

Initiating coverage with BUY

Exel Composites has grown mainly through acquisitions in recent years. Organic growth has been weak due to challenges in telecommunications and infrastructure markets. Moreover, the company's EBIT margin, at ca. 5% last year, has declined to way below the desired level. A recent acquisition further cut profitability. Volume visibility is limited, yet we take a constructive view based on Exel's repositioning towards the wind energy sector, where long-term fundamentals are strong and carbon fiber reinforcements are gaining further market share.

The wind energy sector is now Exel's top customer industry

The wind energy sector recently claimed the position as Exel's most important customer industry. Exel has selected wind turbine blade reinforcements as the main application to drive order volumes. We estimate this market to grow at low double-digit rates in the coming years, and thus expect Exel to be able to add EUR 3-5m in sales p.a. within the segment. According to our analysis, operational leverage should help Exel to achieve a 7% EBIT margin in 2021 (up from adjusted 2018 operating margin of 5.2%) despite a 100bps gross margin decline due to the increased share of lower margin wind energy sector deliveries.

Execution is key, the company needs to win large accounts

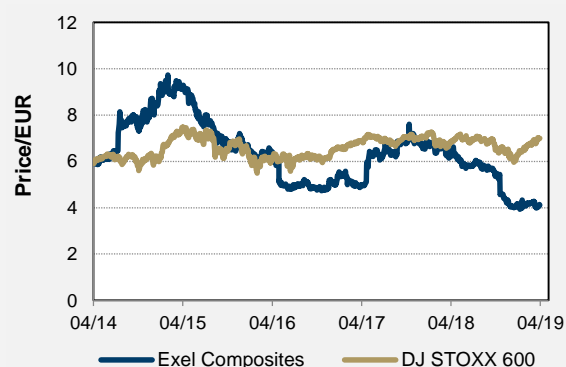
In our view Exel is to gain from volume tailwinds within select customer industries and thus set to grow especially within the Construction and Infrastructure segment. While efficiency measures such as the cost reduction program targeting EUR 3m in annual savings by 2020 are important for improving the operating margin, we recognize higher volumes as the main value driver. To move the needle, Exel should add such new customers that could generate annual revenues in the EUR 5m ballpark.

Our rating is BUY, target price EUR 5 per share

We initiate coverage with BUY based on our multiple and DCF analysis. Our target price implies a 2019E EV/EBITDA multiple of 8x vs. historic average of almost 9x and the peer group currently trading at around 9-10x.

Rating

+ BUY



Share price, EUR (Last trading day's closing price) 4.11

Target price, EUR 5.0

Latest change in recommendation -

Latest report on company -

Research paid by issuer: YES

No. of shares outstanding, '000's 11,897

No. of shares fully diluted, '000's 11,897

Market cap, EURm 49

Free float, % 100

Exchange rate EUR/USD 1.15

Reuters code EXL1V.HE

Bloomberg code EXL1V FH

Average daily volume, EURm 0.1

Next interim report 03-May-19

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+ BUY □ HOLD - SELL

KEY FIGURES

	Sales EURm	EBIT EURm	EBIT %	Ptx profit EURm	EPS EUR	P/E (x)	EV/Sales (x)	P/CF (x)	EV/EBIT (x)	DPS EUR
2017	86	6	7.1%	5	0.35	18.6	1.0	12.9	14.2	0.30
2018	97	2	2.4%	2	0.04	95.2	0.7	-17.0	31.5	0.18
2019E	103	6	6.1%	6	0.36	11.4	0.7	6.3	11.6	0.20
2020E	110	7	6.5%	6	0.42	9.8	0.7	5.8	10.1	0.20
2021E	117	8	7.1%	8	0.50	8.2	0.6	5.3	8.4	0.25
Market cap, EURm	49			BV per share 2019E, EUR		2.3	CAGR EPS 2018-21, %		128.1	
Net debt 2019E, EURm	24			Price/book 2019E		1.8	CAGR sales 2018-21, %		6.6	
Enterprise value, EURm	73			Dividend yield 2019E, %		4.9	ROE 2019E, %		16.0	
Total assets 2019E, EURm	77			Tax rate 2019E, %		21.8	ROCE 2019E, %		11.4	
Goodwill 2019E, EURm	13			Equity ratio 2019E, %		36.0	PEG, P/E 19/CAGR		0.9	

All the important disclosures can be found on the last pages of this report

Investment summary

One of the largest manufacturers of pultruded composite profiles

Exel Composites is a process manufacturing company focusing on the production of composites profiles for various demanding applications, mainly by utilizing pultrusion manufacturing technology. The company's product offering finds its end-uses in different industries such as wind energy (e.g. wind turbine blade reinforcements), transportation (e.g. panels for trains, trams and buses) and telecommunications (e.g. antenna radomes and tubes).

The company operates in a niche market with strong long-term fundamentals

The composites market represents a small fraction of the global materials market (which is dominated by steel, plastics and aluminum). Composites are synthesized from plastics (e.g. epoxy) and reinforcements (e.g. carbon fiber), leading to a material that is both strong and light. Exel focuses on using the pultrusion technique (the approach enables large consistent quality volumes), a niche market of about a few billion USD. In this context Exel's market share amounts to only a couple of percentage points. As the market for pultruded elements can be expected to grow at a rate (roughly 5%) clearly above that of global GDP, we see plenty of revenue potential over the long-term. We view our organic revenue CAGR estimate of 4.5% for the next ten years as rather conservative against this background.

Visibility is limited, and single accounts can have a significant impact on total delivery volumes

While the long-term fundamentals for pultruded profiles look promising, there is not much visibility regarding volumes in the short-term. The order backlog generally covers only the next few months, and the actual orders materialize only within weeks before the date of delivery. Moreover, while Exel's customer industries mostly have favorable long-term prospects, the company's delivery volumes can be subject to significant cyclicality in addition to suffering from losses caused by single specific accounts. In recent years this risk has materialized within the telecommunications sector, where both volumes and margins have been under pressure.

The company's historical and target profitability levels look rather high in the current context

Exel targets long-term EBIT margin at above 10% (the long-term historical average stands at 9%). The company has not achieved these figures for years, not even on a quarterly basis. Profitability has suffered even more recently following an acquisition in the U.S., where most notably the gross margin has been around 10 percentage points lower than Exel's own.

Even though we believe in robust volume growth over the long-term, we do not expect Exel to resume 9-10% EBIT margins

The telecommunications sector used to represent Exel's most important customer industry, however the wind energy sector has recently claimed the top spot. Exel's selected telecommunications applications, such as antenna radomes, have always been subject to pronounced cyclicality, although the margins used to be sufficiently attractive to compensate for the nuisance. As both the volumes and margins have disappointed in recent years, Exel has been shifting its focus more towards the wind energy sector, where growth should be more stable. Indeed, we recognize substantial volume potential for Exel's selected wind energy application (spar caps for wind turbine blades). However, with the sector being quite competitive and the margins relatively low, we expect Exel to reach neither the targeted nor the historical levels of profitability.

In our view current valuation places expectations (too) low

Exel's current share price reflects low profitability expectations. The company delivered disappointing operating margins even before the acquisition of DSC. The acquired unit represents around 20% of Exel's revenue and had a negative EBIT margin of ca. 3% prior to the acquisition. Our valuation of Exel assumes DSC will reach a 5% EBIT margin by '21, whereas the rest of Exel will achieve 7.5% (compared to the 7% average adjusted margin during the four years prior to the acquisition), thus bringing the group EBIT margin to 7%.

We expect operational leverage to lift EBIT margin despite gross margin headwind

Our 4.5% organic revenue CAGR estimate places Exel's EBIT margin on an improving track despite our modelling a gross margin decline of about 100bps by 2021 due to the increasing share of lower margin wind energy applications. We expect annual revenue growth at about 6.5% for the next few years, and consequently model fixed cost share to decline to 49% of revenues by 2021 (52% in 2018), placing 2021E EBITDA margin at 10.5%.

We initiate coverage with BUY rating, TP at EUR 5 per share

We regard Exel's current valuation attractive within the context where the company's profitability has been at historic lows. Exel currently trades at roughly 7x for our 2019E EBITDA (in recent history the NTM EV/EBITDA multiple has averaged just below 9x).

Company overview

A brief history

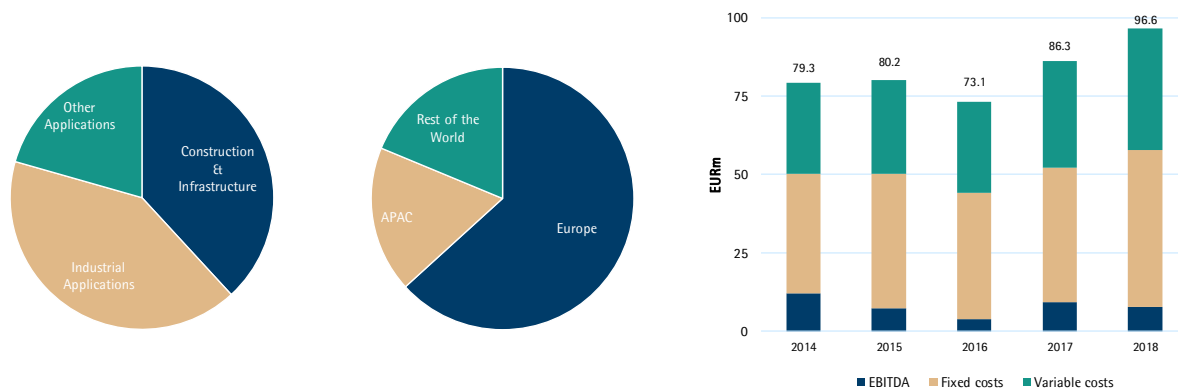
In 1960 three chemists, based in Helsinki, founded a company specializing in the production of electronic detonator caps. The company derived its name from the words Explosive Electronics. One of the founders, inspired by his passion for shooting sports, decided to develop hearing protectors. The products were sold under the Silenta brand, their success enabling the development of new products.

The company started manufacturing composite products in 1970. Cross-country ski pole production was launched in 1973. The redesigned lightweight poles proved a success in the 1976 Innsbruck Olympic Games, where 70% of the ski medals were won with the help of the carbon fiber sticks. Subsequently the company's ski pole sales exploded to 1.5 million pairs per year, or a share equivalent to half of the global market. Other sports applications followed in the 1980s and 1990s (such as windsurfing masts, golf shafts, ice hockey and floorball sticks, as well as baseball bats). The company launched the concept of Nordic walking with the help of the associated sticks. Even industrial uses were unearthed.

Sponsor Capital, a Finnish private equity firm, acquired the company from Neste in an MBO transaction in 1996. The company grew strongly during the subsequent years, expanding internationally, launching an IPO in 1998. Sponsor Capital fully exited the company in 2000. The company continued to expand in the early 2000s by acquiring several pultrusion businesses. This period of expansion was followed by an exit from the sports equipment businesses in the late 2000s so that the company could focus on manufacturing industrial composites.

Today Exel Composites can be described as a process manufacturing company. The company's business is to design, produce and distribute composite profiles and tubes for various industrial applications. For the most part, Exel Composites applies a specific manufacturing process technology, called pultrusion, to produce made-to-order batches of composite profiles for different industrial end uses. The company currently employs close to 700 personnel and, by the end of April 2019, will have eight manufacturing plants, of which five are in Europe, two in China, and one in the U.S.

Figure 1: Exel Composites' 2018 segmental & geographic sales splits and sales & profitability development



Source: Exel Composites

Business model

Exel produces composite profiles with an operational model defined by both high gross margins and fixed costs, meaning volumes are crucial for results

The company supplies pultruded profiles and other composites on a made-to-order basis. A given customer first specifies the kind of profile needed, after which a customized profile shape is designed to meet the desired requirements. After a suitable profile has been engineered, the form can be reproduced on short notice at large volumes with a consistent quality (the company has developed over 1,000 glass and carbon fiber profile applications). Besides pultruded custom shapes Exel offers a wide range of standardized profiles, however these represent a negligible share of sales. Exel's order volumes are mainly driven by relatively large customer accounts (we estimate around a dozen customers to bring in more than half of annual sales, out of a total number in the hundreds). The company's most important customer industries include the wind energy, telecommunications, transportation and construction sectors, besides half a dozen other less crucial ones.

Exel's business model is characterized by a rather high and stable gross margin, which has averaged slightly above 60% (the 40% variable cost component is mainly comprised of composites raw materials i.e. synthetic resins and reinforcing fibers). Meanwhile Exel's operational leverage is also quite high (fixed costs, according to our definition including employee expenses and other operating expenses such as heat and electricity, amounted to 53% of sales in 2015-18), meaning Exel's financial results are highly dependent on order volumes, while volumes themselves are driven by the select customer industry business cycles. In general, the visibility on near future delivery volumes is quite limited as the order backlog covers only the next few months.

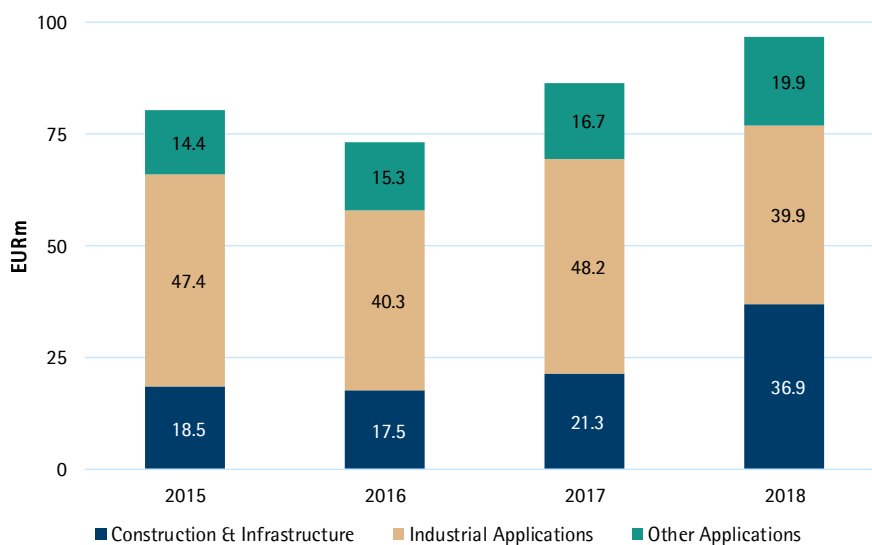
Exel has delivered lackluster results in recent years due to the challenging market situation within the telecommunications sector. Infrastructure project postponements have also been to blame. The company's reaction has been to refocus its efforts on the wind energy sector, which should support high and more stable volumes although the margin potential is less attractive.

A major share of Exel's revenue exposure and manufacturing footprint is in Europe (63% of 2018 sales and a corresponding share of production plants), although the portion has decreased in recent years as the company has made acquisitions in China and the U.S. to better serve large customers on a global basis. Composite profiles are not, for the most part, shipped overseas. This means the manufacturing plants should be located relatively close to customers and end markets.

End applications and customers

Exel Composites reports revenues for three different customer segments: Industrial Applications, Construction & Infrastructure, and Other Applications. Exel does not break out revenues for the major segments' sub-segments or customer industries, nor does it report margins for the three major segments. However, the company has stated that many of the customer industry applications belonging under the Industrial Applications segment tend to have rather high gross margins (although there is a lot of variation between the specific customer industries). The company's offering includes both tailored and standardized products, such as profiles, tubes and laminates that often function as parts of different end products. Most of the company's production is for tailored profiles. Exel also manufactures complete end products and systems.

Figure 2: Exel Composites' revenue split by customer segment



Source: Exel Composites

Industrial Applications segment

The Industrial Applications segment accounted for 41% of Exel's 2018 revenue (32% in Q4'18). The segment's end applications have the highest quality requirements within Exel's product portfolio and consequently quite often the highest margins. For around a decade, Exel's single largest customer used to come from the telecommunications sector. Industrial Applications' sales were weak in late 2018 due to low telecommunications market volumes. Trade barriers and export tariffs had a negative impact especially on the Chinese telecommunications market. Moreover, telecommunications gross margins have deteriorated in recent years in response to the challenging competitive situation. In addition to the telecommunications sector, the Industrial Applications segment also encompasses the transportation industry, another significant customer industry for Exel. Transportation, including aerospace (where Exel does not have a presence), is the largest composites market globally in terms of value.

Table 1: Industrial Applications segment's product and customer examples

Sub-segment	Product examples	Potential customers (est.)
Telecommunication	Base Station System antenna radomes and tubes; Composite light poles; Conical antennas for military networks, gaspipes and ships; Radar profiles for ship radars and airport radars	Nokia, Ericsson, Vaisala, Meggitt, Raymarine
Paper industry	Doctorblades and doctorblade holders	Valmet, Andritz, Voith
Electrical industry	Insulating rings and tubes; Insulating rods; Insulating rail joints; Conduit rods; Tension members; Voltage detector poles; Conductor cores	Normek, Nexans
Machine industry	Fast moving machine parts; Packing machine components; Picker robot parts; Palletizing robots; Manipulators; Conveyer parts; Textile machine components	ABB, Sulzer, KUKA
Transportation industry	Bus and coach profiles; Truck and trailer profiles; Automotive profiles; Train and tram profiles	Bombardier, Transtech, Siemens, Scania, Fiat

Source: Exel Composites, Evli Research

Construction & Infrastructure segment

The Construction & Infrastructure segment generated 38% of Exel's 2018 revenue (48% in Q4'18). Wind energy applications are gaining an increasingly prominent role. While the segment's customer industry-specific gross margins are not generally speaking as attractive as within Industrial Applications, the company sees more potential in terms of delivery volumes. This was demonstrated in late 2018 as Q4'18 sales almost doubled compared to the period year earlier (owing to the acquisition of DSC). The surge in revenue also led to sharply lower company-level gross margin (also largely due to the U.S. acquisition). The growth in revenue was mostly attributable to the wind energy industry. In 2018 Exel's single largest customer came from the wind energy sector.

Table 2: Construction & Infrastructure segment's product and customer examples

Sub-segment	Product examples	Potential customers (est.)
Building, Construction & Infrastructure	Airport fencing, masts, and towers; Cable management systems; Platforms, ladders and stairs; Handrails; Window and door profiles; Architectural facades; Rock bolts; Wastewater treatment systems; Agricultural and fishing applications	Vaisala, Inwido, SSAB
Energy industry	Wind turbine blade reinforcements and blade root joints; Insulating components for wind turbine generators; Offshore oil rig support tethers; Oil/gas well monitoring rods	Vestas, Siemens Gamesa, GE, Goldwind, Enercon, Nordex, Sinovel, Emerson, First Subsea, Trelleborg

Source: Exel Composites, Evli Research

Other Applications segment

The Other Applications segment accounted for 21% of Exel's 2018 revenue (19% in Q4'18). The segment's gross margins often tend to be lower than Industrial Applications', yet the focus on consumer-oriented products means the Other Applications segment is the most stable and defensive of the three reported by Exel.

Table 3: Other Applications segment's product and customer examples

Sub-segment	Product examples	Potential customers (est.)
Cleaning & Maintenance	Tool handles and telescopes; Tubes for hygienic applications; Tubes for electrical applications	Sinituote, Kärcher
Sports & Leisure	Awnings and umbrella frames; Paddle shafts; Sport shafts; Windsurf masts	Amer Sports
Other Industries	Sprayer tubes; Fence posts; Olive picking systems; Camouflage support poles; Mine detecting probes; Sector umbrellas	Finnish Defence Forces

Source: Exel Composites, Evli Research

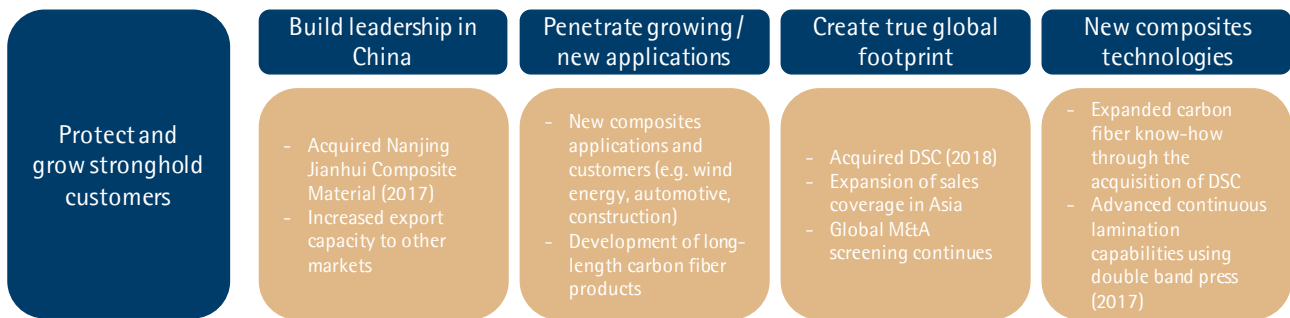
Strategy and operations, acquisitions & financial targets

Strategy and operations

Exel's current strategy (2017-20) focuses on growing the existing customer accounts while improving cost efficiency. The company also seeks to expand beyond its current

core by solidifying foothold in China, gaining better traction in faster growing applications (such as in wind energy, transportation and construction industries), creating truly global manufacturing footprint, and growing with new manufacturing technologies (this could mean further vertical integration and even acquisition of production techniques beyond pultrusion).

Figure 3: Exel Composites' 2017-20 strategy and select implementation measures



Source: Exel Composites

Large customers and their volumes drive Exel's manufacturing operations and profitability

Exel's largest individual customers' volumes can have a significant impact on the company's financial results. The company has stated that its current largest customer account generated roughly 15% of total 2018 sales. The customer in question operates within the wind energy sector, whereas the previous largest account represented the telecommunications sector. The company views the focus and prioritization of appropriate niche accounts as crucial. Long-term competitive positioning is predicated on accessing the right customers, and larger accounts are expected to drive revenue growth also in the future. Exel has said it will be very selective with smaller accounts from now on. In our view this implies the company is aiming to win the types of new customers that could generate around EUR 5m in annual sales. A more focused portfolio would be more efficient from manufacturing and logistics point of view. In total the company has hundreds of customer relationships, but around a dozen or so accounts bring in majority of annual revenues. The customer base is spread around over 50 countries.

Exel does not disclose its customers' names, but the most important accounts are likely to represent large companies operating in various geographic regions, meaning names like Vestas, Siemens Gamesa, Nokia, Ericsson and Bombardier. Moreover, customer relationships tend to be quite sticky, so it's unlikely Exel will win many accounts from its competitors or lose them to competition.

The composite profiles Exel manufactures are largely free of maintenance (one exception are doctor blades and doctor blade holders for paper machines as these items are consumables by nature). While this means the deliveries can be priced relatively high, the downside is that Exel has very little scope to earn additional, more stable service revenues.

According to Exel, composites' shipping costs are high enough to largely prohibit overseas exports. Composite profiles tend not to ship efficiently as the physical dimensions can often be such that empty air takes up a lot of space.

The company's manufacturing plants can be easily recalibrated to serve different end markets. In general, the plants utilize standardized layouts and equipment. Exel currently has nine manufacturing plants located in seven countries across Europe, Asia and North America. Employees total close to 700 in number. The company says the current

manufacturing footprint could support sales of around EUR 150m (the figure depends on the share of pricier carbon fiber materials).

Table 4: Exel Composites' current manufacturing units

Company	Plant location	Current status
Exel Composites Oyj	Joensuu, Finland	In operation
Exel Composites Oyj	Mäntyharju, Finland	In operation
Exel Composites N.V.	Oudenaarde, Belgium	In operation
Exel Composites GmbH	Kapfenberg, Austria	In operation
Exel Composites UK	Runcorn, United Kingdom	In operation
Exel Composites (Nanjing) Co. Ltd.	Nanjing, China	In operation
Nanjing Jingheng Composite Material	Nanjing, China	In operation
Diversified Structural Composites	Erlanger, Kentucky	In operation
Exel GmbH	Voerde, Germany	To be closed in April 2019

Source: Exel Composites

Exel's manufacturing unit in Voerde, Germany holds a large customer exposure to the telecommunications sector and will be closed in April 2019. Following the closure, Exel will have five plants in Europe, two in China, and one in the U.S.

The company aims to set itself apart from competition with efficient and reliable operations, industry-specific products and solutions and global coverage through various sales channels.

In addition to customer and product mix optimization, Exel puts focus on cost efficiency

While Exel does not aspire to differentiate itself as the supplier with the lowest unit production costs, the company has recently implemented a cost reduction program. The program was initiated in 2018 and continues into 2019. The initiative aims to optimize manufacturing footprint in Europe by closing the German plant (located in Voerde) by the end of April 2019. The closure will lead to a headcount reduction of 23 permanent employees, producing annual cost savings of around EUR 1m from 2020 onwards. The closure is expected to result a one-time cash cost of EUR 1.2m, which will be recorded during the first quarter of 2019. Rationalizations in Finland have already been carried out. Additionally, Diversified Structural Composites (DSC), a U.S. subsidiary gained through an acquisition, will be subject to cost efficiency and product optimization measures, while Exel's two Chinese plants are expected to reach further synergy savings (both units are located within the city of Nanjing, although on the opposite sides of the map). The cost efficiency measures target EUR 3m in annual savings by 2020. Exel also implemented an ERP system roll-out in all the European production units. The roll-out continues in other units during 2019.

The company's management team is composed of eight members, headed by the CEO Riku Kytömäki (since 2014). The board of directors is made up of five independent members, headed by Chairman Reima Kerttula (since 2016).

Exel is proactively sourcing new potential applications

Exel continues to develop new composites applications (research and development costs have averaged about 2.5% of revenue). To take an example, the company has specifically mentioned certain kinds of automotive applications, such as battery pack casings for electric vehicles, as a promising avenue for further volume growth. There is significant composite volume potential in this application as the global fleet of electric vehicles is expected to reach 125 million units by 2030, according to the International Energy

Agency (IEA). The projection implies a fleet CAGR of some 33%. Bloomberg New Energy Finance pencils the 2030 figure even higher, while OPEC expects the fleet size at 100 million units (30% CAGR). The wind energy industry also holds potential beyond the current offering of wind turbine blade stiffeners.

In addition to the U.S. and China, Exel has identified Eastern Europe and India as potential major sources of future growth. More specifically, the wind energy sector in India is expected to exhibit substantial growth potential.

Acquisitions

Exel has communicated an intention to expand its global manufacturing capacity (in other words presence in regions outside of Europe) mainly through M&A transactions. The company doesn't view greenfield factories as a very relevant expansion alternative to new markets as a plant's construction phase is expected to take up to 3 years (or more). Meanwhile Exel estimates that a European greenfield plant would cost roughly EUR 10m to build, equipment would absorb further EUR 5m, and training and other costs might total around EUR 5m. In other words, the total investment cost could handily top EUR 20m.

Table 5: Exel Composites' relevant historical acquisitions

Year	Target/Seller	Location(s)	Production type	Deal value (EURm)	Current status
1997	Solte	Voerde, Germany	Ski & snowboard coating	n/a	To be closed in April 2019
2000	Fiberspar Performance Products	Massachusetts	Windsurfing masts	n/a	Sold off
2001	Menzolit Fibron	Germany	Pultrusion	n/a	Closed
2004	Bekaert	Belgium; Spain	Pultrusion	7	In operation
2005	Faserprofil	Kapfenberg, Austria	Pultrusion	2	In operation
2006	Pacific Composites	Australia; China; UK	Pultrusion	21	Closed in 2018
2017	Nanjing Jianhui Composite Material	Nanjing, China	Pultrusion	8	In operation
2018	Diversified Structural Composites	Erlanger, Kentucky	Pultrusion	8	In operation (turnaround)

Source: FactSet, Exel Composites

Exel purchased DSC at a sizable discount compared to its own valuation (in terms of EV/S), yet there's a lot of work to do in addressing weak margins

Exel purchased Diversified Structural Composites, a company based in the U.S., in April 2018, gaining an amount of revenue representing roughly 20% of the two companies' combined total. Exel acquired DSC from the U.S. subsidiary of the carbon fiber manufacturer Teijin. The acquisition price was approximately USD 9.5m (EV/Sales at roughly 0.5x), financed with a fresh long-term loan. The main rationale for the acquisition was to gain foothold in the U.S. market through the existing manufacturing operations and customer network. The acquisition also brought additional competency in carbon fibers. DSC has one composites production facility, located in Erlanger, Kentucky, relying mainly on pultrusion manufacturing technology. The unit produces carbon and glass fiber reinforced composites with a focus on the wind energy industry (the exposures on transportation as well as the oil and gas industry are also significant). The operation employed 90 personnel at the end of fiscal year that closed in March 2018, generating USD 19m in annual revenue and a negative EBIT margin of around 3% (an operating loss of USD 0.6m). DSC's gross margin averaged 49% during the 2016 and 2017 fiscal years, i.e. over 10% below that of Exel. Exel needs to address this low margin level with initiatives to improve the unit's logistics, purchasing and pricing structures.

Exel continues to integrate the subsidiary into its own operations, optimizing the business' customer and product portfolio, and expects break-even profitability during 2019. We expect DSC's low (albeit improving) profitability will weigh down Exel's operating margin for the foreseeable future.

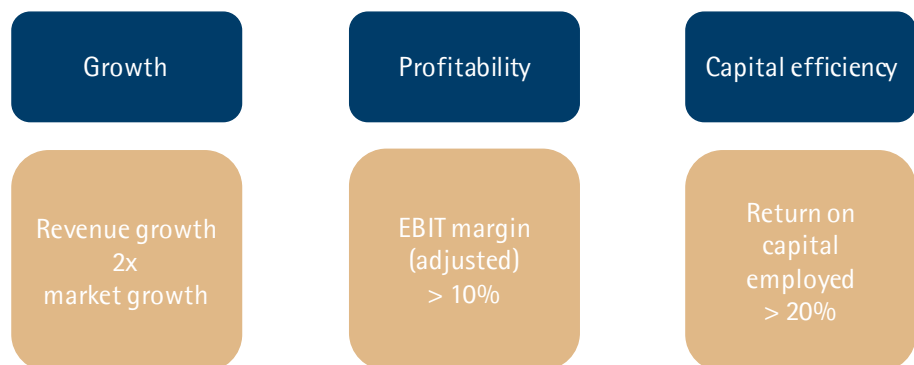
Exel acquired Nanjing Jianhui Composite Material in April 2017 for a consideration of EUR 7.6m (the unit had an annual revenue of some EUR 6m). The Chinese operation has a high share of revenue coming from the wind energy industry.

The company considers acquisition opportunities worldwide, but currently North America and China seem the most potential target domains. Acquisitions in these markets could offer Exel access to e.g. additional wind energy customer accounts. Percentage-wise the U.S. wind energy market is expected to grow faster during the years to come, yet the Chinese market is twice the U.S. size and thus continues to add considerably more capacity in terms of absolute GWs. However, we note that the company's current level of financial leverage (around 3x NIBD/EBITDA 2018) does not leave much leeway for further expansion without an additional infusion of equity.

Financial targets

Exel has disclosed its financial targets adjacent to the company's strategy for 2017-20. Exel considers the targeted figures over a business cycle and says potential acquisitions may impact the long-term financial targets. The targets reflect Exel's growth ambitions.

Figure 4: Exel Composites' financial targets

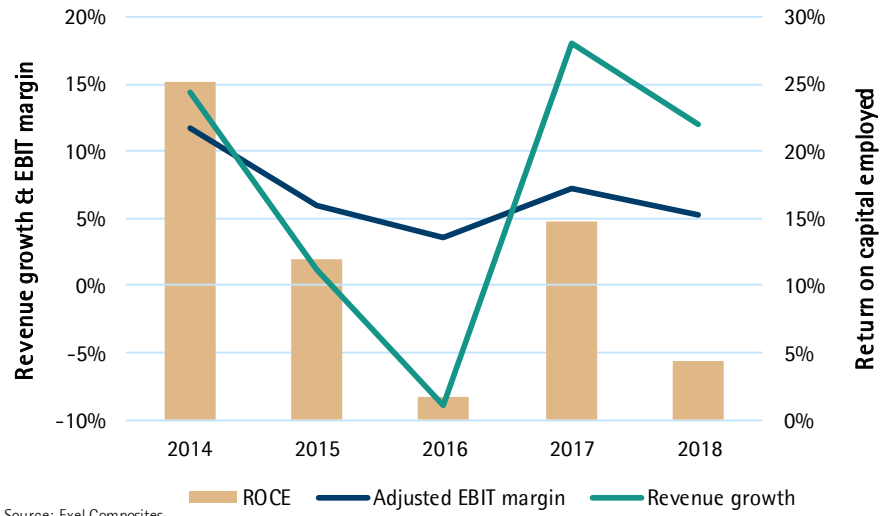


Source: Exel Composites

Exel's financial targets look ambitious within the context of recent years

Exel has set financial targets high. The company targets revenue growth at a rate double that of the market. In recent years Exel has not quite reached this target, as the company's top line grew at a 6.4% CAGR in 2016-18 (including acquisitions). We estimate the double market rate to imply a figure close to 10%. The top line has been basically flat on an organic basis. The company's average adjusted EBIT margin of 5.5% in 2015-18 also falls short of the stated above 10% target (during the last twenty years the margin has averaged 9%). Additionally, Exel's target rate of return on capital employed is above 20%. The company's ROCE averaged some 8% in 2015-18. (The last time the company managed to achieve all the three financial targets was in 2014). Exel also aims to distribute a minimum of 40% of net income as dividends, barring a subsequent excessive indebtedness and exclusion of growth opportunities.

Figure 5: Exel Composites' financial performance, 2014-18



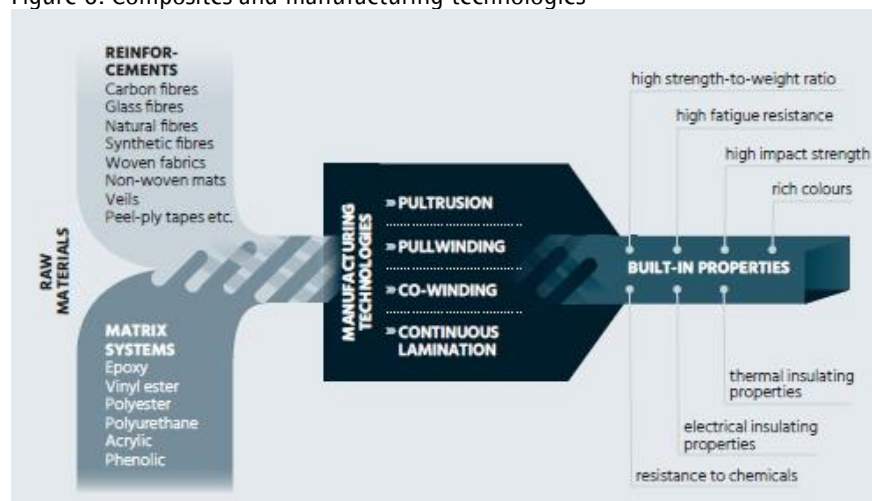
Composites market and competition

Composites and manufacturing technologies

Composites are synthesized from plastics and fibers, the resulting material holding several useful properties for demanding industrial applications

Fiber-reinforced plastics, also known as composites, are materials formed by the combination of two types of raw materials, namely synthetic resins (such as epoxy, vinyl ester, polyester, polyurethane, acrylic, and phenolic) and reinforcements (carbon and glass fibers). The reinforcing fibers provide stiffness and resistance against high loads while the resins both transfer load between the fibers and hold the fibers together. The emerging material is a composite with several desirable properties for demanding industrial types of usage. These built-in properties include high strength-to-weight ratio (especially compared to steel and aluminum), high resistance to weather, fatigue and chemicals (compared to wood), high impact strength, electrical and thermal insulation as well as fire retardation qualities. Moreover, composite materials can display rich colors even without an applied layer of paint coating as the resins can provide the fibers with different hues. In other words, the properties lend the material a maintenance-free usage, while making it stronger than structural steel on a pound-for-pound basis.

Figure 6: Composites and manufacturing technologies

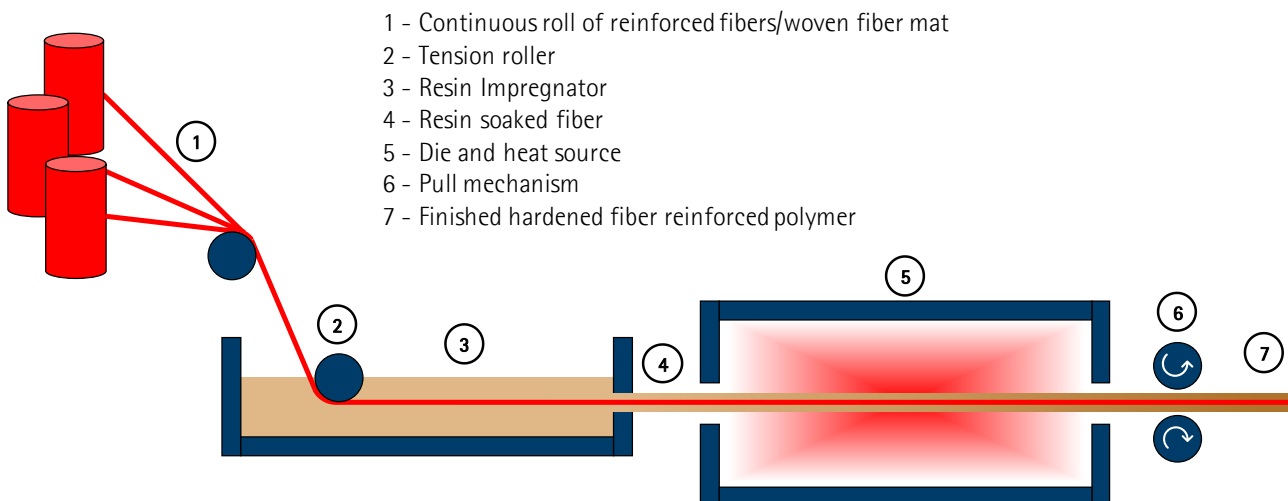


Source: Exel Composites

Pultrusion enables a tailored approach to producing large volumes of composites at a consistent high quality

Pultrusion, the manufacturing technology Exel Composites mainly relies on, is an automated process for the continuous production of composite profiles. Pultrusion is one of the oldest composites manufacturing processes, dating back to the 1950s. The main advantage of pultrusion technology is considerable flexibility with regards to both structural design and the combination of materials. All continuous fibers can be used (carbon and glass fibers are increasingly gaining ground, although the latter type is the predominant one and not expected to grow as fast as carbon fibers). Resin content is also under precise control. Consequently, individual customer accounts can be served on an engineering-to-order basis. Once a suitable template has been established, further volumes can be delivered on a made-to-order basis. The production quality is very consistent, generating a constant cross-section. Pultrusion is a cost-effective way to achieve high volume production of consistent quality structural profiles.

Figure 7: Graphic illustration of the pultrusion manufacturing process



Source: Wikipedia

Pultrusion is a very competitive approach to producing long, stiff profiles

The pultrusion process impregnates the fibers by pulling them from their racks through a thermosetting resin. Once the fiber filaments have been pulled through the impregnation bath and the raw fibers impregnated with a liquid resin, the composite mix is pulled further through a heated die, where curing takes place. The die completes the impregnation process and controls the resin content. Cast into the prespecified shape, the finished composite profiles are finally pulled through a sawing unit located at the end of the pultrusion line, where they are automatically cut to the desired length. The length of the profiles is completely unrestricted, enabling the production of very long pieces. Only transportation considerations determine the practical limit for profile length. However, there are products such as conductor cores that can be rolled up.

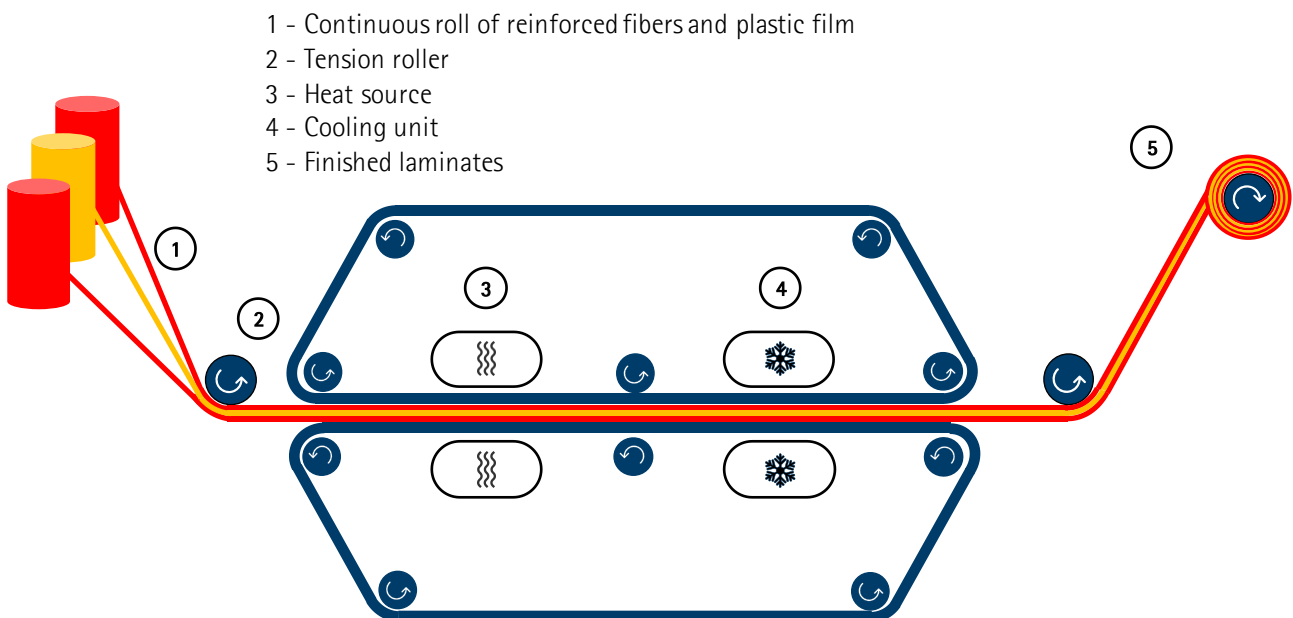
The drawbacks associated with pultruded profiles are relatively high initial cost compared to certain competing materials (such as steel and aluminum). A pultruded profile's blueprint is limited to two dimensions (although rather complex profiles can nevertheless be produced). Moreover, there is bound to be lack of awareness regarding the merits of pultruded composites as pultrusion is still such a niche market. More mergers and acquisitions may be needed within the composites industry for pultrusion to rise in competitiveness from the point of view of larger industries.

Pultrusion equipment manufacturers include names such as KraussMaffei, Pultrex, and Martin Pultrusion Group.

There is a modified version of pultrusion process to manufacture round tubes and profile tubes, called pullwinding. The pullwinding process controls the latitudinal and longitudinal properties of the final product by adjusting the amount of fibers in these two dimensions. Compared to the conventional pultrusion process, pullwinding enables the reduction of wall thickness and weight while improving the tubes' stiffness and strength.

Exel Composites also utilizes a process called continuous lamination, where reinforcement fibers are impregnated by a special epoxy resin, then guided through pressing and guiding rolls. Depending on the specific requirements, the composite will consist of number of reinforcement layers. Special surface materials such as printed paper and decorative fabrics can be applied as well. Following the curing of materials under high temperature and pressure, the laminates will go through sanding and cutting. Finally, the laminates can be painted or lacquered for special effects and UV resistant decorative surfaces.

Figure 8: Graphic illustration of the continuous lamination process



Source: Composites Lab

Prepreg molding refers to a fabrication process where the reinforcement materials are pre-impregnated with a resin or binder. The materials are combined prior to molding. The resulting materials hold a very high strength to weight ratio (and are therefore extensively used in the aerospace industry). Prepregs can be cut into different shapes and patterns prior to molding. The molding happens by rolling the prepregs around a tapered or parallel mandrel. The process is mainly used for the manufacturing of profiles for the aerospace industry (e.g. structural components such as wings and tail sections).

The filament winding process involves winding fibers, impregnated with resin, over a rolling mandrel in a variety of orientations. Once the mandrel is fully covered up to the desired thickness, the curing will be done by either placing the mandrel in an oven or under radiant heaters. The mandrel will be extracted once the resin has cured, leaving behind the hollow composite profile. The process is primarily used to manufacture circular or oval sectioned components, such as pipes and tanks.

3D printing refers to different distinct manufacturing processes under which material is shaped by a computer application according to a set of prespecified instructions. One of the most common 3D printing processes is a material extrusion technique, fused deposition modelling, a form of additive manufacturing. The process works by depositing material in numerous layers. Various types of materials can be used, including composites and thermoplastic polymers as well as ceramics and metals. Despite being a very versatile manufacturing technique, 3D printing does not really compete with the previously mentioned composites manufacturing processes as objects formed by additive manufacturing principles lack the robust structural properties endowed by long continuous fibers.

Composites market overview

Composites currently represent a tiny slice of the total materials market, with pultrusion manufacturing accounting for a fraction of the niche

The global materials market is dominated by steel, plastics and aluminum. The market share of steel is estimated at over 80%, plastics at about 15%, and aluminum at above 2% (estimates provided by Lucintel). Composites, meanwhile, represent only about 0.5% of the total materials market globally. The European Pultrusion Technology Association (EPTA) estimates the global market for composite end products to have figured at USD 82bn in 2016, forecasting it to reach USD 109bn in 2022 (i.e. a CAGR of 5%). Furthermore, according to Exel Composites, pultrusion, the manufacturing technique the company mainly utilizes, accounts for around 3% of this relatively niche market (laminates and filament wound composites correspond to roughly similar size markets, and so together the three techniques represent around 10% of the total composites market). The global pultrusion market is therefore estimated at a few billion USD annually. Consequently, in this narrowly defined context the company's market share amounts to only a few percentage points, meaning there is ample scope for both organic and inorganic growth. Even with this modest market share Exel Composites prevails as one of the single largest constituents.

Exel Composites is heavily exposed to Europe, a market with relatively low potential

Exel Composites currently derives more than 60% of its revenues from Europe. The pultrusion market in Europe is about half of that in North America in size. Meanwhile the Asian market is estimated to be the largest in value and expected to grow a percentage point or two quicker, a result of the countries' catching up to higher manufacturing standards and being more willing to bear the higher associated initial investment costs. Asia represents roughly 50% of projected growth.

The global pultrusion market is expected to grow at a rate roughly equal to EUR 100m p.a.

According to April 2016 report by Lucintel, the pultrusion market in Europe is expected to grow at a 3.6% CAGR at least for the next few years. North America is expected to achieve a rate of 4.5%, while markets in Asia and the rest of the world should manage 5.0%. In more practical terms, the global pultrusion market can be expected to grow at a rate significantly above that of global GDP for the foreseeable future (Exel Composites has set a target rate of growth equal to two times that of the market). Furthermore, given the estimated size of the global pultrusion market, it can be said that annual worldwide pultrusion revenues are expanding by an absolute amount approximately equal to EUR 100m per annum.

The AVK (Federation of Reinforced Plastics), a German professional association for fiber composite plastics, estimated in 2017 the European market for pultrusion profiles would grow by 6% that year, while citing other studies which put the 2017 global pultrusion industry growth at just over 5%. The association estimates the number of pultrudes globally at around 350, saying the ten largest companies share approximately 40% of the market. The report states the market for window profiles and reinforcement bars to be the currently fastest growing area.

The American Composites Manufacturers Association (ACMA) estimates pultrusion to represent 3% of the total North American end market for composites, amounting to USD 790m in 2016. The North American pultrusion market is expected to reach USD 1,060m by 2020 (7.6% CAGR), driven by growth in the construction and infrastructure sectors.

Table 6: Summary of recent pultrusion market growth estimates

Geographic area	Annual growth estimate range
Global	5.0%
Europe	3.6%-6.0%
North America	4.5%-7.6%
Asia	5.0%

Source: EPTA, ACMA, Lucintel, AVK

There is further potential for pultruded profile applications within industrial, construction and infrastructure sectors

The pultrusion process can produce construction material for different kinds of structures and platforms. Composites make for a very reliable and sturdy material as the substance does not rust or rot, nor is it subject to thermal expansion. This means composites can replace steel-reinforcements, or steel rebars (reinforcing bars deployed to strengthen concrete structures), in critical structures such as bridges. Owens Corning estimates this specific market at USD 120bn globally. Furthermore, over 10% of all U.S. bridges are estimated to be structurally deficient (steel rebar corrosion represents one of the major costs). A glass fiber reinforced plastic rebar has been demonstrated to maintain its mechanical properties beyond 15 years of service, whereas the employment of steel rebars means the structural deterioration can begin in as little as 10 years. These kinds of applications should rather easily justify the pultruded profiles' relatively high initial cost in comparison to steel.

Exel previously said that wind energy applications are expected to grow the fastest and be Exel's single largest customer industry by 2021 (as a matter of fact, the wind energy sector achieved the position already in 2018). The telecommunications industry used to be Exel's largest customer industry for many years. We also note that in addition to these key customer industries' investment cycles, the general composites demand volumes are affected by oil and metal prices (higher prices turning composites more competitive).

Exel is looking for large customers operating in certain industries where it can add the most value in specific end applications

Even though the industry's barriers to entry are relatively low, as evidenced by the large number of small market participants, Exel's positioning and prospects look quite stable in the sense that there is large variation in terms of customer account profitability. In other words, higher margins can be more easily achieved with larger accounts. Exel says some sectors are clearly more attractive than others. The oil and gas industry is associated with some of the highest margins (where Exel's presence increased following the acquisition of Diversified Structural Composites in 2018), construction with some of the lowest, while the automotive sector sits somewhere in between. Moreover, even within sectors the specific end application can significantly affect the account's profitability (e.g. there is wide variation within the automotive sector). In response to these dynamics, the company has done some customer portfolio rationalization in recent years. This kind of optimization and the securing of additional large, high margin accounts are the keys for long-term success. Exel does not strive to be the manufacturer with the lowest costs, although the company has in recent years launched cost-cutting initiatives.

Composites application: Wind turbine blade reinforcements

The U.S. wind power coverage level could catch up to Europe in the coming decade

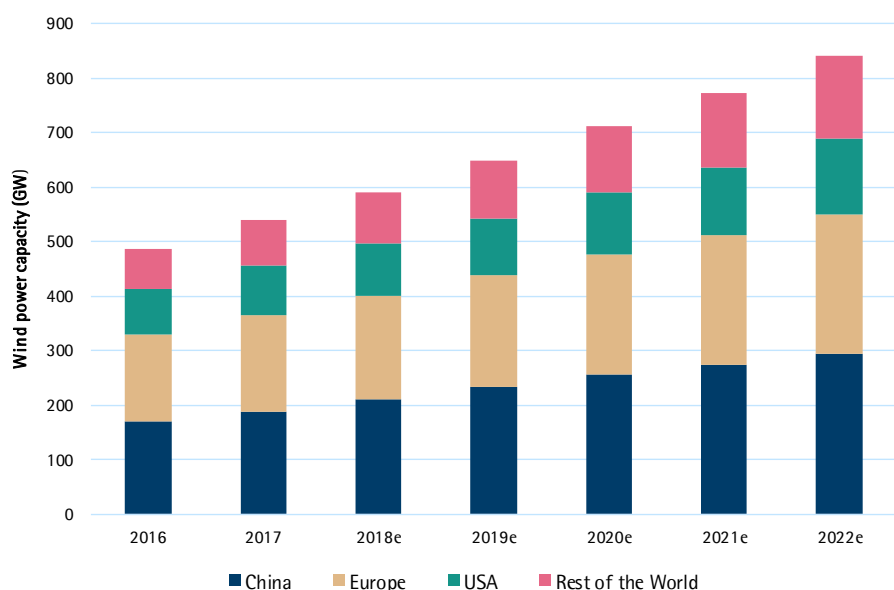
The wind energy industry represents one of the major growth sources for composites as the materials are used for e.g. wind turbine blade reinforcements. Looking at developed markets, Europe is far ahead of the U.S. in terms of wind energy penetration. The U.S. currently has roughly 100GW of installed wind energy capacity. The U.S. Department of Energy has set a target share of 10% for wind energy generation capacity by 2020 (113GW), 30% by 2030 (224GW), and 35% by 2050 (404GW). These figures suggest a capacity CAGR of 7% for the next decade and a 3% CAGR for the two decades thereafter. In contrast, by the end of 2018 Europe had an installed wind farm base amounting to 189GW of wind power capacity, accounting for over 18% of the EU's total installed power generation capacity and covering 14% of average annual electricity demand. European wind energy capacity increased by 7% in 2018. The European Wind Energy Association expects 320GW of wind energy capacity to be installed in the EU by 2030, implying a 4.5% CAGR for 2019-30.

China is the largest market for wind turbine blades and continues to add capacity the most

China continues to add to its considerable wind power capacity base. During the period 2005-10 the country's installed wind power capacity multiplied almost every year, and further expanded at a 25% CAGR during 2010-18. China has already overtaken Europe in terms of installed capacity, the nation having a base of roughly 210GW at the end of 2018. The Chinese government has set a capacity goal of 400GW by 2030 (a 5.6% CAGR for 2019-30), implying a doubling from current levels. The official target for 2050 is 1,000GW. In 2018 Chinese wind turbine installations totaled over 40% global capacity commissions with 19.3GW of added onshore capacity. The 1.7GW offshore capacity increase was a record. The Chinese wind market largely remains in the hands of domestic turbine makers. Consequently, the ballooning Chinese market represents an opportunity for the leading global wind turbine companies, namely Vestas, GE and Siemens Gamesa, who were the only non-Chinese suppliers present in 2018 and together represented only 5% of the new capacity installations.

Global Wind Energy Council expects the wind energy market to achieve a worldwide capacity CAGR of over 9% during 2019-22. Wood Mackenzie projects 8% global onshore wind CAGR for 2017-27 (21% offshore CAGR for the same period).

Figure 9: Global wind power capacity development

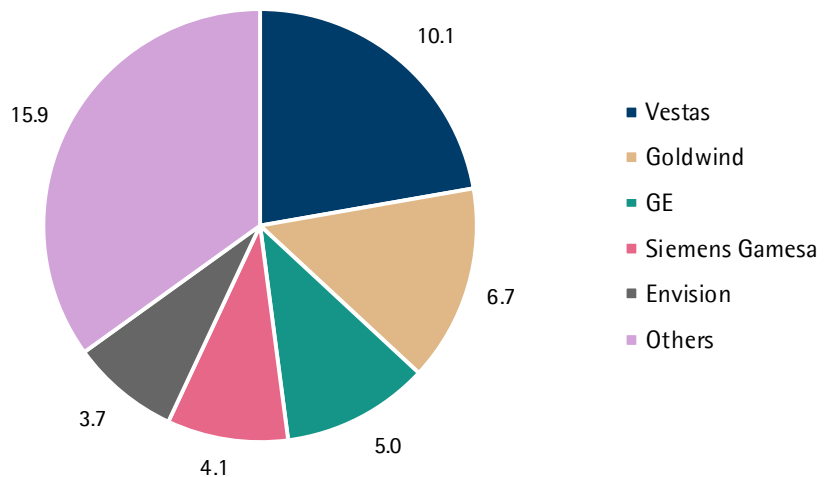


Source: Global Wind Energy Council, Evli Research

The leading global turbine manufacturer has an above 20% market share, whereas the three followers control roughly 10% each

According to Bloomberg New Energy Finance, in 2018 the top four wind turbine manufacturers shared close to 60% of all commissioned onshore installations. The leader, Danish producer Vestas, accounted for over 20% of all the commissions globally. The company's 2018 onshore deliveries amounted to 10.1GW. The revenue from 2018 installations amounted to some EUR 9bn. Vestas estimates that its installed wind turbine base of over 101GW represents about 20% of global wind capacity. Chinese manufacturer Goldwind produced the second-highest volume with 6.7GW, or roughly 15% of global deliveries. Goldwind captured a third of the Chinese market; China represented 95% of Goldwind's sales. GE, the American company, saw to 5GW in 2018, and supplied about 60% of all new U.S. turbines. Siemens Gamesa, based in Spain, supplied onshore installations to the tune of 4.1GW. All in all, 2018 added 45.4GW of onshore wind capacity. With the additional 4.3GW of offshore capacity the worldwide total increase came to 49.7GW. The global commissioning of onshore wind turbines declined by 3% in 2018 (partly due to a slowdown in India and Germany) but is expected to bounce back in 2019 with 60GW of additions, i.e. growing by a third compared to previous year.

Figure 10: 2018 global onshore wind turbine installations by manufacturer (GW)



The offshore wind energy market is gaining traction in the U.S and China

Global Market Insights estimates the offshore wind energy market will surpass USD 60bn by 2024. Currently the largest offshore wind energy farms are in Northern Europe and Germany, but the market is gaining momentum in the U.S. and China as well, the two countries having plans to invest heavily in the offshore wind energy market. The largest sources of offshore wind energy are in the U.K. and Germany, which between them contain two-thirds of the total worldwide installed offshore wind energy capacity. After the first offshore wind farm was completed in North America (Block Island Wind Farm off Rhode Island), the region has been identified as one of the more lucrative ones. China has been evolving towards a market leading position, mostly thanks to strong governmental support. As targeted in the country's 13th five-year plan, China is expected to have a 5GW offshore grid online by 2020.

Bloomberg New Energy Finance estimates Shanghai Electric (Sewind) was the leading supplier of offshore wind energy capacity in 2018 with 720MW of installed capacity. Envision (the second largest Chinese onshore supplier) and Goldwind both installed 0.4GW.

A wind turbine's effective lifespan may stretch to around a dozen years

Wind turbines are expected to have a lifespan ranging between 15 and 25 years. A 2012 study indicates that onshore turbines continue to generate electricity effectively for 12 to 15 years. The report states that a wind turbine will typically generate more than twice as much electricity in its first year than when it has reached the 15-year mark. An onshore turbine's efficiency, as defined by the load factor (the percentage of actual produced electricity compared to the theoretical maximum), is reduced from 24% in the first 12 months of operation to 11% after 15 years. The gradient of decline is even steeper for offshore turbines, as the load factor decreases from 39% in the first year to 15% after 10 years.

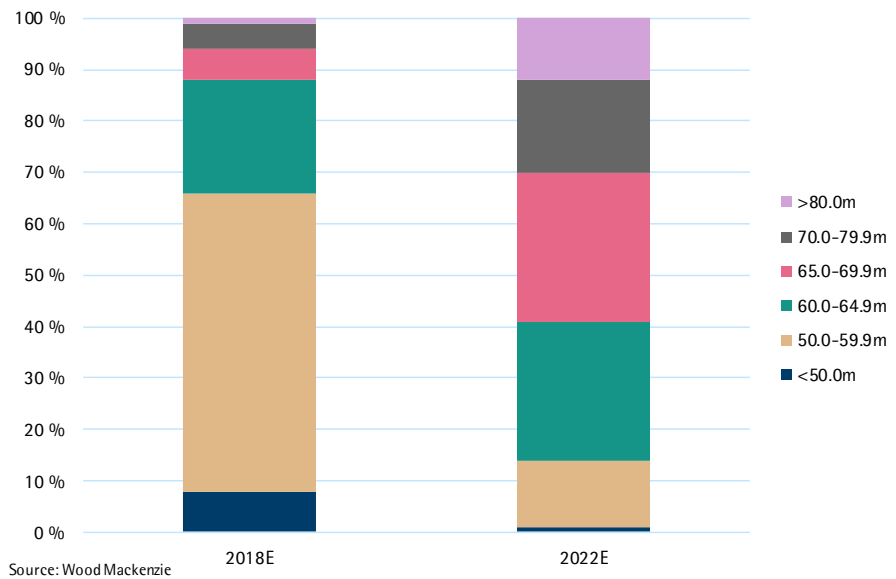
Wind turbine blade manufacturing will increasingly rely on consistent quality composite materials

Acumen Research and Consulting says the global market for wind turbine composite materials could reach a market value of more than USD 12bn by 2023 and is expected to grow at a CAGR of around 9.6% from 2017 to 2023. Global demand for wind turbine composite materials has improved primarily because of growing amounts of funding for wind turbine projects. There is robust demand for advanced-quality wind turbine parts due to e.g. their ability to sustain harsh weather conditions. Moreover, pultruded profiles have been gaining share in recent years due to their superior mechanical properties.

Wind turbines have been increasing steadily in size over the last 15 years, with blades lengthening from previously typical 23 meters to over 80 meters today. In general terms, the longer the blades, the higher the efficiency. The longest blades today weigh above 20 tons each. Turbines are expected to grow larger still, especially offshore ones. For example, GE announced in March 2018 its latest offshore platform, the Haliade-X, featuring a 12MW capacity, 220-meter rotor and a 107-meter blade. GE states a single Haliade-X turbine can power the equivalent of up to 16,000 European homes and is to be prototyped in Rotterdam during the summer of 2019. Larger individual wind turbine constructions mean increased focus on supplier quality from the wind turbine manufacturer's point of view. The blade material needs to be as light as possible without compromising on qualities such as strength, stiffness and durability. Larger turbines create more turbulence, which means increased amounts of stress on the materials, further leading to a higher incidence of breakdowns and maintenance requirements. This kind of technological development should favor carbon fibers.

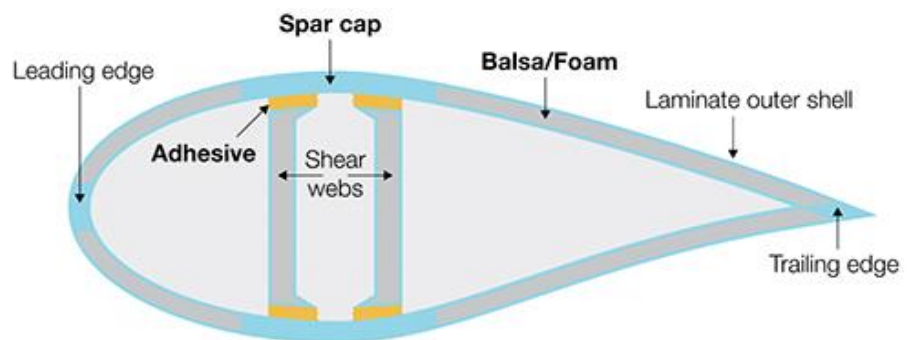
Wood Mackenzie expects wind turbine blades to lengthen at an increasingly rapid pace during the next few years. Whereas in 2018 blades over 65 meters in length accounted for about 12% of all blades, by 2022 their share is expected to reach almost 60%. Such a rapid shift could provide a major demand boost for carbon fiber reinforced component materials.

Figure 11: Global wind turbine blade length breakdown



Exel's wind energy offering currently comprises mainly of wind turbine blade stiffeners, or spar caps (Exel also supplies some other items such as ladders and generator parts). Spar caps are used as reinforcing elements inside the wind turbine blades to improve the shafts' structural performance. According to Wood Mackenzie, the blades make up about 22% of a wind turbine's total installation cost. Spar caps are likely to amount to an increasing slice of a blade's cost as pricier (and stiffer) carbon fibers are gaining share from less pricy glass fibers. Exel says the total blade stiffener market amounts to roughly EUR 1bn in annual sales. Based on the various industry growth estimates we have collected, we expect the market for carbon fiber spar caps to grow at low double-digit rates during the coming years.

Figure 12: An illustrative wind turbine blade profile



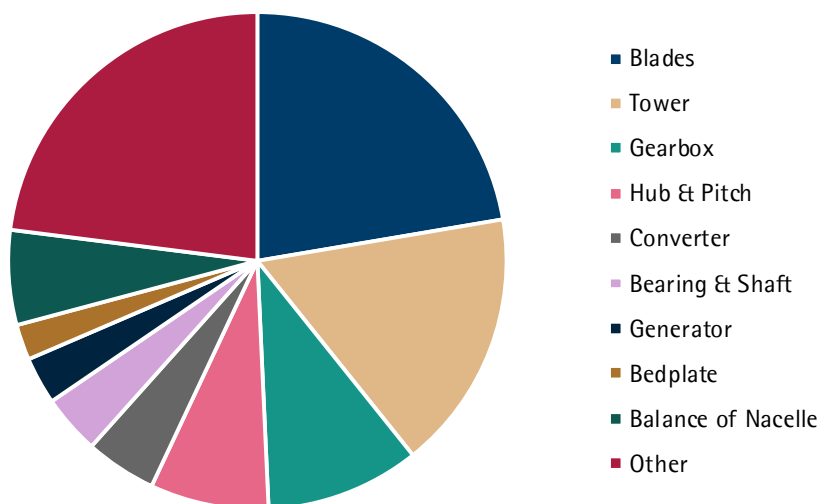
Source: Olympus

There is substantial potential for pultruded profiles to gain a larger share of the market for spar caps

Currently only about 5% of spar caps are manufactured using the pultrusion process (the pultruded spar caps are predominantly made of carbon fiber). Another 5% of blades are prepreg-based, while infusion is the current dominant manufacturing technology. Spar caps are structurally critical parts of wind blades and pultruded profiles offer a consistent level of high quality and low scrap rates. Overall, the pultruded solution offers a lower blade cost relative to infusion as well as savings in capital and operating expenditure. For a typical 80-meter long blade, a pultruded spar cap design can enable overall cost savings to the tune of 9-12%, and further achieving a 10% reduction in

capital expenditure. The overall blade weight can be reduced by 3-7%. The wind turbine OEMs may be seeking their own pultrusion solutions, yet this is bound to be an unnecessarily burdensome task without the relevant expertise and proper positioning within the supply chain. Looking at the competitive dynamics from this point of view, in our opinion companies such as Exel can offer a highly competitive solution by providing high-standard pultruded profiles with specific properties, pricing and supply chain security.

Figure 13: Wind turbine cost breakdown by component



Source: Wood Mackenzie

Carbon fiber, due to its superior strength-to-weight ratio, will likely take further market share as turbine sizes continue to grow

Pultruded carbon fiber reinforced spar caps have been introduced to the market only relatively recently, a little over five years ago. Zoltek, a company active in pultrusion, estimates about 25% of wind turbines globally are now manufactured with carbon fiber spar caps. The figure is bound to trend upward, as the turbine blades keep growing longer. The majority of turbines are still built entirely from glass fiber composites. Carbon fiber is about 30% lighter than glass fiber by volume and has roughly three times the tensile strength and one-and-a-half times the compressive strength of glass (these figures can vary slightly depending on the types of carbon and glass fibers being compared). This means carbon fiber can be used to manufacture spar caps that are lighter, thinner, and have an improved aerodynamic performance.

Testifying to the combined power of wind energy and outsourcing growth trends, TPI Composites, a wind blade manufacturer based in the U.S., was able to grow its revenues by nearly 400% from 2013 to 2018 (the company supplies wind blades to leading wind turbine OEMs such as Vestas, GE and Siemens Gamesa).

While wind energy order volumes can materialize in a lumpy fashion, not unlike in other industries targeted by Exel, the period of field-testing conducted prior to the manufacturing of a large batch of wind blades can stretch to over 12 months.

In 2018 Exel's single largest customer, identified as a company operating in the wind energy industry, generated EUR 12.4m in revenue, the first year such an account held the top-spot. Wind energy now represents Exel's single largest customer sub-segment.

Whereas the wind energy market can be expected to achieve a stable and attractive long-term growth rate, the gross margins are lower compared to industries such as

telecommunications. This is manifested in the fact that Exel's gross margin declined to below 55% (previously quite reliably above 60%) in Q4'18, a period when the company's wind energy volumes grew at an especially rapid pace. This was also due to the DSC acquisition (the U.S. operation had a gross margin more than 10% below that of Exel).

Besides some smaller pultrusion-focused competitors, even certain larger composites manufacturers have begun to address the growing wind energy market. Gurit, for example, has identified wind energy as a strategically important market. In 2018 the wind energy market represented 68% of Gurit's sales. TPI Composites supplies completed blades for wind turbine OEMs. Wind energy currently represents a relatively small market for SGL Carbon (the company focuses on automotive and transportation segments), yet the company has started to develop in-house pultrusion competency to better serve the growing industry. Hexcel mainly produces prepregs for the commercial aerospace industry, yet also offers prepregs as well as pultruded elements for the wind energy sector. Zoltek entered the pultrusion market around the time it was acquired by Toray (in 2013). Zoltek is now a significant supplier of carbon fiber materials to the wind energy market.

We expect Exel's wind energy gross margins to stay relatively low due to stiff competition. Moreover, the manufacturing of wind turbines is dominated by a few large players. So even though blade stiffeners represent only a modest cost as a percentage of the total bill of installing a wind turbine (the blades in whole amounting to some 22%), the relatively commoditized product form and the strong negotiating power of the major wind turbine manufacturers mean the product sub-segment does not hold margin expansion potential.

Composites application: 5G network antennas and stations

The 5G upgrade cycle will lead to denser antenna networks

Current telecommunications networks will be unable to meet future demand for data transmission volumes, and hence a major network upgrade cycle is inevitable. 5G mobile networks are scheduled to roll out from 2020 onwards. 5G will operate at higher frequencies and reduced latencies compared to the current 4G/LTE standard. However, the higher frequency will translate to shorter wavelengths, meaning a decreased range in comparison to the previous longer wave signals. Consequently, a denser network of antennas will be needed to support the 5G signal. A number of additional antennas have to be integrated into city infrastructures on a global basis. Moreover, all urban radio frequency signals inevitably lose momentum as they pass through various materials, an especially pressing problem with shorter wavelengths as they will be diminished more rapidly than longer wavelengths. The problem will not be helped by the increasing prevalence of better insulated buildings.

Composite materials are transparent to radio frequencies, and thus an effective solution for covering 5G antennas. Composites are already used as construction materials in windows and doors, facades and cladding, bridges and bridge reinforcements, street lighting and furniture, and platforms and access structures.

Exel is positioned to capture major order volumes with the advent of 5G

Exel is currently in the process of developing composite light poles, a joint project with various partners aiming to give rise to a concept of network of "smart light poles." In addition to lighting urban areas, the poles will host 5G networks. Besides functioning as mast, architectural casing, weather protection and radome for the 5G antennas and base stations, the poles will be embedded with sensors, information displays, cameras and other devices. The pultruded pole tubes will be manufactured from glass fiber reinforced polyurethane resin. The lightweight composite poles will be easy to assemble and have an extended life compared to steel and wood alternatives. Exel's previous experience from manufacturing antenna radomes and poles for airport lighting systems as well as

structures for GSM, 3G and 4G base stations will come in handy in refining the smart light pole concept to a potentially valuable commercial opportunity.

According to Exel, the total market for composites in the global construction industry was valued at EUR 11.3bn in 2016, whereas the market for 5G built infrastructure is expected to total EUR 160bn by 2025.

For the past ten years, Exel's single largest customer used to come from the telecommunications industry, only to be replaced in 2018 by a wind energy sector operator. While the wind energy segment is expected to continue to grow in a steady fashion, the roll-out of 5G, beginning in 2020, could provide a major boost for this previously largest customer account.

Exel's current telecommunications offering focuses on antenna covers such as radomes, rods and tubes, designed to protect an antenna from the environment without impairing its ability to transmit or receive radio waves. Exel produces antenna profiles with the help of pultrusion and pullwinding manufacturing processes. Glass fiber composites provide the desirable electromagnetic properties as well as qualities like low weight, high strength and stiffness, low thermal sensitivity, weather durability and low maintenance.

Although the telecommunications sector order volumes are very cyclical by nature, the gross margins are also quite high in comparison to more stable industries like wind energy. However, it should be noted that in recent years telecommunications gross margins have decreased from their historically higher levels due to heavier competition.

Composites application: Transportation industry profiles

Stricter emission requirements and additional design requirements are changing the transportation industry. Manufacturers and operators in the transportation industry are looking at composites as a replacement for steel and aluminum parts. Composites offer a cost-effective way to achieve substantial weight reductions while providing strength and improved corrosion resistance. Furthermore, composites can help to reduce manufacturing supply chain complexity. Composite profiles can be used both externally and internally on cars, buses, trams, trains and trucks. The parts can range from ceiling panels to heating ducts, from bus rails to exterior panels.

Composites offer several key benefits over metal parts. Composites are light and thus help reduce overall vehicle weight, enabling greater fuel savings. (A Volvo research team in the U.S. found that using panels made from recycled carbon fiber in conjunction with certain other changes could help reduce a truck's weight by as much as 29 percent). Composites' strength matches that of steel and aluminum and outperforms plastics. As insulators, composites outperform metals by having a warmer feel while lacking the issues metals have with condensation and freezing. Unlike metals, composites are not subject to corrosion. Moreover, composites can stand impacts and bumps better and spring back into shape more easily than metals.

Exel has four transportation sub-categories; bus and coach profiles, train and tram profiles, truck and trailer profiles and automotive profiles. From Exel's point of view, longer and larger (i.e. bulkier) profiles make for clearly more attractive deliveries, meaning the company would prefer to supply panels to trains and buses as opposed to automotive profiles (though there are certain attractive automotive niches such as bumper beams). Mediums of mass transportation can absorb higher volumes of profiles (in addition to the initial delivery of panels, a vehicle such as a train or a tram can support further deliveries during its lifetime due to modularity considerations).

Together with climate change, megatrends such as growing populations and urbanization are driving more sustainable mobility solutions. The International Transport Forum expects the demand for global passenger transport will more than double from current levels by 2050, to 120,000 billion passenger-kilometers (a 2.5% CAGR). The number of cars worldwide is expected to grow to 2.4 billion by 2050 (currently at around 1.1 billion units). Global freight transport volumes are projected to roughly triple by 2050, to over 300,000 billion ton-kilometers (a CAGR of around 3.5%).

Competition

Competition is very fragmented both in the general composites market and the more narrowly defined pultrusion market. Exel is a leading pultrusion market operator with a market share amounting to only a couple of percentage points. Main competitors include e.g. Fiberline (Denmark), Creative Pultrusion (U.S.), Strongwell (U.S.) and Epsilon (France). Epsilon has launched its own trademarked Carboglulam pultrusion process to produce stackable carbon fiber laminate for the manufacture of wind turbine blade spar caps.

Many larger companies can provide solutions competitive with Exel's offering

There are some significantly larger companies that to some extent compete with Exel's current composites offering. Gurit, a Swiss company, manufactures various kinds of composite materials, and places increasing emphasis on wind energy applications. Hexagon Composites, a Norwegian company, manufactures filament winding-based solutions for gas storage in the form of CNG, CHG and LPG cylinders. Hexcel, based in the U.S., focuses on manufacturing prepreg-based carbon fiber composites for the commercial aerospace industry, but also offers solutions for the wind energy sector (prepregs as well as pultruded elements). PolyOne, a polymer materials company based in the U.S., includes a pultrusion business. SGL Carbon, based in Germany, manufactures carbon fibers, composite components and graphite-based products (the company has lately started to develop platform for pultrusion manufacturing organically, after looking for a smaller acquisition target). TPI Composites, a U.S. company, manufactures wind blades, acting as a supplier to wind turbine OEMs such as Vestas and GE (the company has multiplied its top line in recent years by expanding its global manufacturing footprint).

Gurit and Hexagon Composites, arguably the two most relevant listed Exel competitors, are set to grow their 2019 revenues significantly due to recent acquisitions, an observation in line with the view that the global composites market is very fragmented in structure. The composites competitors' larger size also translates into their profitability, as the companies' EBIT margins are, on average, 2-3 percentage points higher than Exel's and are expected to remain so during the years to come even as we model improvement in Exel's profitability.

Table 7: Select composites competitors' key metrics

EXEL COMPOSITES PEER GROUP	Sales (EURm)		Sales growth		EBIT-%			Employees
	2018	2019E	2020E	2019E	2020E	2021E	2018	
Gurit Holding	375	25 %	2 %	8.9 %	9.8 %	9.7 %	2 419	
Hexagon Composites	152	138 %	15 %	8.6 %	9.8 %	11.7 %	920	
Hexcel	1928	11 %	6 %	17.9 %	18.4 %	18.7 %	6 626	
PolyOne	3095	6 %	4 %	8.8 %	9.4 %	10.1 %	6 600	
SGL Carbon	1048	4 %	8 %	6.3 %	8.2 %	8.9 %	5 032	
TPI Composites	904	50 %	19 %	4.8 %	6.4 %	5.3 %	10 600	
Peer Group Average	1250	39 %	9 %	9.2 %	10.3 %	10.7 %	5 366	
Peer Group Median	976	18 %	7 %	8.7 %	9.6 %	9.9 %	5 816	
Exel Composites (Evli est.)	97	7 %	7 %	6.1 %	6.5 %	7.1 %	647	

Source: FactSet, Bloomberg, Evli Research

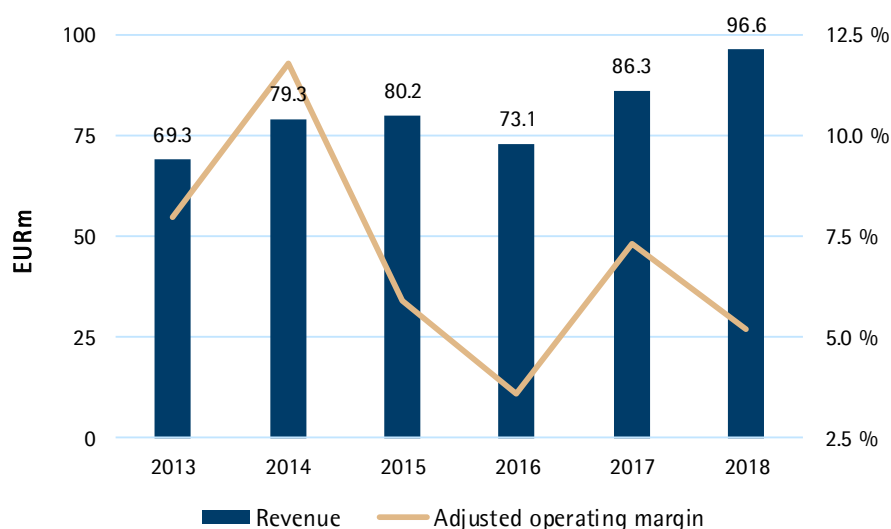
Exel has stated its willingness to pursue composite manufacturing processes other than pultrusion and expand its operations' scope through vertical integration.

Financial review and estimates

Financial performance and characteristics

The company's sales grew at a 6.4% CAGR in 2016-18 (largely due to acquisitions), reaching EUR 96.6m in 2018. Exel's EBIT margin averaged close to 4% in 2015-18 (5.5% in adjusted terms). The company managed to achieve a 7% operating margin in 2017, an exception in the recent series of profit-disappointing years as Exel has been unable to scale up its revenues high enough to compensate for the relatively high fixed cost base. The company's fixed costs, according to our definition including employee expenses and other operating expenses such as heat and electricity, averaged 53% of revenues in 2015-18.

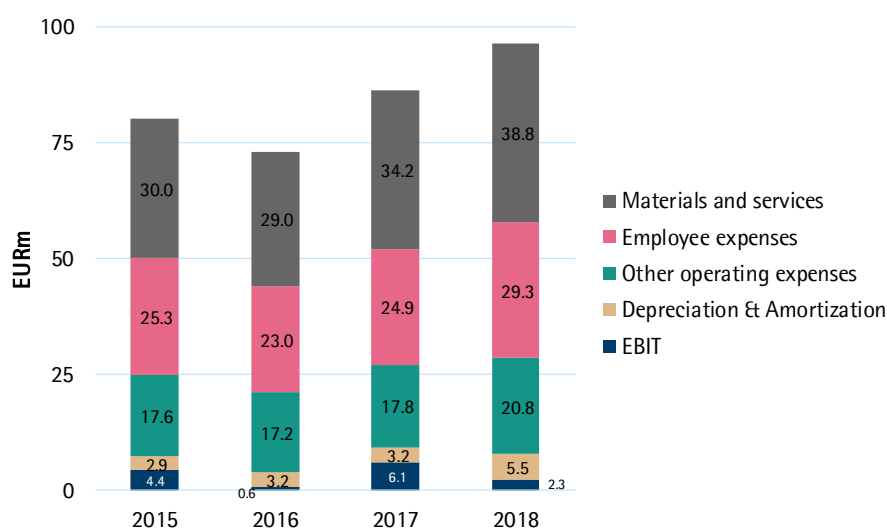
Figure 14: Exel Composites' sales and profitability development



Source: Exel Composites

Exel's Cost of Goods Sold line item is mainly comprised of materials, which we define as the company's only variable cost. The company's gross margin has proved steady, averaging slightly above 60%, testifying how the company is not bearing significant input price risks. (In Q4'18 the gross margin declined to 55% due to DSC's low gross margin and the increased share of more competitively priced wind energy applications). The level of inventories has also developed in a stable fashion, amounting to about 15% of previous twelve-month sales and 19% of total balance sheet. The inventory is mainly comprised of current materials destined to be used for made-to-order batches in near future. Exel also has no need to hoard raw materials such as carbon and glass fibers and synthetic resins as these inputs can be sourced through reliable supply networks. There have been no instances of supply bottlenecks interfering with Exel's manufacturing operations.

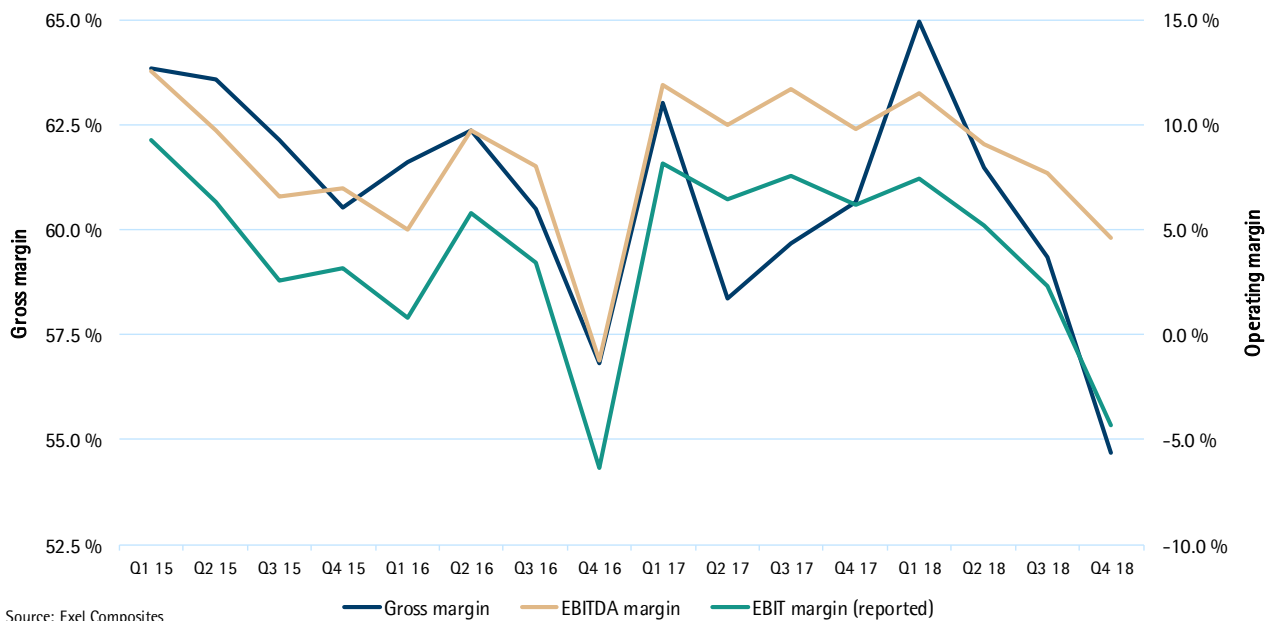
Figure 15: Exel Composites' cost structure split



Source: Exel Composites

Exel's recent years have been unstable in financial terms. EBITDA almost halved in 2016, then in 2017 rebounded to levels firmly above those of 2015, only to fall again to approximately 2016 levels during the latter half of 2018. Meanwhile quarterly sales have hovered quite steadily around EUR 20m (boosted to about EUR 25m since Q2'18 by the DSC acquisition). 2016 revenues declined by 9% due to overall low demand and increased competition in key markets such as telecommunications (in 2016 sales to Exel's then largest customer, a telecommunications company, dropped by some EUR 5m). The company also cited postponed infrastructure projects, and further stated its market shares in key industries remained unchanged. The 2017 bounce was due to higher revenue from key European customers as well as increased operational efficiency. Overall, the revenue picture has been a disappointment as basically no organic growth has materialized since 2015-16. Operating margins have been weak as revenue growth hasn't quite matched the pace of increase in fixed costs.

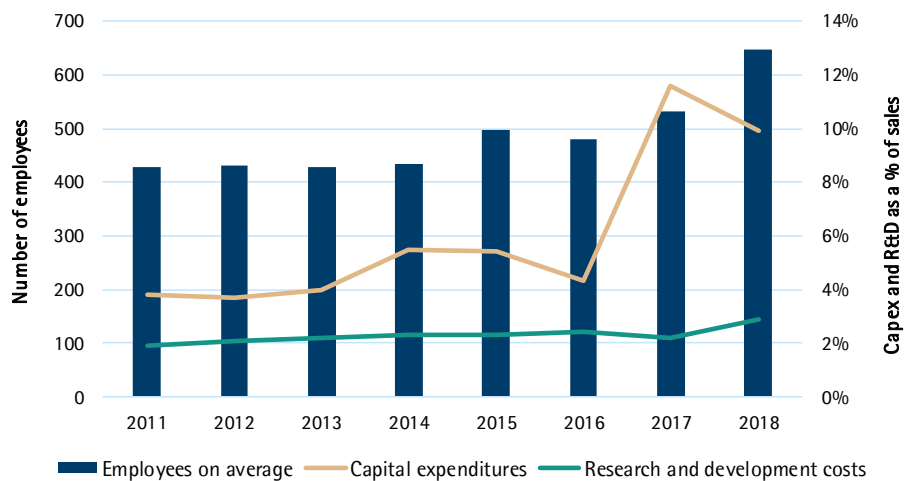
Figure 16: Exel Composites' margin development, 2015-18



We expect operational leverage to drive improving operating margins

Improved operating margins are unlikely to be achieved through any other way than higher volumes. As a result, capacity optimization plays a key role from an operational point of view. Employee expenses are relatively high due to prevalence of manual labor, averaging about 30% of revenue (Exel currently employs close to 700 personnel). Other operating expenses (such as heat and electricity) amount to above 20% of sales. Operating margin improvement should be achieved through higher volumes against this rather fixed cost base. High delivery volumes can translate to very high returns on invested capital due to relatively low fixed capital requirements. Capital expenditures amounted to roughly 5% of sales in 2015-16, then climbed to over 10% in 2017-18 (due to acquisitions). When looking over longer periods of time, capital expenditures have typically amounted closer to 3% of sales. Meanwhile research and development costs have averaged slightly over 2% of revenues.

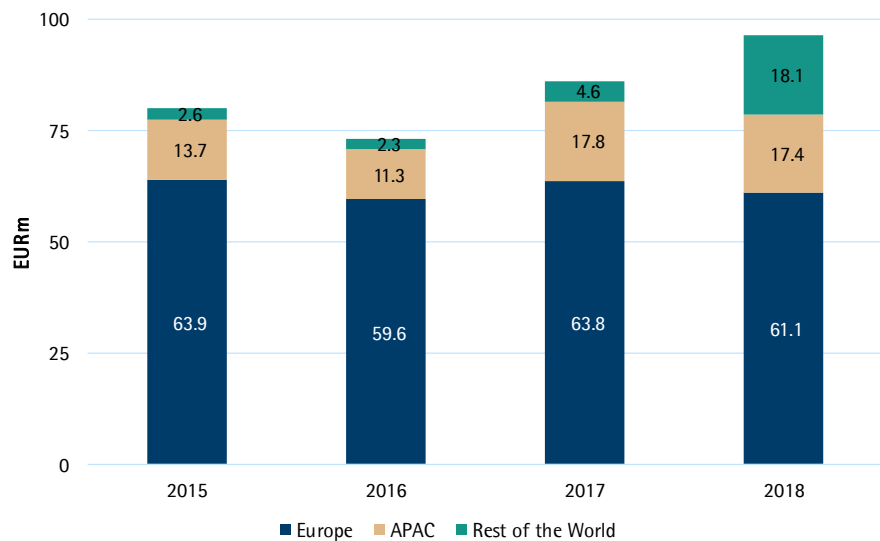
Figure 17: Exel Composites' employees, capex and R&D



Relative sales exposure to Europe has declined, yet we estimate the region to remain crucial with roughly a 60% revenue share

The company's sales to Europe have remained quite stable in recent years, averaging over EUR 60m annually, or about 75% of total revenue. The relative sales exposure to Europe has declined from around 80% in 2015-16 to a bit above 60%. While absolute European sales remained steady in 2018, the relative share dropped to 63% as revenue from Rest of the World geography quadrupled to EUR 18.1m (due to the U.S. acquisition). Exel's reported Rest of the World geographic area mainly captures North America, while the APAC region is mostly comprised of China. The APAC region averaged 18% of sales in 2015-18. We expect this share to grow slightly in the coming years. Regarding the Rest of the World area, we are expecting the geography's slice to grow from the 2018 share of 19% to 22% by 2021. In more practical terms, Europe is to remain a crucial geography for Exel, and we estimate the region to contribute a revenue share just shy of 60% by 2021.

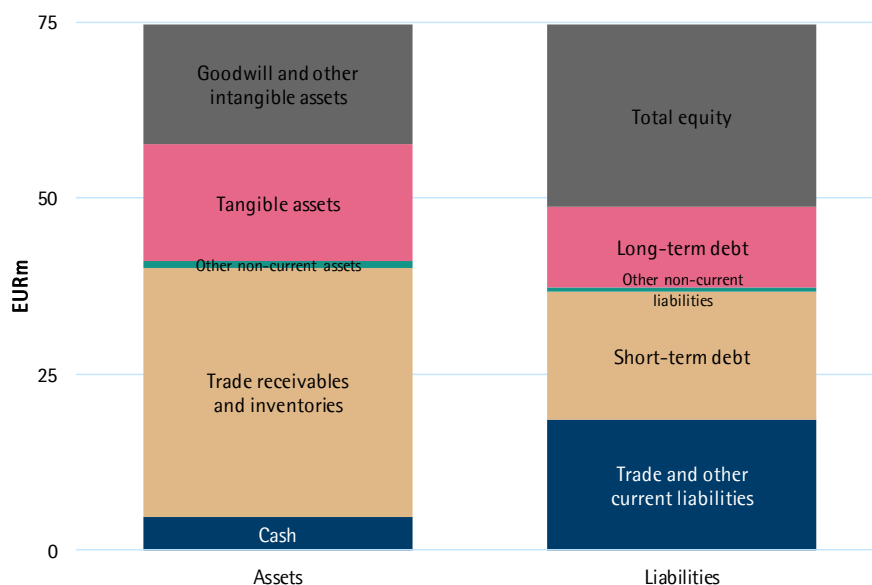
Figure 18: Exel Composites' revenue split by region



Source: Exel Composites

Exel's business model requires only modest amounts of investment in tangible assets. In recent years the company's tangible assets have averaged 24% of total assets and 18% of trailing twelve months' sales. The composite manufacturing process is relatively labor-intensive compared to certain other industrial manufacturing processes.

Figure 19: Exel Composites' balance sheet composition (Dec 2018)

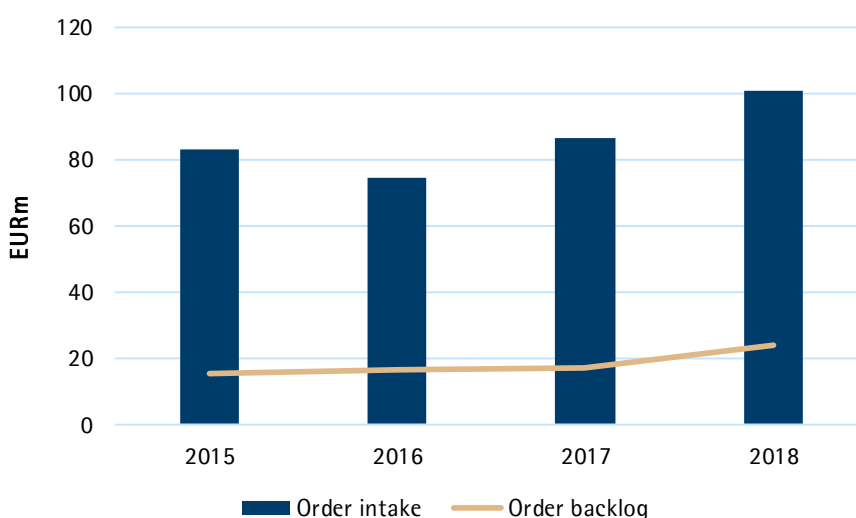


Source: Exel Composites

The company's net working capital has increased recently (mainly due to DSC's sales mix). Wind energy customers operate with more demanding terms of business, so increased share of wind energy sector sales has led to a more challenging working capital position. Whereas in 2016-17 net working capital averaged 10% of sales, in 2018 the ratio climbed to 17%, driven to a large extent by higher trade receivables, but also by elevated inventories.

Compared to many other industries, Exel's order backlog does not provide that much visibility or coverage. The company has stated that its order backlog generally covers only the next 2-3 months. Exel's large customers typically project their demand for the next 6-12 months, yet the actual orders materialize only within weeks of the date of delivery.

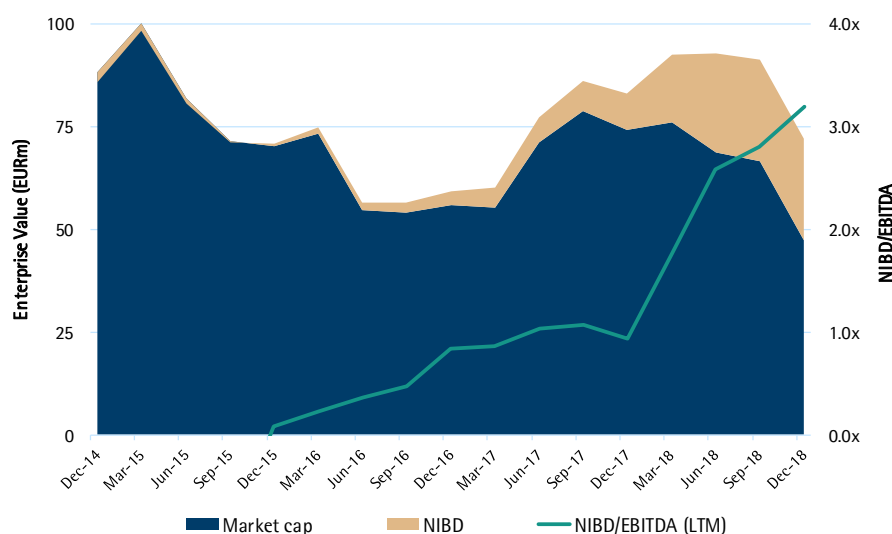
Figure 20: Exel Composites' order intake development



Source: Exel Composites

Exel's current borrowings are comprised of both short and long-term loans from financial institutions. The company relies on shorter term bank loans to finance its working capital needs. Exel's policy has been to negotiate the loan maturities so that they don't all expire within a short period of time. In 2018 Exel's indebtedness increased by almost EUR 20m, largely due to the DSC acquisition. The company's current level of net interest-bearing debt stands at about 3x 2018 EBITDA (net gearing close to 100%). The relatively high current leverage combined with the demands of DSC integration and turnaround in our opinion mean the company is likely not to make major acquisitions any time too soon.

Figure 21: Exel Composites' capitalization development



Source: Bloomberg, Exel Composites

Outlook

The company's outlook for 2019 states both revenue and adjusted operating profit are to increase compared to 2018. Exel Composites retains its long-term financial targets (i.e. aims for revenue growth at a rate double that of the market, adjusted operating margin above 10%, and return on capital employed above 20%).

Estimates

We estimate revenue growth rates separately for Exel's three segments. For the Industrial Applications segment, we expect 5% organic annual growth rate for the next couple of years. The segment grew at a -5.6% CAGR in 2016-18. We expect the Construction & Infrastructure segment to grow at a 10% annual organic rate over the next few years, the higher volumes mainly driven by wind energy applications (we estimate Exel to add EUR 3-5m annually in wind energy revenues). The segment's revenue grew at a 26.1% CAGR in 2016-18 (including acquisitions). Finally, we expect the Other Applications segment to grow at a 3% organic rate over the following years. The segment sales grew at a 11.4% CAGR in 2016-18.

Our segment-specific revenue growth forecasts for 2019-21 translate to organic group sales CAGR of 6.6% for the period.

Table 8: Estimates summary

Exel Composites	2016	2017	Q1/'18	Q2/'18	Q3/'18	Q4/'18	2018	Q1/'19E	Q2/'19E	Q3/'19E	Q4/'19E	2019E	2020E	2021E
Industrial Applications	40.3	48.2	10.0	12.5	8.8	8.6	39.9	10.0	13.1	9.7	9.0	41.9	43.9	46.1
Construction Et Infrastructure	17.5	21.3	6.7	7.5	9.8	12.9	36.9	9.4	8.3	10.3	12.7	40.7	44.7	49.2
Other Applications	15.3	16.7	4.8	5.3	4.6	5.2	19.9	4.9	5.5	4.7	5.4	20.5	21.1	21.7
Revenue	73.1	86.3	21.5	25.3	23.2	26.7	96.6	24.3	26.8	24.7	27.1	103.0	109.8	117.1
<i>change, %</i>	<i>-8.9 %</i>	<i>18.0 %</i>	<i>6.0 %</i>	<i>9.2 %</i>	<i>13.3 %</i>	<i>19.1 %</i>	<i>12.0 %</i>	<i>13.1 %</i>	<i>6.2 %</i>	<i>7.1 %</i>	<i>1.4 %</i>	<i>6.6 %</i>	<i>6.6 %</i>	<i>6.7 %</i>
Gross profit	44.1	52.1	14.0	15.5	13.7	14.6	57.8	14.8	16.4	15.0	16.4	62.6	65.9	69.7
<i>-margin, %</i>	<i>60.3 %</i>	<i>60.4 %</i>	<i>65.0 %</i>	<i>61.4 %</i>	<i>59.1 %</i>	<i>54.7 %</i>	<i>59.9 %</i>	<i>61.0 %</i>	<i>61.0 %</i>	<i>60.5 %</i>	<i>60.5 %</i>	<i>60.7 %</i>	<i>60.0 %</i>	<i>59.5 %</i>
EBITDA	3.9	9.3	2.5	2.3	1.8	1.2	7.8	2.4	2.7	2.5	2.7	10.3	11.1	12.3
<i>-margin, %</i>	<i>5.3 %</i>	<i>10.8 %</i>	<i>11.5 %</i>	<i>9.1 %</i>	<i>7.7 %</i>	<i>4.6 %</i>	<i>8.0 %</i>	<i>10.0 %</i>	<i>10.0 %</i>	<i>10.0 %</i>	<i>10.0 %</i>	<i>10.0 %</i>	<i>10.1 %</i>	<i>10.5 %</i>
Adjusted EBIT	2.6	6.3	1.8	2.0	0.5	0.8	5.0	1.4	1.7	1.5	1.7	6.3	7.1	8.3
EBIT	0.6	6.1	1.6	1.3	0.5	-1.2	2.2							
<i>-margin, %</i>	<i>3.6 %</i>	<i>7.3 %</i>	<i>8.4 %</i>	<i>7.8 %</i>	<i>2.1 %</i>	<i>2.9 %</i>	<i>5.2 %</i>	<i>5.9 %</i>	<i>6.3 %</i>	<i>6.0 %</i>	<i>6.3 %</i>	<i>6.1 %</i>	<i>6.5 %</i>	<i>7.1 %</i>
<i>-margin (reported), %</i>	<i>0.9 %</i>	<i>7.0 %</i>	<i>7.4 %</i>	<i>5.2 %</i>	<i>2.0 %</i>	<i>-4.3 %</i>	<i>2.3 %</i>							

Source: Exel Composites, Evli Research

According to our estimates, Exel's gross margin will decline to 59.5% by 2021 (compared to 61% in 2015-18), due to the increasing prevalence of more competitively priced wind energy applications. Meanwhile we expect employee cost share to decrease to 29% (previously around 30.5% of sales) and other operating expenses, such as heat and electricity, to drop to 20% of 2021 sales (22.5% in 2015-18). In other words, we expect the company's fixed cost share to decline from 53% to 49% of sales by 2021. Based on these projections, we estimate the company's EBITDA margin to improve to 10.5% by 2021 from the recent 8% average.

Valuation

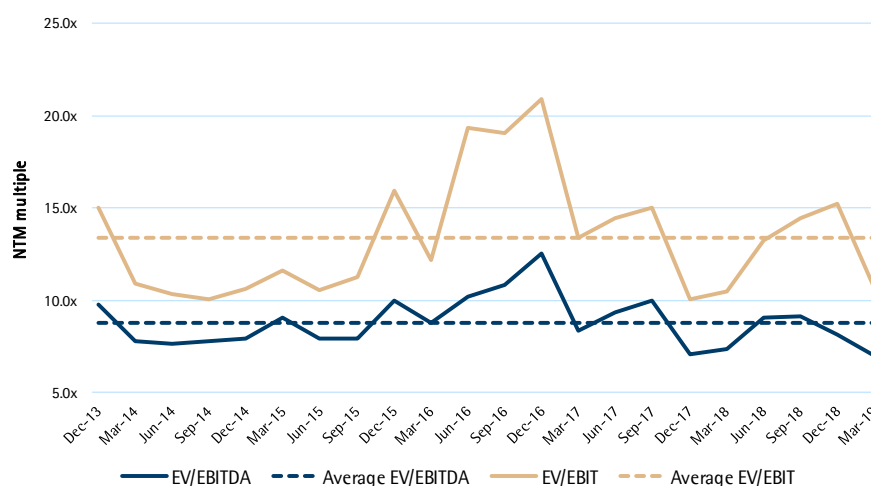
Exel currently trades at relatively low valuation multiples due to recent years' disappointing profitability. The adjusted operating margin has averaged 5.5% during the last four full calendar years, whereas in the more long-term perspective the company has achieved an average EBIT margin of about 9% (the last twenty years). The company's target adjusted EBIT margin remains above 10%. Consequently, in our view Exel's current share price looks attractive when set against the favorable long-term fundamental backdrop underpinning the global composites market. We base our valuation and EUR 5 per share target price on our multiple and DCF analysis.

The company has guided 2019 revenue as well as adjusted operating profit to increase compared to 2018. Exel's long-term financial targets include revenue growth rate twice that of the market, adjusted operating margin above 10%, and return on capital employed at above 20%.

Multiples analysis

In recent years the company's next twelve-month EV/EBITDA and EV/EBIT multiples have averaged about 9x and 13.5x, respectively. Currently Exel trades at around 7x EV/EBITDA and 11.5x EV/EBIT for our 2019E (i.e. at a 20% discount compared to its own recent history average).

Figure 22: Exel Composites' NTM valuation multiple development



Source: Bloomberg

We identify a peer group that comprises of companies somewhat different in comparison to Exel. We are unable to identify any pultrusion-focused public companies. All the peers we identify are several times larger than Exel.

Table 9: Exel Composites' peer group valuation multiples

EXEL COMPOSITES PEER GROUP	MCAP MEUR	EV/EBITDA			EV/EBIT			EBIT-%		
		19	20	21	19	20	21	19	20	21
Gurit Holding	416	8.8x	8.1x	8.0x	11.7x	10.5x	10.4x	8.9 %	9.8 %	9.7 %
Hexagon Composites	688	13.8x	11.4x	8.8x	21.3x	16.2x	11.4x	8.6 %	9.8 %	11.7 %
Hexcel	5152	12.2x	11.3x	10.8x	16.2x	14.9x	14.2x	17.9 %	18.5 %	18.7 %
PolyOne	2121	8.7x	8.0x	7.8x	11.2x	10.1x	9.4x	8.8 %	9.4 %	10.1 %
SGL Carbon	953	8.4x	7.0x		17.4x	12.5x	10.7x	6.3 %	8.2 %	8.9 %
TPI Composites	904	8.8x	6.1x	7.3x	15.1x	9.4x	10.6x	4.8 %	6.4 %	5.3 %
Peer Group Average	1706	10.1x	8.7x	8.6x	15.5x	12.2x	11.1x	9.2 %	10.4 %	10.7 %
Peer Group Median	928	8.8x	8.1x	8.0x	15.6x	11.5x	10.7x	8.7 %	9.6 %	9.9 %
Exel Composites (Evli est.)	49	7.1x	6.5x	5.7x	11.6x	10.1x	8.4x	6.1 %	6.5 %	7.1 %

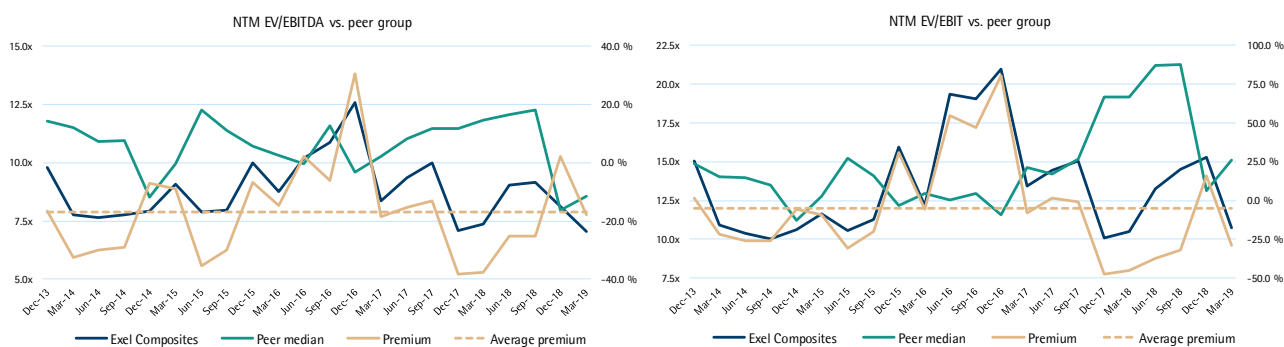
Exel Composites prem./disc. to peer median

-20 % -20 % -29 % -26 % -12 % -21 % -30 % -32 % -28 %

Source FactSet, Evli Research

According to our peer group analysis, the peer group multiples suggest an enterprise value range that would correspond to around EUR 5.5-6.0 per Exel share. In terms of EV/EBITDA '19e, the peer group is currently trading on average at 10x, a multiple which would translate to EUR 6.6 per Exel share. However, we would not give this valuation approach too much weight due to the peer companies' somewhat different profiles (in terms of size and product portfolios).

Figure 23: Exel Composites' NTM multiple development vs. peer group



Source: Bloomberg

During the last five years Exel's NTM EV/EBITDA multiple has averaged slightly below 9x, whereas the peer group median has traded at 10.75x. Exel's current forward-looking multiple, at around 7x for our EBITDA 2019E, represents an approximate 20% discount compared to both its own historic average and the current peer group median (the discount is of similar size in terms of EV/EBIT). Our target price of EUR 5 per share implies a 2019E EV/EBITDA multiple of ca. 8x.

DCF analysis

We acknowledge the challenge in valuing Exel Composites from a DCF perspective as there is very limited visibility regarding the company's upcoming quarters let alone a span of many years. Organic revenue growth is bound to be lumpy, and further acquisitions may or may not materialize.

Our DCF valuation of Exel assumes a 4.5% (organic) revenue CAGR for the next ten years. This is a rather conservative assumption against the company's stated target of growing at a rate double that of the market (which we estimate would imply about a 10% CAGR). In other words, we expect Exel will only grow at a rate roughly equal to market.

We expect Exel to achieve a 7% group EBIT margin should the company manage to turn DSC around to 5% EBIT margin level

We assume Exel (excluding DSC) will achieve a long-term average EBIT margin of 7.5%. This is significantly below the company's target level of above 10% margin (also below the long-term historical 9% average), but clearly above the recent years' 5.5% adjusted average. Exel's EBIT margin averaged 7.5% during the 18-month period 2017-H2'18, just prior to the acquisition of DSC. Regarding DSC, we assume Exel will manage to improve the unit's profitability by addressing the sales and product mix (and thus increase the unit's gross margin by around 10 percentage points to a level slightly below what Exel has historically achieved i.e. 59%), achieve an employee cost share of 31%, and other operating expenses equal to 22% of sales. These measures would bring DSC's EBIT margin to a level of 5%. Consequently, the blended group EBIT margin would then equal 7%.

Conclusion

We expect strong composites volumes to help Exel achieve such organic growth rate (6.6% CAGR for 2019-21) that the company can manage to improve its operating margin from the recent adjusted average of 5.5% to 7% by 2021. We expect the wind energy sector to support significant carbon fiber volume growth in the coming years, however we also note that the telecommunication, transportation and construction

sectors retain their status as industries increasingly resorting to applications based on carbon and glass fibers. According to our view, Exel's gross margin will contract slightly while the increased volumes imply fixed costs as a share of revenue will decrease to 49% by 2021 (previously 52%). We consequently expect operating margins to improve by about 200bps.

We rate the shares BUY based on our assessment of current valuation multiples and the long-term outlook reflected in our DCF valuation. Our target price of EUR 5 per share implies a 2019E EV/EBITDA multiple of 8x (in comparison to historic average of almost 9x and the peer group currently trading at around 9-10x).

VALUATION RESULTS	BASE CASE DETAILS	VALUATION ASSUMPTIONS	ASSUMPTIONS FOR WACC
Current share price	4.11 PV of Free Cash Flow	37 Long-term growth, %	1.5 Risk-free interest rate, %
DCF share value	5.12 PV of Horizon value	49 WACC, %	8.5 Market risk premium, %
Share price potential, %	24.6 Unconsolidated equity	0 Spread, %	0.5 Debt risk premium, %
Maximum value	5.7 Marketable securities	5 Minimum WACC, %	8.0 Equity beta coefficient
Minimum value	4.6 Debt - dividend	-30 Maximum WACC, %	9.0 Target debt ratio, %
Horizon value, %	57.4 Value of stock	61 Nr of shares, Mn	11.9 Effective tax rate, %

DCF valuation, EURm	2018	2019E	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	Horizon
Net sales	97	103	110	117	124	132	138	142	146	149	151	153
<i>Sales growth, %</i>	<i>11.9</i>	<i>6.6</i>	<i>6.6</i>	<i>6.7</i>	<i>6.0</i>	<i>6.0</i>	<i>5.0</i>	<i>3.0</i>	<i>2.5</i>	<i>2.0</i>	<i>1.5</i>	<i>1.5</i>
Operating income (EBIT)	2	6	7	8	9	9	10	10	10	10	11	11
<i>EBIT margin, %</i>	<i>2.4</i>	<i>6.1</i>	<i>6.5</i>	<i>7.1</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.	6	4	4	4	4	4	4	4	4	4	4	4
- Income taxes	-2	-1	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2
- Change in NWC	-9	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	0
<i>NWC / Sales, %</i>	<i>17.4</i>	<i>17.4</i>	<i>17.4</i>	<i>17.4</i>	<i>17.4</i>	<i>17.4</i>	<i>17.4</i>	<i>17.4</i>	<i>17.4</i>	<i>17.4</i>	<i>17.4</i>	
+ Change in other liabs	0	0	0	0	0	0	0	0	0	0	0	0
- Capital Expenditure	-9	-4	-4	-4	-4	-4	-5	-5	-5	-5	-5	-5
<i>Investments / Sales, %</i>	<i>9.7</i>	<i>4.2</i>	<i>3.9</i>	<i>3.7</i>	<i>3.5</i>	<i>3.4</i>	<i>3.3</i>	<i>3.2</i>	<i>3.1</i>	<i>3.1</i>	<i>3.0</i>	<i>3.0</i>
- Other items	0	0	0	0	0	0	0	0	0	0	0	0
= Unlevered Free CF (FCF)	-12	4	4	5	5	5	6	7	7	7	8	109
= Discounted FCF (DFCF)		3	4	4	4	4	4	4	4	4	3	49
= DFCF min WACC		3	4	4	4	4	4	4	4	4	4	55
= DFCF max WACC		3	4	4	4	4	4	4	4	3	3	44

INTERIM FIGURES

EVLI ESTIMATES, EURm	2018Q1	2018Q2	2018Q3	2018Q4	2018	2019Q1E	2019Q2E	2019Q3E	2019Q4E	2019E	2020E	2021E
Net sales	22	25	23	27	97	25	27	25	27	103	110	117
EBITDA	3	2	2	1	8	3	3	3	3	10	11	12
<i>EBITDA margin (%)</i>	<i>11.6</i>	<i>8.7</i>	<i>7.8</i>	<i>4.9</i>	<i>8.1</i>	<i>10.1</i>	<i>9.7</i>	<i>10.1</i>	<i>10.2</i>	<i>10.0</i>	<i>10.1</i>	<i>10.5</i>
EBIT	2	1	1	-1	2	2	2	2	2	6	7	8
<i>EBIT margin (%)</i>	<i>7.4</i>	<i>5.1</i>	<i>2.2</i>	<i>-4.1</i>	<i>2.4</i>	<i>6.0</i>	<i>6.0</i>	<i>6.0</i>	<i>6.4</i>	<i>6.1</i>	<i>6.5</i>	<i>7.1</i>
Net financial items	0	0	0	0	0	0	0	0	0	-1	-1	-1
Pre-tax profit	1	2	1	-1	2	1	1	1	2	6	6	8
Tax	0	0	0	0	-1	0	0	0	0	-1	-1	-2
<i>Tax rate (%)</i>	<i>25.0</i>	<i>33.3</i>	<i>80.0</i>	<i>-7.1</i>	<i>72.2</i>	<i>23.1</i>	<i>21.4</i>	<i>23.1</i>	<i>20.0</i>	<i>21.8</i>	<i>21.8</i>	<i>21.8</i>
Net profit	1	1	0	-1	1	1	1	1	1	4	5	6
EPS	0.08	0.08	0.01	-0.13	0.04	0.08	0.09	0.08	0.10	0.36	0.42	0.50
EPS adjusted (diluted no. of shares)	0.08	0.08	0.01	-0.13	0.04	0.08	0.09	0.08	0.10	0.36	0.42	0.50
Dividend per share	0.00	0.00	0.00	0.00	0.18	0.00	0.00	0.00	0.00	0.20	0.20	0.25
SALES, EURm												
Exel Composites	22	25	23	27	97	25	27	25	27	103	110	117
Total	22	25	23	27	97	25	27	25	27	103	110	117
SALES GROWTH, Y/Y %												
Exel Composites	5.9	9.5	13.2	18.7	11.9	15.3	5.9	7.4	-0.4	6.6	6.6	6.7
Total	5.9	9.5	13.2	18.7	11.9	15.3	5.9	7.4	-0.4	6.6	6.6	6.7
EBIT, EURm												
Exel Composites	2	1	1	-1	2	2	2	2	2	6	7	8
Total	2	1	1	-1	2	2	2	2	2	6	7	8
EBIT margin, %												
Exel Composites	7.4	5.1	2.2	-4.1	2.4	6.0	6.0	6.0	6.4	6.1	6.5	7.1
Total	7.4	5.1	2.2	-4.1	2.4	6.0	6.0	6.0	6.4	6.1	6.5	7.1

INCOME STATEMENT, EURm	2014	2015	2016	2017	2018	2019E	2020E	2021E
Sales	79	80	73	86	97	103	110	117
<i>Sales growth (%)</i>	<i>14.4</i>	<i>1.1</i>	<i>-8.9</i>	<i>18.1</i>	<i>11.9</i>	<i>6.6</i>	<i>6.6</i>	<i>6.7</i>
Costs	-67	-73	-69	-77	-89	-93	-99	-105
Reported EBITDA	13	7	4	9	8	10	11	12
Extraordinary items in EBITDA	0	0	0	0	0	0	0	0
<i>EBITDA margin (%)</i>	<i>15.8</i>	<i>9.1</i>	<i>5.2</i>	<i>10.8</i>	<i>8.1</i>	<i>10.0</i>	<i>10.1</i>	<i>10.5</i>
Depreciation	-3	-3	-3	-3	-5	-4	-4	-4
EBITA	9	4	1	6	2	6	7	8
Goodwill amortization / writedown	0	0	0	0	0	0	0	0
Reported EBIT	9	4	1	6	2	6	7	8
<i>EBIT margin (%)</i>	<i>11.9</i>	<i>5.5</i>	<i>0.8</i>	<i>7.1</i>	<i>2.4</i>	<i>6.1</i>	<i>6.5</i>	<i>7.1</i>
Net financials	0	0	0	-1	0	-1	-1	-1
Pre-tax profit	9	4	1	5	2	6	6	8
Extraordinary items	0	0	-2	0	0	0	0	0
Taxes	-3	-1	0	-1	-1	-1	-1	-2
Minority shares	0	0	0	0	0	0	0	0
Net profit	6	2	-1	4	1	4	5	6
BALANCE SHEET, EURm								
Assets								
Fixed assets	13	15	17	16	21	21	22	22
<i>% of sales</i>	<i>17</i>	<i>19</i>	<i>24</i>	<i>19</i>	<i>22</i>	<i>21</i>	<i>20</i>	<i>19</i>
Goodwill	10	10	10	13	13	13	13	13
<i>% of sales</i>	<i>12</i>	<i>12</i>	<i>13</i>	<i>16</i>	<i>13</i>	<i>12</i>	<i>12</i>	<i>11</i>
Inventory	10	10	9	12	15	16	17	18
<i>% of sales</i>	<i>13</i>	<i>12</i>	<i>12</i>	<i>14</i>	<i>16</i>	<i>16</i>	<i>16</i>	<i>16</i>
Receivables	11	12	10	15	20	21	23	24
<i>% of sales</i>	<i>14</i>	<i>14</i>	<i>14</i>	<i>17</i>	<i>21</i>	<i>21</i>	<i>21</i>	<i>21</i>
Liquid funds	8	8	7	8	5	5	5	6
<i>% of sales</i>	<i>10</i>	<i>10</i>	<i>10</i>	<i>9</i>	<i>5</i>	<i>5</i>	<i>5</i>	<i>5</i>
Total assets	52	54	54	64	75	77	81	84
Liabilities								
Equity	30	31	27	29	26	28	30	34
<i>% of sales</i>	<i>38</i>	<i>38</i>	<i>36</i>	<i>33</i>	<i>27</i>	<i>27</i>	<i>28</i>	<i>29</i>
Deferred taxes	1	1	1	0	0	0	0	0
<i>% of sales</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
Interest bearing debt	6	8	14	16	30	29	28	27
<i>% of sales</i>	<i>7</i>	<i>11</i>	<i>18</i>	<i>19</i>	<i>31</i>	<i>28</i>	<i>26</i>	<i>23</i>
Non-interest bearing current liabilities	16	14	12	18	18	20	21	22
<i>% of sales</i>	<i>20</i>	<i>17</i>	<i>17</i>	<i>21</i>	<i>19</i>	<i>19</i>	<i>19</i>	<i>19</i>
Other interest free debt	0	1	1	0	0	0	0	0
<i>% of sales</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>0</i>	<i>0</i>	<i>0</i>
Total liabilities	52	54	54	64	75	77	81	84
CASH FLOW, EURm								
+ EBITDA	13	7	4	9	8	10	11	12
- Net financial items	0	0	0	-1	0	-1	-1	-1
- Taxes	-2	-1	0	-2	-2	-1	-1	-2
- Increase in Net Working Capital	0	-3	1	-1	-9	-1	-1	-1
+/- Other	0	0	-2	0	0	0	0	0
= Cash flow from operations	9	3	3	6	-3	7	8	9
- Capex	-5	-4	-6	-6	-9	-4	-4	-4
- Acquisitions	0	0	0	0	0	0	0	0
+ Divestments	0	0	0	0	0	0	0	0
= Net cash flow	4	-2	-3	0	-12	3	3	4
+/- Change in interest-bearing debt	-7	3	5	3	13	0	-1	-2
+/- New issues/buybacks	1	1	0	-1	0	0	0	0
- Paid dividend	0	-2	-3	-1	-4	-2	-2	-2
+/- Change in loan receivables	0	0	0	0	0	0	0	0
Change in cash	-2	0	-1	1	-3	0	0	0

KEY FIGURES	2015	2016	2017	2018	2019E	2020E	2021E
M-cap	77	60	78	48	49	49	49
Net debt	1	6	9	25	24	23	21
Enterprise value	78	66	87	72	73	72	70
Sales	80	73	86	97	103	110	117
EBITDA	7	4	9	8	10	11	12
EBIT	4	1	6	2	6	7	8
Pre-tax	4	1	5	2	6	6	8
Earnings	3	0	4	1	4	5	6
Book value	31	27	29	26	28	30	34
Valuation multiples							
EV/sales	1.0	0.9	1.0	0.7	0.7	0.7	0.6
EV/EBITDA	10.7	17.3	9.3	9.3	7.1	6.5	5.7
EV/EBITA	17.7	109.9	14.2	31.5	11.6	10.1	8.4
EV/EBIT	17.7	109.9	14.2	31.5	11.6	10.1	8.4
EV/operating cash flow	24.1	14.6	14.3	-25.9	9.3	8.6	7.6
EV/cash earnings	13.5	18.5	12.6	12.8	8.8	8.0	7.0
P/E	27.3	164.3	18.6	95.2	11.4	9.8	8.2
P/E excl. goodwill	27.3	164.3	18.6	95.2	11.4	9.8	8.2
P/B	2.5	2.2	2.7	1.8	1.8	1.6	1.4
P/sales	1.0	0.8	0.9	0.5	0.5	0.4	0.4
P/CF	23.9	13.2	12.9	-17.0	6.3	5.8	5.3
Target EV/EBIT	0.0	0.0	0.0	0.0	13.3	11.6	9.7
Target P/E	28.9	31.4	19.7	14.1	13.8	12.0	10.0
Target P/B	0.0	0.0	0.0	0.0	2.1	2.0	1.7
Per share measures							
Number of shares	11,897	11,897	11,897	11,897	11,897	11,897	11,897
Number of shares (diluted)	11,897	11,897	11,897	11,897	11,897	11,897	11,897
EPS	0.24	0.03	0.35	0.04	0.36	0.42	0.50
EPS excl. goodwill	0.24	0.03	0.35	0.04	0.36	0.42	0.50
Cash EPS	0.48	0.30	0.58	0.47	0.70	0.75	0.83
Operating cash flow per share	0.27	0.38	0.51	-0.24	0.66	0.71	0.78
Capital employed per share	2.62	2.76	3.15	4.25	4.37	4.50	4.63
Book value per share	2.57	2.24	2.42	2.16	2.35	2.56	2.86
Book value excl. goodwill	1.77	1.43	1.29	1.09	1.27	1.49	1.79
Dividend per share	0.22	0.10	0.30	0.18	0.20	0.20	0.25
Dividend payout ratio, %	92.5	327.2	85.0	428.3	55.3	47.8	50.1
Dividend yield, %	3.4	2.0	4.6	4.4	4.9	4.9	6.1
Efficiency measures							
ROE	9.4	1.3	15.2	1.8	16.0	17.0	18.4
ROCE	12.1	1.8	14.6	4.8	11.4	12.5	14.1
Financial ratios							
Capex/sales, %	5.6	7.8	6.9	9.7	4.2	3.9	3.7
Capex/depreciation excl. goodwill,%	156.6	177.6	66.8	183.2	107.0	107.4	108.0
Net debt/EBITDA, book-weighted	0.1	1.6	0.9	3.2	2.3	2.1	1.7
Debt/equity, market-weighted	0.1	0.2	0.2	0.6	0.6	0.6	0.5
Equity ratio, book-weighted	56.7	49.5	44.7	34.5	36.0	37.8	40.5
Gearing	0.02	0.23	0.30	0.96	0.86	0.75	0.62
Number of employees, average	498	479	532	647	647	647	647
Sales per employee, EUR	161,044	152,610	162,218	149,304	159,196	169,703	181,073
EBIT per employee, EUR	8,835	1,253	11,466	3,555	9,737	11,031	12,856

COMPANY DESCRIPTION: Exel Composites Plc is a technology company which designs, manufactures and markets composite profiles and tubes for industrial applications.

INVESTMENT CASE:

OWNERSHIP STRUCTURE	SHARES	EURm	%
Nordea Bank ABP (Nom. reg.)	2,080,032	8.549	17.5%
Skandinaviska Enskilda Banken AB (Nom. reg.)	1,390,372	5.714	11.7%
Sijoitusrahasto Taaleritehdas Mikro Markka	650,000	2.671	5.5%
OP-Finland Small Firms Fund	498,259	2.048	4.2%
OP-Finland Value Fund	417,449	1.716	3.5%
Phoebus Fund	290,000	1.192	2.4%
Danske Invest Finnish Institutional Equity Fund	265,000	1.089	2.2%
Ilmarinen Mutual Pension Insurance Company	242,733	0.998	2.0%
Matti Suutarinen	231,821	0.953	1.9%
Nelimarkka Heikki Antero	230,495	0.947	1.9%
Ten largest	6,296,161	25.877	53%
Residual	5,600,682	23.019	47%
Total	11,896,843	48.896	100%

EARNINGS CALENDAR

May 03, 2019	Q1 report
July 23, 2019	Q2 report
October 30, 2019	Q3 report

OTHER EVENTS

COMPANY MISCELLANEOUS

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CFO: Mikko Kettunen	Tel: +358 20 7541 200
IR: Noora Koikkalainen	

DEFINITIONS

P/E	$\frac{\text{Price per share}}{\text{Earnings per share}}$	EPS	$\frac{\text{Profit before extraordinary items and taxes} - \text{income taxes} + \text{minority interest}}{\text{Number of shares}}$
P/Sales	$\frac{\text{Market cap}}{\text{Sales}}$	DPS	Dividend for the financial period per share
P/BV	$\frac{\text{Price per share}}{\text{Shareholders' equity} + \text{taxed provisions per share}}$	CEPS	$\frac{\text{Gross cash flow from operations}}{\text{Number of shares}}$
P/CF	$\frac{\text{Price per share}}{\text{Operating cash flow per share}}$	EV/Share	$\frac{\text{Enterprise value}}{\text{Number of shares}}$
EV (Enterprise value)	Market cap + net debt + minority interest at market value – share of associated companies at market value	Sales/Share	$\frac{\text{Sales}}{\text{Number of shares}}$
Net debt	Interest bearing debt – financial assets	EBITDA/Share	$\frac{\text{Earnings before interest, tax, depreciation and amortisation}}{\text{Number of shares}}$
EV/Sales	$\frac{\text{Enterprise value}}{\text{Sales}}$	EBIT/Share	$\frac{\text{Operating profit}}{\text{Number of shares}}$
EV/EBITDA	$\frac{\text{Enterprise value}}{\text{Earnings before interest, tax, depreciation and amortisation}}$	EAFI/Share	$\frac{\text{Pretax profit}}{\text{Number of shares}}$
EV/EBIT	$\frac{\text{Enterprise value}}{\text{Operating profit}}$	Capital employed/Share	$\frac{\text{Total assets} - \text{non interest bearing debt}}{\text{Number of shares}}$
Div yield, %	$\frac{\text{Dividend per share}}{\text{Price per share}}$	Total assets	Balance sheet total
Payout ratio, %	$\frac{\text{Total dividends}}{\text{Earnings before extraordinary items and taxes} - \text{income taxes} + \text{minority interest}}$	Interest coverage (x)	$\frac{\text{Operating profit}}{\text{Financial items}}$
Net cash/Share	$\frac{\text{Financial assets} - \text{interest bearing debt}}{\text{Number of shares}}$	Asset turnover (x)	$\frac{\text{Turnover}}{\text{Balance sheet total (average)}}$
ROA, %	$\frac{\text{Operating profit} + \text{financial income} + \text{extraordinary items}}{\text{Balance sheet total} - \text{interest free short term debt} - \text{long term advances received and accounts payable (average)}}$	Debt/Equity, %	$\frac{\text{Interest bearing debt}}{\text{Shareholders' equity} + \text{minority interest} + \text{taxed provisions}}$
ROCE, %	$\frac{\text{Profit before extraordinary items} + \text{interest expenses} + \text{other financial costs}}{\text{Balance sheet total} - \text{non interest bearing debt (average)}}$	Equity ratio, %	$\frac{\text{Shareholders' equity} + \text{minority interest} + \text{taxed provisions}}{\text{Total assets} - \text{interest free loans}}$
ROE, %	$\frac{\text{Profit before extraordinary items and taxes} - \text{income taxes}}{\text{Shareholders' equity} + \text{minority interest} + \text{taxed provisions (average)}}$	CAGR, %	Cumulative annual growth rate = Average growth per year

Important Disclosures

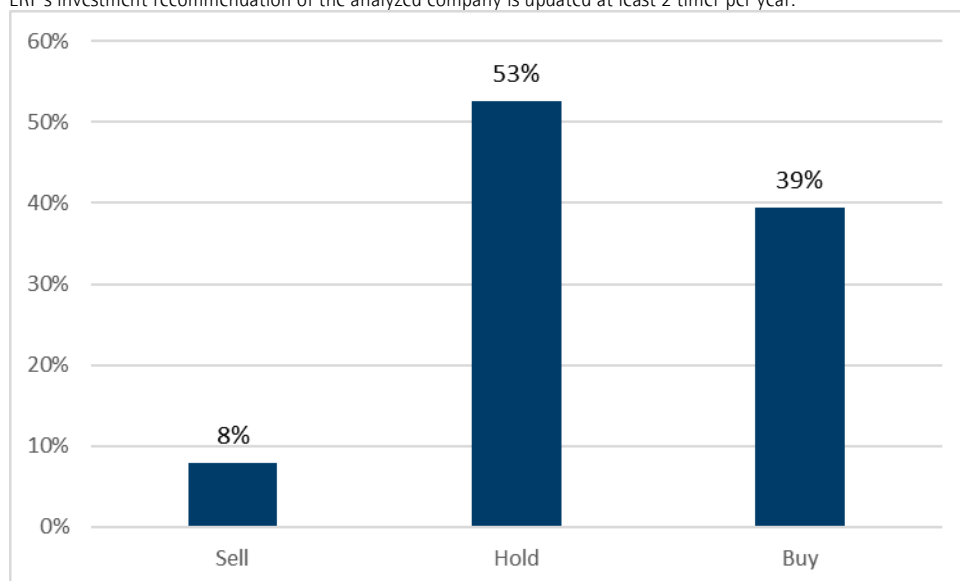
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Target price compared to share price	Recommendation
< -10 %	SELL
-10 - (+10) %	HOLD
> 10 %	BUY

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

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