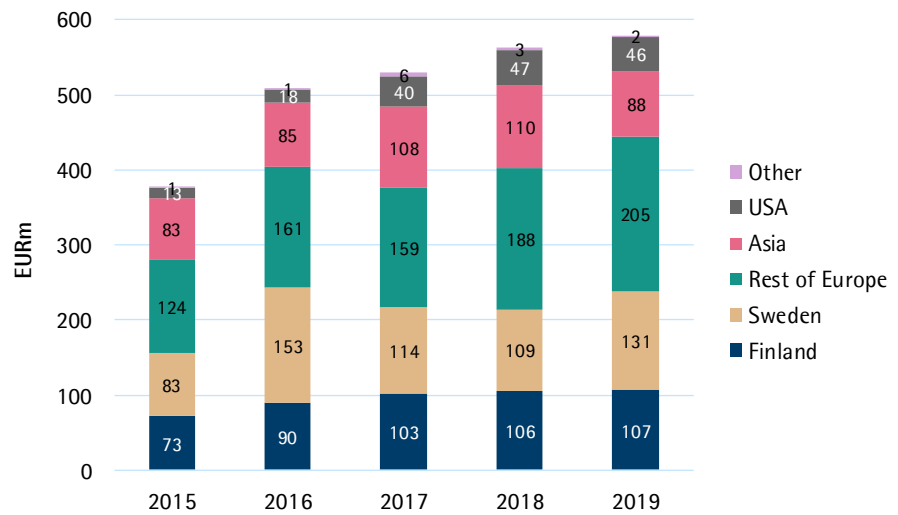
Figure 20: Scanfil revenue and profitability development



Source: Scanfil, FactSet

Scanfil has historically grown both in organic as well as inorganic terms. The three latest acquisitions added approximately EUR 300m in revenue; Scanfil paid in total some EUR 93m for these targets, or about 0.3x EV/S. In our opinion the deals turned out to be attractive for Scanfil and see there's a reasonable chance additional inorganic growth will materialize with similarly modest valuation multiples.

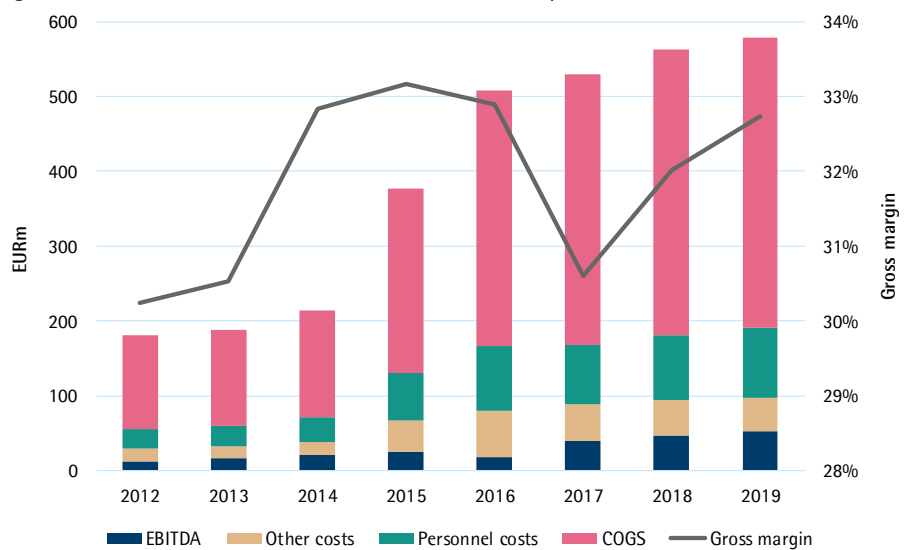
Figure 21: Scanfil revenue by customer delivery address location



Source: Scanfil

Scanfil customers based in Europe (according to delivery address) generated more than three-quarters of revenue in 2019. The share increased by about five percentage points compared to previous year and mirrors the HASEC acquisition as well as strong development within Swedish customers. The EUR 239m in combined Finnish and Swedish sales can be compared to the ballpark EUR 2bn figure which Reed Electronics Research estimates to be the annual total Nordic EMS market size.

Figure 22: Scanfil revenue and cost structure development



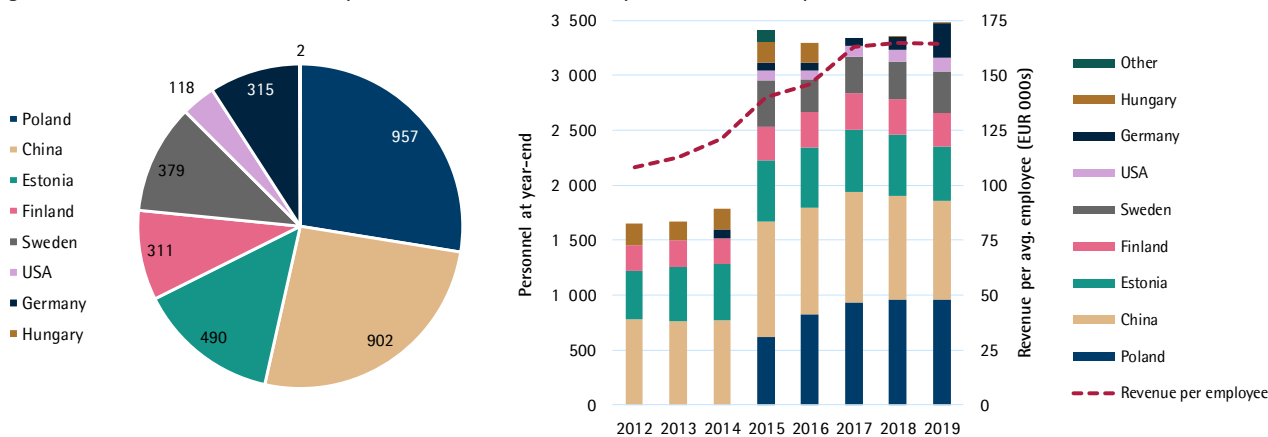
Source: Scanfil

Scanfil's cost of goods sold has developed steady and amounted to some 68% of revenue in recent years. Scanfil has thus managed a stable gross margin of around 32%.



Transformative deals like the PartnerTech acquisition have the potential to improve the combined company's component purchasing power, however in Scanfil's case such development has not been apparent since the 2015 transaction. It should be noted that e.g. product mix also affects gross margin. We do not expect meaningful changes in Scanfil's gross margin going forward. The contract electronics manufacturing industry remains very competitive and even long-term customer relationships do not offer that much scope for higher pricing.

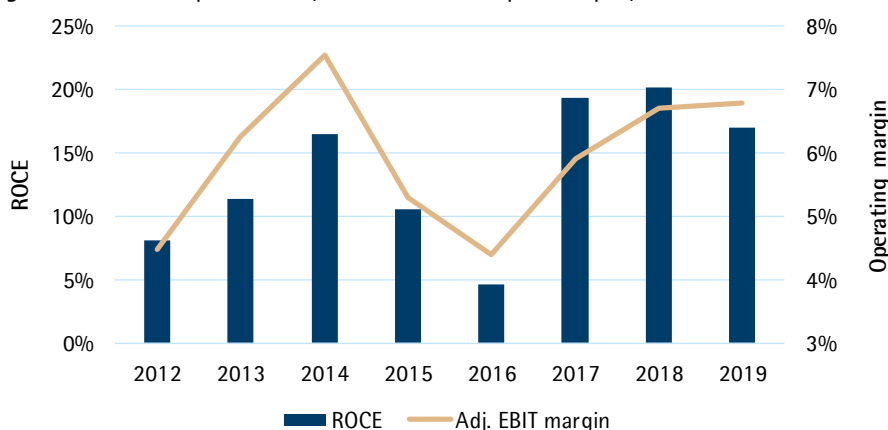
Figure 23: Scanfil 2019 year-end personnel by country and personnel development 2012-19



Source: Scanfil

Personnel expenses (not including outsourced labor) on average amount to slightly more than 15% of revenue and are thus an important item after material costs. Productivity has improved in recent years as both revenue and profit per employee have increased markedly. Scanfil employed close to 3,500 staff at the end of 2019 and of these more than two-thirds were in relatively low-cost countries, namely Poland, China and Estonia. Scanfil's other expenses, i.e. outsourced staff, utility bills, equipment repair and other similar items, usually amount to some 8-9% of revenue (the PartnerTech acquisition temporarily elevated other expenses somewhat).

Figure 24: Scanfil's profitability and return on capital employed



Source: Scanfil

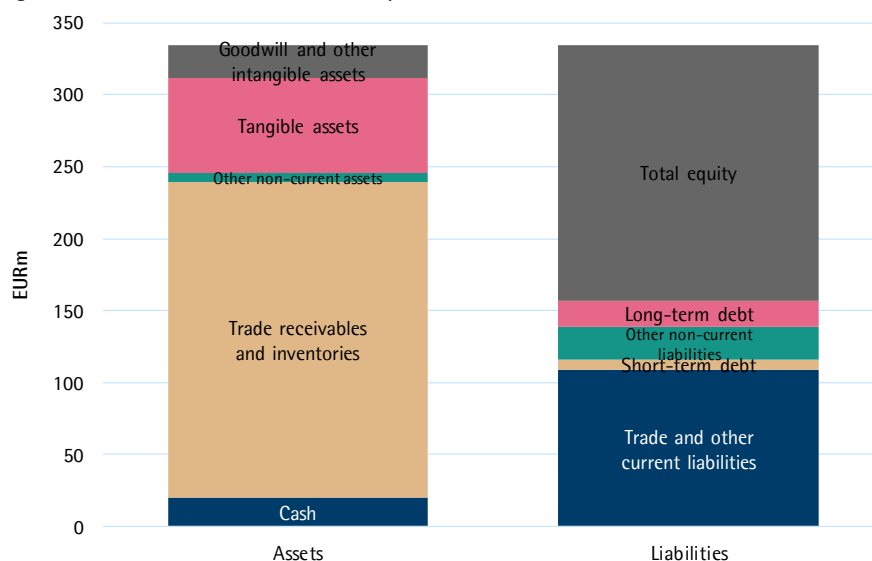
Together plant capacity utilization (i.e. manufactured customer product volumes) and product mix determine Scanfil's profitability. Scanfil's adjusted operating margin averaged close to 6% in 2012-19. The profitability level declined by a few percentage points in 2015-16 due to the PartnerTech acquisition but has since begun to improve again as Scanfil has successfully restructured the acquired operations. Scanfil's historical

4.5-7.5% operating margin range corresponds to an approximate return on capital employed range of 10-20%. Scanfil's asset-light business model means even somewhat modest operating margins can turn into considerable levels of return on capital employed. Scanfil is thus well positioned to generate ROCE in the high teens.

## Balance sheet

Contract electronics manufacturing is quite labor-intensive but requires only limited amounts of capital investment. Scanfil's equity book value stood at EUR 178m at the end of Q3'20.

Figure 25: Scanfil balance sheet composition (Q3'20)

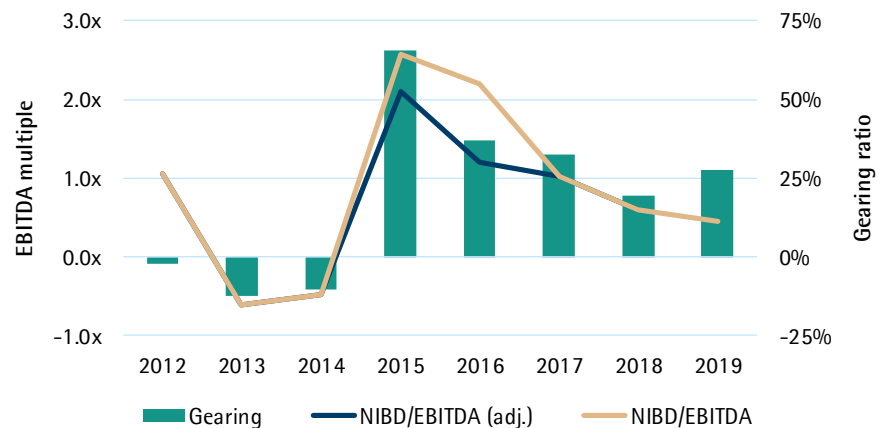


Source: Scanfil

Scanfil carries a significant positive net working capital position that amounts to almost 20% of annual revenue. The position is to a large extent attributable to inventories, however accounts receivable are also somewhat higher than accounts payable. The EUR 106m tied up in inventories at the end of Q3'20 is a pretty normal Scanfil inventory level. Scanfil nevertheless does not bear significant inventory-related risks since the company's customers are obliged to recompense for any component purchases that do not eventually translate into finished products.

Scanfil's tangible assets stood close to EUR 50m at the end of Q3'20. The figure is attributable to manufacturing equipment and facilities. Scanfil also holds some EUR 20m in right-of-use assets. Meanwhile Scanfil's capital expenditures and depreciation & amortization have in recent years averaged slightly below EUR 10m. Scanfil says about 2% of revenue is a reasonable expectation as a long-term annual capex figure, which currently translates to a bit over EUR 10m.

Figure 26: Scanfil financial leverage development



Source: Scanfil

Scanfil's borrowings totaled EUR 26m at the end of Q3'20 while the company had EUR 20m in cash assets. The company's financial net debt position is thus close to zero. Scanfil used to be leveraged at around 1-2x NIBD/EBITDA just a few years ago; Scanfil says it could be comfortable with a financial leverage level close to some 3x. The PartnerTech acquisition indeed stretched the ratio close to that level, but Scanfil has since managed to de-lever thanks to successful integration and continued good business development.

### Estimates

Scanfil guides FY '20 revenue in the EUR 590-610m range, expecting adjusted operating profit to land within EUR 38-40m. The revenue range implies the Q4'20 figure will be EUR 149-169m, while operating profit will amount to EUR 9.3-11.3m. Our respective EUR 154m and EUR 10.0m Q4'20 estimates are both slightly below the midpoints. This means we are basically estimating flat FY '20 organic growth since the HASEC acquisition contributes some EUR 35m in annual revenue.

Table 8: Scanfil estimates summary

Scanfil	2018	Q1'19	Q2'19	Q3'19	Q4'19	2019	Q1'20	Q2'20	Q3'20	Q4'20e	2020e	2021e	2022e	2023e
<b>Revenue</b>	563	130	143	152	155	579	144	156	142	154	595	617	643	670
<i>growth-%</i>	6.2 %	-6.9 %	-6.0 %	15.8 %	10.3 %	2.9 %	10.9 %	9.1 %	-7.0 %	-0.7 %	2.7 %	3.8 %	4.2 %	4.2 %
Communication	98	18	19	21	21	79	22	29	21	23	95	100	102	106
Consumer Applications	126	24	28	28	28	107	19	20	21	23	83	84	85	87
Energy & Automation	108	26	28	28	29	111	31	33	29	30	122	127	133	139
Industrial	135	36	42	49	47	173	46	49	45	48	187	194	203	213
Medtec & Life Science	98	27	26	26	29	108	27	25	26	30	108	113	119	125
<b>EBITDA</b>	47	10	13	16	14	54	12	14	14	14	54	58	61	63
<i>EBITDA margin</i>	8.4 %	7.7 %	9.4 %	10.6 %	9.0 %	9.2 %	8.6 %	9.0 %	9.6 %	9.1 %	9.1 %	9.3 %	9.5 %	9.5 %
<b>EBIT</b>	38	7	10	12	10	39	9	10	10	10	39	42	45	47
<i>EBIT margin</i>	6.7 %	5.2 %	7.2 %	7.9 %	6.5 %	6.8 %	6.0 %	6.5 %	7.0 %	6.5 %	6.5 %	6.8 %	7.0 %	7.0 %

Source: Evli Research

We consider Scanfil's positioning resilient in the face of increased uncertainty

Scanfil announced the plans to close the Hamburg site in summer 2020, and the process is still going on. Scanfil estimates the Hamburg restructuring, which it expects to finalize by the end of Q3'21, to yield some EUR 2.5m in annual cost savings. We consider this a meaningfully large figure; our profitability estimates for the coming years should hold up well even if Scanfil's top line were to develop slightly soft relative to our estimates. We estimate Scanfil will achieve some 4% revenue CAGR organically in 2021-23. Scanfil

aims to reach EUR 700m in FY '23 revenue on an organic basis (the target translates to roughly 5% CAGR) with a 7% operating margin. We view especially the relative profitability target highly relevant since Scanfil is already performing quite close to the respective level (and has indeed achieved the level in some quarters). In our opinion the organic growth target also remains relevant despite increased macroeconomic uncertainty in the wake of the pandemic. Scanfil's revenue held up well in FY '20 as the company adjusted its annual revenue guidance midpoint down only by slightly more than 2%. The respective adjusted operating profit revision was less than 5%. We see Scanfil's strong customer account portfolio and proactive measures to protect profitability underpinning good development in the years to come.

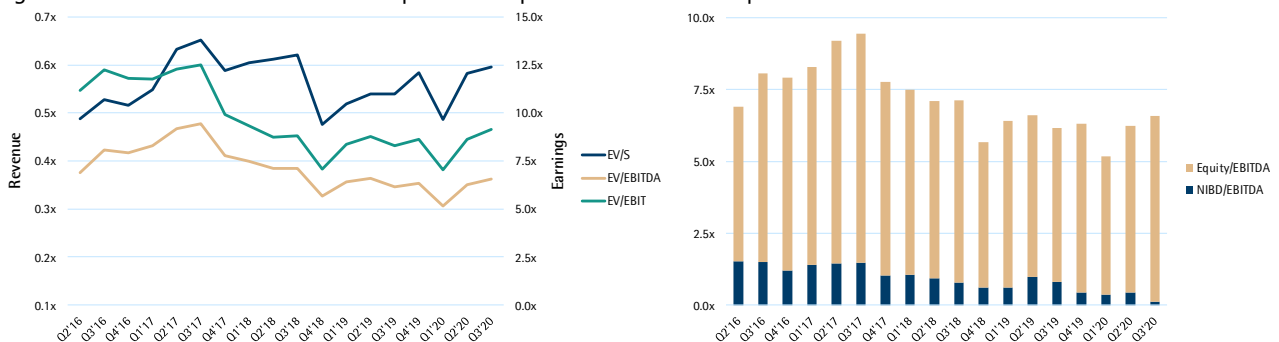
Scanfil also continues to scan the relevant geographical markets for fitting acquisition targets. The company deems the Nordic and Central European markets most promising in this respect. Scanfil is in a strong enough financial position to make either many smaller acquisitions or a more transformative one. We nevertheless do not view any acquisition announcements imminent given Scanfil's historically patient approach to M&A.

## Valuation

We consider earnings-based multiples to be the most relevant approach to valuing Scanfil. The company, like most other contract electronics manufacturers, has been historically valued at quite conservative multiples due to the sector's tough value chain positioning and limited visibility.

Scanfil's earnings-based valuation multiples used to be somewhat lower than where they are now. Historically Scanfil has been valued on average 0.6x EV/S, 7x EV/EBITDA and 10x EV/EBIT on a trailing twelve-months basis. Scanfil currently trades slightly above these historical average multiples. Based on our Q4'20 estimates the LTM EV/S multiple is now about 0.7x, while EV/EBITDA and EV/EBIT are approximately 8x and 11x respectively. We don't consider these levels particularly pricey, yet we don't see additional upside potential either since visibility is limited. While Scanfil's organic development might yet deliver a positive surprise, the fact remains that big sudden jumps in revenue are unlikely and operating margin is already at a very good level.

Figure 27: Scanfil LTM valuation multiples and capital structure development



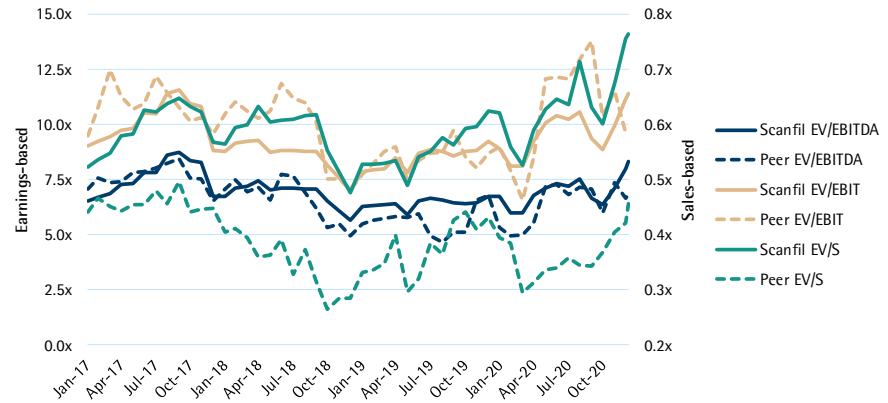
Source: Scanfil, FactSet

We are still confident Scanfil's positioning will remain relatively strong in the contract electronics manufacturing context. From this perspective we view the recent appreciation in valuation multiples entirely justified.

Scanfil has been valued on average close to 7x EV/EBITDA on next twelve-months basis, compared to the peers' respective 6.6x figure. In terms of EV/EBIT Scanfil has averaged slightly over 9x, compared to about 10x for a typical peer. Scanfil's average 0.6x EV/S

multiple has been significantly higher than the comparable 0.4x peer figure. Overall Scanfil's valuation multiples have moved well in tandem with those of peers.

Figure 28: Scanfil and peer group median NTM valuation multiples



Source: Bloomberg

Scanfil's current peer group multiples are not demanding. Multiples are up a bit for FY '20 as the pandemic has had some adverse effects on the sector, however the hurt seems to remain overall quite modest. Current estimates imply meaningful earnings growth for FY '21. This positive development would help EBITDA multiples to contract from the 7.5-8.0x level for FY '20 to around 6.5-7.0x for FY '21. Meanwhile EBIT multiples would decrease from 14x to 12x.

Table 9: Scanfil peer group valuation multiples

SCANFIL PEER GROUP	MCAP MEUR	EV/EBITDA			EV/EBIT			EBIT-%		
		19	20	21	19	20	21	19	20	21
Benchmark Electronics	874				25.0x	23.8x	17.3x	2.1 %	1.8 %	2.7 %
Celestica	876	4.7x	3.7x	4.0x	7.9x	5.9x	6.4x	2.8 %	3.3 %	3.4 %
TT Electronics	408	8.4x	11.3x	9.5x	12.2x	18.6x	14.2x	8.4 %	5.9 %	7.4 %
HANZA Holding	48	6.2x	7.8x	4.7x	13.8x	18.0x	9.7x	3.2 %	2.2 %	3.8 %
Kitron	293	9.6x	9.9x	9.7x	13.5x	13.1x	13.1x	6.2 %	7.7 %	7.1 %
Lacroix	122	5.9x	7.6x	5.7x	9.9x	13.9x	8.9x	3.5 %	2.8 %	4.1 %
Flex Ltd	7873	5.2x	7.1x	7.9x	9.2x	12.7x	12.7x	3.6 %	3.8 %	4.0 %
Plexus	2016	11.9x	10.4x	10.6x	16.3x	14.3x	14.4x	4.6 %	4.8 %	5.0 %
Sanmina	1851			5.5x	7.7x	7.4x	7.5x	4.1 %	4.2 %	4.3 %
SIIX	581	9.6x	10.4x	8.4x	19.2x	25.9x	17.5x	2.5 %	2.2 %	2.9 %
Valuetronics	161	3.9x	1.4x	1.7x	5.0x	1.8x	2.4x	8.0 %	8.7 %	8.6 %
Peer Group Average	1373	<b>7.3x</b>	<b>7.7x</b>	<b>6.8x</b>	<b>12.7x</b>	<b>14.1x</b>	<b>11.3x</b>	<b>4.4 %</b>	<b>4.3 %</b>	<b>4.8 %</b>
Peer Group Median	581	<b>6.2x</b>	<b>7.8x</b>	<b>6.8x</b>	<b>12.2x</b>	<b>13.9x</b>	<b>12.7x</b>	<b>3.6 %</b>	<b>3.8 %</b>	<b>4.1 %</b>
Scanfil (EvlI est.)	<b>418</b>	<b>7.1x</b>	<b>7.9x</b>	<b>7.1x</b>	<b>9.6x</b>	<b>11.0x</b>	<b>9.9x</b>	<b>6.8 %</b>	<b>6.5 %</b>	<b>6.8 %</b>

Scanfil prem./disc. to peer median

14 % 2 % 5 % -21 % -21 % -22 % 89 % 72 % 64 %

Source FactSet, Evli Research

We don't view Scanfil's current valuation, relative to the peers' earnings-based multiples, especially challenging. Scanfil however used to be valued at slightly lower multiples relative to a typical peer; Scanfil now trades quite well in line. In our opinion Scanfil might well warrant premium multiples in the future especially if organic growth picks up in FY '21.

We highlight Kitron and Lacroix as the most relevant peers due to their similar size (annual revenues roughly in the EUR 300-500m range) as well as geographic and sector focus. The two now average almost 9x EV/EBITDA for FY '20.

There are many larger CEM companies that could potentially be contemplating the acquisition of Scanfil. In practice any potential acquirer would need to consider Scanfil's geographical footprint and customer portfolio a good fit for its own strategic purposes. We nevertheless view Scanfil's sale unlikely. Since Scanfil is already performing very strong any deal would have to value the company high relative to its potential (this contrasts with e.g. Scanfil's own PartnerTech acquisition, where the company found good scope to engage in restructuring efforts). In our opinion Scanfil's major owners remain highly committed to the company and are not easily persuaded to sell.

We rate Scanfil's shares HOLD (BUY). Our EUR 6.5 (6.25) target price values Scanfil roughly 7-8x EV/EBITDA and 10-11x EV/EBIT for FY '20-21. In terms of DCF valuation we estimate fair value close to EUR 7 per share with what we see as relatively conservative long-term assumptions.



VALUATION RESULTS	BASE CASE DETAILS	VALUATION ASSUMPTIONS	ASSUMPTIONS FOR WACC
Current share price	6.54 PV of Free Cash Flow	235 Long-term growth, %	1.5 Risk-free interest rate, %
DCF share value	6.90 PV of Horizon value	258 WACC, %	8.5 Market risk premium, %
Share price potential, %	5.5 Unconsolidated equity	0 Spread, %	0.5 Debt risk premium, %
Maximum value	7.5 Marketable securities	30 Minimum WACC, %	8.0 Equity beta coefficient
Minimum value	6.4 Debt - dividend	-38 Maximum WACC, %	9.0 Target debt ratio, %
Horizon value, %	52.3 Value of stock	440 Nr of shares, Mn	63.9 Effective tax rate, %

DCF valuation, EURm	2019	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	Horizon
Net sales	579	595	617	643	670	694	715	733	747	758	770	781
<i>Sales growth, %</i>	<i>2.9</i>	<i>2.7</i>	<i>3.6</i>	<i>4.3</i>	<i>4.3</i>	<i>3.5</i>	<i>3.0</i>	<i>2.5</i>	<i>2.0</i>	<i>1.5</i>	<i>1.5</i>	<i>1.5</i>
Operating income (EBIT)	39	39	42	45	47	49	50	51	52	53	54	55
<i>Operating income margin, %</i>	<i>6.8</i>	<i>6.5</i>	<i>6.8</i>	<i>7.0</i>	<i>7.0</i>	<i>7.0</i>	<i>7.0</i>	<i>7.0</i>	<i>7.0</i>	<i>7.0</i>	<i>7.0</i>	<i>7.0</i>
+ Depreciation+amort.	14	15	16	16	17	17	18	18	19	19	20	
EBITDA	54	54	58	61	63	66	68	69	71	72	74	
- Paid taxes	-5	-7	-8	-11	-11	-12	-12	-12	-13	-13	-13	
- Change in NWC	-15	14	-4	-5	-5	-4	-4	-3	-3	-2	-2	
<i>NWC / Sales, %</i>	<i>19.7</i>	<i>16.8</i>	<i>16.9</i>	<i>16.9</i>	<i>16.9</i>	<i>16.9</i>	<i>17.0</i>	<i>17.0</i>	<i>17.0</i>	<i>17.0</i>	<i>17.0</i>	
+ Change in other liabs	0	0	0	0	0	0	0	0	0	0	0	
- Operative CAPEX	-18	-17	-18	-18	-19	-19	-20	-20	-21	-21	-22	
<i>opCAPEX / Sales, %</i>	<i>4.2</i>	<i>3.0</i>	<i>3.0</i>	<i>3.0</i>	<i>3.0</i>	<i>2.9</i>	<i>2.9</i>	<i>2.9</i>	<i>2.9</i>	<i>2.9</i>	<i>2.9</i>	
- Acquisitions	0	0	0	0	0	0	0	0	0	0	0	
+ Divestments	0	0	0	0	0	0	0	0	0	0	0	
- Other items	0	0	0	0	0	0	0	0	0	0	0	
= FCFF	15	43	28	27	28	30	32	34	35	36	37	535
= Discounted FCFF		43	26	23	22	22	21	21	20	19	18	258
= DFCF min WACC		43	26	23	23	22	22	21	20	20	18	290
= DFCF max WACC		43	25	23	22	22	21	20	19	18	17	231

## INTERIM FIGURES

EVLI ESTIMATES, EURm	2019Q1	2019Q2	2019Q3	2019Q4	2019	2020Q1	2020Q2	2020Q3	2020Q4E	2020E	2021E	2022E
Net sales	129.9	142.6	152.3	154.6	579.4	144.1	155.5	141.7	153.7	595.0	616.6	642.9
EBITDA	10.0	13.4	16.2	14.0	53.6	12.4	14.0	13.6	14.0	54.0	57.6	61.1
<i>EBITDA margin (%)</i>	<i>7.7</i>	<i>9.4</i>	<i>10.6</i>	<i>9.1</i>	<i>9.3</i>	<i>8.6</i>	<i>9.0</i>	<i>9.6</i>	<i>9.1</i>	<i>9.1</i>	<i>9.3</i>	<i>9.5</i>
EBIT	6.8	10.5	12.0	10.1	39.4	8.6	10.2	9.9	10.0	38.7	41.6	45.0
<i>EBIT margin (%)</i>	<i>5.2</i>	<i>7.4</i>	<i>7.9</i>	<i>6.5</i>	<i>6.8</i>	<i>6.0</i>	<i>6.6</i>	<i>7.0</i>	<i>6.5</i>	<i>6.5</i>	<i>6.8</i>	<i>7.0</i>
Net financial items	-0.8	0.4	-0.9	0.0	-1.3	0.1	-0.6	-0.8	-0.4	-1.7	-1.6	-0.5
Pre-tax profit	6.0	10.9	11.1	10.1	38.1	8.7	9.6	9.1	9.6	37.0	40.0	44.5
Tax	-1.2	-2.2	-2.3	-0.2	-5.9	-1.2	-1.4	-2.4	-2.0	-7.0	-8.0	-10.7
<i>Tax rate (%)</i>	<i>20.0</i>	<i>20.2</i>	<i>20.7</i>	<i>2.0</i>	<i>15.5</i>	<i>13.8</i>	<i>14.6</i>	<i>26.4</i>	<i>20.8</i>	<i>18.9</i>	<i>20.0</i>	<i>24.0</i>
Net profit	4.8	8.7	8.8	9.9	32.2	7.5	8.2	6.7	7.6	30.0	32.0	33.8
EPS	0.08	0.14	0.14	0.15	0.50	0.12	0.13	0.10	0.12	0.47	0.50	0.53
EPS adjusted (diluted no. of shares)	0.08	0.14	0.14	0.15	0.50	0.12	0.13	0.10	0.12	0.47	0.50	0.53
Dividend per share	0.00	0.00	0.00	0.00	0.15	0.00	0.00	0.00	0.00	0.15	0.17	0.17
<b>SALES, EURm</b>												
Group	129.9	142.6	152.3	154.6	579.4	144.1	155.5	141.7	153.7	595.0	616.6	642.9
Total	129.9	142.6	152.3	154.6	579.4	144.1	155.5	141.7	153.7	595.0	616.6	642.9
<b>SALES GROWTH, Y/Y %</b>												
Group	-6.9	-6.0	15.8	10.3	2.9	10.9	9.0	-7.0	-0.6	2.7	3.6	4.3
Total	-6.9	-6.0	15.8	10.3	2.9	10.9	9.0	-7.0	-0.6	2.7	3.6	4.3
<b>EBIT, EURm</b>												
Group	6.8	10.5	12.0	10.1	39.4	8.6	10.2	9.9	10.0	38.7	41.6	45.0
Total	6.8	10.5	12.0	10.1	39.4	8.6	10.2	9.9	10.0	38.7	41.6	45.0
<b>EBIT margin, %</b>												
Group	5.2	7.4	7.9	6.5	6.8	6.0	6.6	7.0	6.5	6.5	6.8	7.0
Total	5.2	7.4	7.9	6.5	6.8	6.0	6.6	7.0	6.5	6.5	6.8	7.0

INCOME STATEMENT, EURm	2015	2016	2017	2018	2019	2020E	2021E	2022E
Sales	377.3	508.0	529.9	563.0	579.4	595.0	616.6	642.9
<i>Sales growth (%)</i>	<i>75.9</i>	<i>34.6</i>	<i>4.3</i>	<i>6.2</i>	<i>2.9</i>	<i>2.7</i>	<i>3.6</i>	<i>4.3</i>
EBITDA	30.4	33.3	40.0	47.2	53.6	54.0	57.6	61.1
<i>EBITDA margin (%)</i>	<i>8.1</i>	<i>6.5</i>	<i>7.5</i>	<i>8.4</i>	<i>9.3</i>	<i>9.1</i>	<i>9.3</i>	<i>9.5</i>
Depreciation	-10.8	-11.0	-8.7	-9.4	-14.2	-15.3	-16.0	-16.1
EBITA	19.6	22.3	31.3	37.8	39.4	38.7	41.6	45.0
Goodwill amortization / writedown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EBIT	19.6	22.3	31.3	37.8	39.4	38.7	41.6	45.0
<i>EBIT margin (%)</i>	<i>5.2</i>	<i>4.4</i>	<i>5.9</i>	<i>6.7</i>	<i>6.8</i>	<i>6.5</i>	<i>6.8</i>	<i>7.0</i>
Reported EBIT	14.0	7.2	31.3	37.8	39.4	38.7	41.6	45.0
<i>EBIT margin (reported) (%)</i>	<i>3.7</i>	<i>1.4</i>	<i>5.9</i>	<i>6.7</i>	<i>6.8</i>	<i>6.5</i>	<i>6.8</i>	<i>7.0</i>
Net financials	-0.2	-1.2	1.3	-1.7	-1.3	-1.7	-1.6	-0.5
Pre-tax profit	19.4	21.1	32.6	36.1	38.1	37.0	40.0	44.5
Taxes	-5.4	-6.0	-6.8	-8.3	-5.9	-7.0	-8.0	-10.7
Minority shares	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Net profit	8.4	0.0	25.8	27.8	32.2	30.0	32.0	33.8
Cash NRIs	-5.6	-15.1	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
<b>BALANCE SHEET, EURm</b>								
<b>Assets</b>								
Fixed assets	68	57	62	64	68	70	72	74
Goodwill	11	11	10	10	8	8	8	8
Right of use assets	0	0	0	15	21	22	22	23
Inventory	91	85	101	96	102	101	105	109
Receivables	107	92	108	104	115	110	114	119
Liquid funds	22	20	21	28	20	30	31	46
Total assets	302	267	307	321	340	346	357	385
<b>Liabilities</b>								
Shareholder's equity	100	108	125	148	167	190	212	235
Minority interest	0	0	0	0	0	0	0	0
Convertibles	0	0	0	0	0	0	0	0
Lease liabilities	0	0	0	15	19	22	22	23
Deferred taxes	3	3	5	5	7	7	7	7
Interest bearing debt	88	60	61	52	44	16	1	0
Non-interest bearing current liabilities	105	88	113	99	96	104	108	113
Other interest-free debt	4	1	2	2	7	7	7	7
Total liabilities	302	267	307	321	340	346	357	385
<b>CASH FLOW, EURm</b>								
+ EBITDA	30	33	40	47	54	54	58	61
- Net financial items	2	-1	2	-2	-1	-2	-2	0
- Taxes	-4	-5	-8	-7	-5	-7	-8	-11
- Increase in Net Working Capital	-8	-6	-6	-9	-15	14	-4	-5
+/- Other	-9	-5	-6	0	0	0	0	0
= Cash flow from operations	13	16	22	29	32	59	44	45
- Capex	-52	-5	-21	-10	-24	-18	-19	-19
- Acquisitions	0	0	0	0	0	0	0	0
+ Divestments	0	0	0	0	0	0	0	0
= Free cash flow	-39	10	2	19	8	41	26	26
+/- New issues/buybacks	1	13	-4	3	-6	3	0	0
- Paid dividend	-4	-5	-6	-7	-8	-10	-10	-11
+/- Other	45	-21	8	-7	-1	-25	-15	0
Change in cash	3	-2	0	8	-8	9	1	15

KEY FIGURES	2016	2017	2018	2019	2020E	2021E	2022E
M-cap	223	272	281	336	418	418	418
Net debt (excl. convertibles)	40	41	39	43	8	-8	-23
Enterprise value	263	312	320	379	426	410	395
Sales	508	530	563	579	595	617	643
EBITDA	33	40	47	54	54	58	61
EBIT	22	31	38	39	39	42	45
Pre-tax	21	33	36	38	37	40	45
Earnings	15	26	28	32	30	32	34
Equity book value (excl. minorities)	108	125	148	167	190	212	235
<b>Valuation multiples</b>							
EV/sales	0.5	0.6	0.6	0.7	0.7	0.7	0.6
EV/EBITDA	7.9	7.8	6.8	7.1	7.9	7.1	6.5
EV/EBITA	11.8	10.0	8.5	9.6	11.0	9.9	8.8
EV/EBIT	11.8	10.0	8.5	9.6	11.0	9.9	8.8
EV/OCF	16.9	14.0	11.0	11.9	7.2	9.3	8.7
EV/FCFF	-120.1	29.5	15.5	25.7	9.8	14.8	14.5
P/FCFE	21.4	169.7	14.9	44.7	10.1	16.3	16.1
P/E	14.7	10.5	10.1	10.4	13.9	13.1	12.3
P/B	2.1	2.2	1.9	2.0	2.2	2.0	1.8
Target EV/EBITDA	0.0	0.0	0.0	0.0	7.8	7.1	6.4
Target EV/EBIT	0.0	0.0	0.0	0.0	10.9	9.8	8.7
Target EV/FCF	0.0	0.0	0.0	0.0	10.2	15.9	15.2
Target P/B	0.0	0.0	0.0	0.0	2.2	2.0	1.8
Target P/E	0.0	0.0	0.0	0.0	13.8	13.0	12.3
<b>Per share measures</b>							
Number of shares	63,670	63,895	63,895	63,895	63,895	63,895	63,895
Number of shares (diluted)	63,670	63,895	63,895	63,895	63,895	63,895	63,895
EPS	0.24	0.40	0.44	0.50	0.47	0.50	0.53
Operating cash flow per share	0.24	0.35	0.45	0.50	0.92	0.69	0.71
Free cash flow per share	0.16	0.03	0.30	0.12	0.65	0.40	0.41
Book value per share	1.70	1.95	2.32	2.61	2.97	3.32	3.68
Dividend per share	0.09	0.11	0.13	0.15	0.15	0.17	0.17
Dividend payout ratio, %	37.9	27.2	29.9	29.8	33.0	33.0	33.0
Dividend yield, %	2.6	2.6	3.0	2.9	2.4	2.5	2.7
FCF yield, %	4.7	0.6	6.7	2.2	9.9	6.1	6.2
<b>Efficiency measures</b>							
ROE	14.5	22.2	20.4	20.4	16.8	15.9	15.1
ROCE	12.5	17.7	18.8	17.7	16.9	18.0	18.2
<b>Financial ratios</b>							
Inventories as % of sales	16.8	19.0	17.0	17.6	17.0	17.0	17.0
Receivables as % of sales	18.1	20.5	18.4	19.8	18.5	18.5	18.5
Non-interest bearing liabilities as % of sales	17.4	21.3	17.5	16.6	17.5	17.5	17.5
NWC/sales, %	17.2	17.7	17.5	19.7	16.8	16.9	16.9
Operative CAPEX/sales, %	1.0	3.9	1.8	4.2	3.0	3.0	3.0
CAPEX/sales (incl. acquisitions), %	1.0	3.9	1.8	4.2	3.0	3.0	3.0
FCFF/EBITDA	-0.1	0.3	0.4	0.3	0.8	0.5	0.4
Net debt/EBITDA, book-weighted	1.2	1.0	0.8	0.8	0.2	-0.1	-0.4
Debt/equity, market-weighted	0.3	0.2	0.2	0.1	0.0	0.0	0.0
Equity ratio, book-weighted	40.6	40.6	46.2	49.0	54.8	59.3	61.0
Gearing, %	36.9	32.7	26.0	25.6	4.3	-3.6	-9.7

**COMPANY DESCRIPTION:** Scanfil is a contract electronics manufacturer based in Sievi, Finland, operating a global plant network with nine sites located across three continents. The company focuses on producing industrial electronics for its customers, many of which are large global industrial original equipment manufacturers. In practice Northern Europe is by far Scanfil's most important market. Scanfil's strategy is based on a vertically integrated model with which the company aims to provide solutions to cover the entire supply chain during the whole life-cycle of a given customer product.

**INVESTMENT CASE:** In our view Scanfil is well-positioned to achieve its target 7% operating margin. We see upside to the current share price when customer product volumes continue to develop positively, helping to lift absolute operating profit. We expect Scanfil to achieve even more diversified customer portfolio; this would justify an increase in valuation multiples.

OWNERSHIP STRUCTURE	SHARES	EURm	%
Takanen Harri	9,913,146	64.832	15.5%
Takanen Jarkko	8,596,169	56.219	13.5%
Varikot Oy	7,606,442	49.746	11.9%
Takanen Jorma	6,129,305	40.086	9.6%
Tolonen Jonna	3,351,950	21.922	5.2%
Pöllä Reijo	3,328,745	21.770	5.2%
Laakkonen Mikko	2,531,187	16.554	4.0%
Takanen Martti	1,947,018	12.733	3.0%
Foundation of Riitta and Jorma J.Takanen	1,900,000	12.426	3.0%
Sijoitusrahasto Aktia Capital	1,688,000	11.040	2.6%
Ten largest	46,991,962	307.327	74%
Residual	16,903,477	110.549	26%
Total	63,895,439	417.876	100%

**EARNINGS CALENDAR**

February 18, 2021	FY 2020 Results
April 23, 2021	Q1 report
August 06, 2021	Q2 report
October 26, 2021	Q3 report

**OTHER EVENTS****COMPANY MISCELLANEOUS**

CEO: Petteri Jokitalo	Yritystie 6, FI-85410 Sievi
CFO: Kai Valo	Tel: +358 8 48 82 111
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, %	$\frac{\text{Profit before extraordinary items and taxes} - \text{income taxes}}{\text{Shareholder's equity} + \text{minority interest} + \text{taxed provisions (average)}}$		

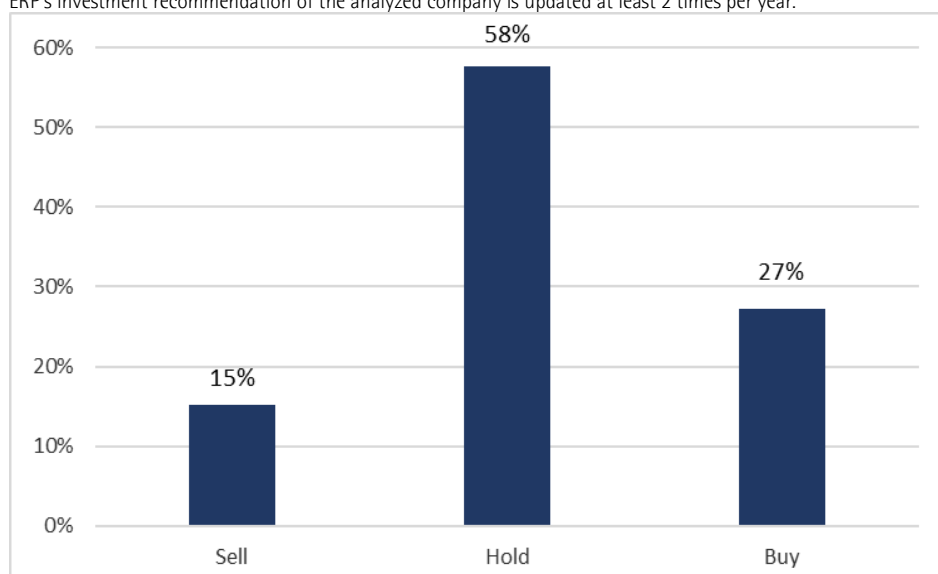
## Important Disclosures

Evli Research Partners Plc ("ERP") uses 12-month target prices. Target prices are defined by utilizing analytical techniques based on financial theory including (but not limited to) discounted cash flow analysis and comparative valuation. The selection of valuation methods depends on different circumstances. Target prices may be altered on the basis of new information coming to light in the underlying company or changes in interest rates, changes in foreign exchange rates, other securities prices or market indices or outlook for the aforementioned factors or other factors that may change the conditions of financial markets. Recommendations and changes by analysts are available at [Analysts' recommendations and ratings revisions](#).

Investment recommendations are defined as follows:

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

ERP's investment recommendation of the analyzed company is updated at least 2 times per year.



The graph above shows the distribution of ERP's recommendations of companies under coverage in 11th of May 2020. If recommendation is not given, it is not mentioned here.

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

This research report has been prepared by Evli Research Partners Plc ("ERP" or "Evli Research"). ERP is a subsidiary of Evli Bank Plc. Production of the investment recommendation has been concluded on [8.1.2021, 8:55]. This report has been published on [8.1.2021, 9:20].

None of the analysts contributing to this report, persons under their guardianship or corporations under their control have a position in the shares of the company or related securities.

The date and time for any price of financial instruments mentioned in the recommendation refer to the previous trading day's closing price(s) unless otherwise stated in the report.

Each analyst responsible for the content of this report assures that the expressed views accurately reflect the personal views of each analyst on the covered companies and securities. Each analyst assures that (s)he has not been, nor are or will be, receiving direct or indirect compensation related to the specific recommendations or views contained in this report.

Companies in the Evli Group, affiliates or staff of companies in the Evli Group, may perform services for, solicit business from, hold long or short positions in, or otherwise be interested in the investments (including derivatives) of any company mentioned in the publication or report.

Neither ERP nor any company within the Evli Group have managed or co-managed a public offering of the company's securities during the last 12 months prior to, received compensation for investment banking services from the company during the last 12 months prior to the publication of the research report.

ERP has signed an agreement with the issuer of the financial instruments mentioned in the recommendation, which includes production of research reports. This assignment has a limited economic and financial impact on ERP and/or Evli. Under the assignment ERP performs services including, but not limited to, arranging investor meetings or –events, investor relations communication advisory and production of research material.

ERP or another company within the Evli Group does not have an agreement with the company to perform market making or liquidity providing services.

For the prevention and avoidance of conflicts of interests with respect to this report, there is an information barrier (Chinese wall) between Investment



Research and Corporate Finance units concerning unpublished investment banking services to the company. The remuneration of the analyst(s) is not tied directly or indirectly to investment banking transactions or other services performed by Evli Bank Plc or any company within Evli Group.

This report has been disclosed to the company prior to its dissemination. The company has not made any amendments to its contents. Selected portions of the report were provided to the company for fact checking purposes only.

This report is provided and intended for informational purposes only and may not be used or considered under any circumstances as an offer to sell or buy any securities or as advice to trade any securities.

This report is based on sources ERP considers to be correct and reliable. The sources include information providers Reuters and Bloomberg, stock-exchange releases from the companies and other company news, Statistics Finland and articles in newspapers and magazines. However, ERP does not guarantee the materialization, correctness, accuracy or completeness of the information, opinions, estimates or forecasts expressed or implied in the report. In addition, circumstantial changes may have an influence on opinions and estimates presented in this report. The opinions and estimates presented are valid at the moment of their publication and they can be changed without a separate announcement. Neither ERP nor any company within the Evli Group are responsible for amending, correcting or updating any information, opinions or estimates contained in this report. Neither ERP nor any company within the Evli Group will compensate any direct or consequential loss caused by or derived from the use of the information represented in this publication.

All information published in this report is for the original recipient's private and internal use only. ERP reserves all rights to the report. No part of this publication may be reproduced or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, or stored in any retrieval system of any nature, without the written permission of ERP.

This report or its copy may not be published or distributed in Australia, Canada, Hong Kong, Japan, New Zealand, Singapore or South Africa. The publication or distribution of this report in certain other jurisdictions may also be restricted by law. Persons into whose possession this report comes are required to inform themselves about and to observe any such restrictions.

Evli Bank Plc is not registered as a broker-dealer with the U. S. Securities and Exchange Commission ("SEC"), and it and its analysts are not subject to SEC rules on securities analysts' certification as to the currency of their views reflected in the research report. Evli Bank is not a member of the Financial Industry Regulatory Authority ("FINRA"). It and its securities analysts are not subject to FINRA's rules on Communications with the Public and Research Analysts and Research Reports and the attendant requirements for fairness, balance and disclosure of potential conflicts of interest. This research report is only being offered in U.S. by Auerbach Grayson & Company, LLC (Auerbach Grayson) to Major U.S. Institutional Investors and is not available to, and should not be used by, any U.S. person or entity that is not a Major U.S. Institutional Investor. Auerbach Grayson is a broker-dealer registered with the U.S. Securities and Exchange Commission and is a member of the FINRA. U.S. entities seeking more information about any of the issuers or securities discussed in this report should contact Auerbach Grayson. The securities of non-U.S. issuers may not be registered with or subject to SEC reporting and other requirements.

ERP is not a supervised entity but its parent company Evli Bank Plc is supervised by the Finnish Financial Supervision Authority.

**Contact information****SALES, TRADING AND RESEARCH****Equity Sales**

Ari Laine +358 9 4766 9115  
Lauri Ahokanto +358 9 4766 9117  
Niclas Henelius +358 9 4766 9116

**Trading**

Lauri Vehkaluoto (Head) +358 9 4766 9120  
Pasi Väisänen +358 9 4766 9120  
Antti Kässi +358 9 4766 9120  
Miika Roankanen +358 9 4766 9120

**ETFs and Derivatives**

Joachim Dannberg +358 9 4766 9123  
Kimmo Lijja +358 9 4766 9130

**Structured Investments**

Heikki Savijoki +358 9 4766 9726  
Aki Lakkisto +358 9 4766 9123

**Equity Research**

Jonas Forslund +358 9 4766 9314  
Joonas Ilvonen +358 44 430 9071  
Jerker Salokivi +358 9 4766 9149  
Anna-Liisa Rissanen +358 40 157 9919

**Evli Investment Solutions**

Johannes Asuja +358 9 4766 9205  
Markku Reinikainen +358 9 4766 9669



**EVLI BANK PLC**  
Aleksanterinkatu 19 A  
P.O. Box 1081  
FIN-00101 Helsinki, FINLAND  
Phone +358 9 476 690  
Fax +358 9 634 382  
Internet [www.evli.com](http://www.evli.com)  
E-mail [firstname.lastname@evli.com](mailto:firstname.lastname@evli.com)

**EVLI BANK PLC,  
STOCKHOLMSFILIAL**  
Regeringsgatan 67 P.O. Box 16354  
SE-103 26 Stockholm  
Sverige  
[stockholm@evli.com](mailto:stockholm@evli.com)  
Tel +46 (0)8 407 8000  
Fax +46 (0)8 407 8001