

Elektrobit

Annual review

11/2014

inde
res.

Expensive but worth it

We have updated our company report of Elektrobit and raised our target price to 3.25 EUR (from 2.75 EUR). The value is derived from our sum of the parts analysis. We find the valuation of EB to be high at current share price, but it is justified by the excellent outlook of Automotive and the progress of the transformation in Wireless.

Automotive is the value driver

Clearly the biggest value driver of EB is the Automotive business, which has been developing in an excellent way. It has taken a giant leap forward in profitability (H1'14 EBIT 9.8 % vs. H1'13 1.9 %) that used to be clearly the biggest drawback of the business. This potential has been known, but it has been seriously doubted due to the relatively poor track record. Now it has started to realize and has driven the value of the business to a completely new level. Rapid sales growth (>20%) combined with improving margins is an excellent combination for rapid earnings growth, which again is visible in the acceptable valuation. We believe that eventually Automotive has the potential to reach 15 % EBIT margin (2014e: 10.3 %), but we don't forecast this to happen at this point. In general Automotive's outlook is solid; the market is expected to grow >6% annually and the company is in an excellent position to take advantage of this with its JV with Audi (part of Volkswagen Group), strategic co-operation with Daimler and otherwise strong references (including BMW and Ford). The entry barriers for the business are also high, making the strong position more valuable.

Wireless is going to come out stronger from the transformation

Wireless is still going through a painful transformation. The outcome of this transformation should be a more product based and more scalable business model. However, this is not a quick process and in the meantime the profitability has been and is expected to remain relatively low. The biggest question about the whole plan is EB's ability to make a breakthrough in the international markets for defense and authorities products. We still don't give a high valuation to the traditional R&D services business, where a sustainable competitive edge is very difficult to achieve, the margins are generally quite low and competitive situation is challenging. However, we do see a lot potential in products for the defense and authority markets and are willing to give them significant value.

Sum of the parts justifies our target price, but the valuation is high

Our main valuation method for EB is sum of the parts (SOTP), which is supported by traditional multiples and DCF. We believe that Automotive can now be valued around 325 MEUR (76 % of the total value) due to the rapid growth, excellent position in an attractive business area, improving margins and solid outlook. This means that EV/EBIT of 15x with our 2015 earnings estimates that already include a significant improvement compared to 2014. There's a clear premium against peers (median EV/EBIT 2015e only 10x), so Automotive has to continue outperforming them with a wide margin as it has done in the past few years. We give the Wireless segment a value of 60 MEUR, which doesn't require a major breakthrough in the product side, but does require international product sales and the business to return to decent margins. EB's balance sheet is solid and includes 37 MEUR (2014e) of cash, which is the last piece in our sum of the parts valuation. These sum up to 3.25 EUR per share, which is also our target price. In general we want to point out that the current valuation of EB is high. While we find it to be justified, there is no safety margin for any mistakes. The expectations are high, which is why we consider EB to be a high risk investment right now.

Analyst

Juha Kinnunen
+ 358 40 778 1368
juha.kinnunen@inderes.fi

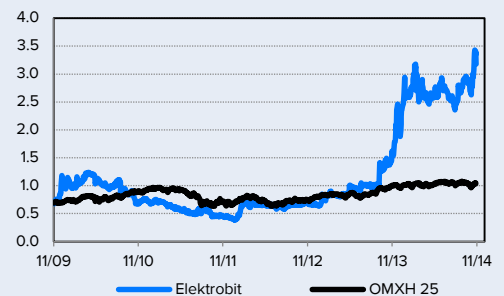


Recommendation

Accumulate



Target price: 3.25 €



Share price (last close) **3.18 EUR**

Price range, LTM **1.53-3.43 EUR**

Key figures

	2013	2014e	2015e
Net sales	199	224	259
- growth-%	15 %	13 %	16 %
EBIT	8.1	17.0	23.7
- EBIT-%	4.1 %	7.6 %	9.1 %
Pre-tax profit	7.2	16.3	23.5
Net earnings	30.9	11.6	18.1
EPS	0.24	0.08	0.14
DPS	0.02	0.05	0.08
- Payout-%	8 %	57 %	56 %
P/E	11.2	33.9	21.8
P/B	4.2	4.3	3.9
P/S	1.7	1.8	1.5
EV/EBIT	38.0	21.1	14.9
EV/EBITDA	18.0	14.0	10.9
EV/Sales	1.5	1.6	1.4
Dividend yield-%	0.8 %	1.7 %	2.6 %

Source: Inderes (valuation with the share price of 3.00 €)

Table of contents

1. Investment case summary.....	1
2. Business segments in a nutshell	3
3. Automotive - now at a different level	4
3.1 Overlook of the automotive software industry.....	7
Market growth and trends.....	7
R&D cycle and business dynamics	8
3.2 EB has a solid position in the field.....	12
3.3 EB's different offerings in Automotive	13
3.4 e.solutions – Joint Venture with Audi.....	14
3.5 Competitive situation of Automotive.....	16
3.6 Earnings potential and future estimates	18
4. Wireless - looking for the breakthrough.....	22
4.1 The business areas and main offerings	25
4.2 Core of Wireless: R&D services.....	28
4.3 Future potential is in the defense products	29
4.4 Competitive situation in different segments	30
4.5 Earnings potential and future estimates	31
5. Balance sheet is solid.....	35
6. Group cost structure and profitability	38
7. Valuation: sum of the parts.....	40
7.1 Automotive has to deliver also in the future	41
7.2 Wireless - potential is difficult to value	43
7.3 Consolidating the value	44
8. The biggest risks and possibilities	45
P&L statement, balance sheet and DCF-model.....	46
Profit & Loss statement	46
Balance sheet.....	47
DCF-valuation	48
Summary information	49
Disclaimer	50

1. Investment case summary

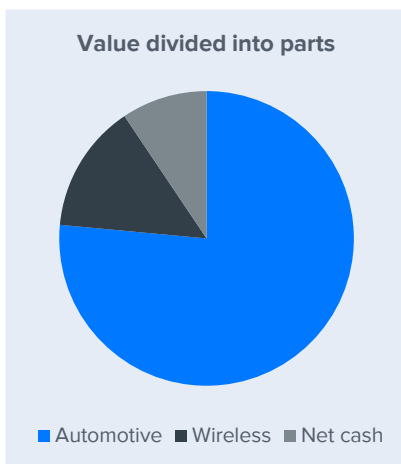
EB's Automotive business has outperformed all expectations during the last 12 months. The company has been able to bring out the potential of the business and now it's also visible in earnings.

EB's share price has skyrocketed over 150 % in last 12 months. This can be justified by the solid performance of Automotive. At the same it's important to note that the expectations for the company are now also in a completely new level.

Our investment case relies heavily on Automotive, which is clearly the value driver of the share. We aren't convinced about the Wireless business, but do see the potential of the product based business.

Our main valuation method for EB is sum of the parts (SOTP). We believe that Automotive can now be valued around 325 MEUR due to the rapid growth, improving margins and solid outlook.

We give the Wireless segment, which is currently in transformation, a value of 60 MEUR. This doesn't require a major breakthrough in the product side, but does require significant product sales and a return to at least decent margins.



Elektrobit (EB) has clearly exceeded both our expectations and those of the markets during the 18 months. The company has been able to transfer the potential of the Automotive business segment into a reality through the significant profitability improvements and solid earnings. While the Wireless business segment continues to struggle, it has still shown promise with the renewed strategy that is more focused on scalable products.

During the last 12 months EB's share price has skyrocketed over 150 %. While this has been justified by the fundamentals (EBITDA has grown over 200 % from FY'12 to FY'14e), it's natural that also the expectations towards the company have also risen dramatically. EB is no longer a case of hidden potential at least when it comes to the Automotive business - strong earnings growth has to continue in order to justify the current share price. The visibility to EB's future is limited, so the high expectations also contain relatively high risks. However, we expect the positive momentum to continue and are therefore willing to accept the current high valuation level of the share.

Our investment case relies heavily on Automotive, which is clearly the value driver of the share. It's already dominant both in terms of earnings and value, but it also has a clearly better outlook and a solid growth path. We are assigning high valuation multiples and a clear premium against peers to Automotive. We aren't convinced about the Wireless business, but do see potential in products for the defense and authority markets. EB's balance sheet is solid and includes 37 MEUR (2014e) of cash, which is a part of our sum of the parts valuation.

Automotive is the value driver

Clearly the biggest value driver of EB is the Automotive business, which has been developing in an excellent way. It has taken a giant leap forward in profitability (H1'14 EBIT 9.8 % vs. H1'13 1.9 %) that used to be clearly the biggest drawback of the business. This potential has been known, but it has been seriously doubted due to the relatively poor track record. Now it has started to realize and has driven the value of the business to a completely new level. Rapid sales growth combined with improving margins is an excellent combination for quick earnings growth, which again is visible in the acceptable valuation. We believe that eventually Automotive has the potential to reach 15 % EBIT margin. In our opinion Automotive business can now be valued around 325 MEUR, while we valued it only at 200 MEUR in the beginning of 2013.

Wireless is in transformation phase

The Wireless business segment hasn't been progressing in the same way. Wireless is still going through a painful transformation, where the end result should be more product based and more scalable business model. However, this is not a quick process and in the meantime the profitability has been and is expected to remain relatively low. The biggest question about the whole plan is EB's ability to make a breakthrough in the international markets for defense and authorities products. We still don't give much value to the traditional R&D services business, where a sustainable competitive edge is very difficult to achieve, the margins are generally quite low and competitive situation is challenging. We give the Wireless segment a value of 60 MEUR, which doesn't require a major breakthrough in the product side, but does require international product sales and the business to return to at least decent margins.

Summary of the key elements of our investment case

Automotive

Wireless

Value Drivers

1. Strong market position
2. Solid track record in R&D services
3. Huge growth potential within the market and large with the market
4. High entry-barriers for new competitors
5. Continuing profitability improvements

1. Product sales growth - international breakthrough of the defense products
2. Good opportunities when new appliances are going to be connected
3. Improving the profitability of the R&D services business

Risks & Challenges

- Availability of high-quality resources (personnel) could limit the growth
- Weak track record in profitability prior to last 12 months
- Limited pricing power against the very large clients in services
- Possibility of new large companies entering the market with force

- International breakthrough requires an establishment of solid sales network and becoming a reliable and well-known supplier in the sector
- High dependence on biggest clients (e.g. case TerreStar)
- Weak financial track-record
- Limited pricing power in services
- Unstable project business

Potential

Automotive's unexploited potential is still huge. The market is growing rapidly and EB has a good position in it. We also believe that there's still room for improvement in profitability, so the earnings growth is expected to be fast.

If the new products would make a breakthrough to a very competitive and massive defense sector, they could be very valuable for EB. However, major success is still a long shot. The traditional R&D business has only a limited potential.



We see some upside in the share due to rapid earnings growth of Automotive, but note that high expectations are already priced in.

Recommendation

Accumulate

Target Price

3.25 € (next 12 months)

ELEKTROBIT

P/E (2015e)	22x
EV/EBITDA (15e)	11x
P/B (2014e)	4.3x

BUSINESS SEGMENTS

	Value (EV)	EV/EBIT
Automotive	325 MEUR	15x (2015e)
Wireless	60 MEUR	23x (2016e)

2. Business segments in a nutshell

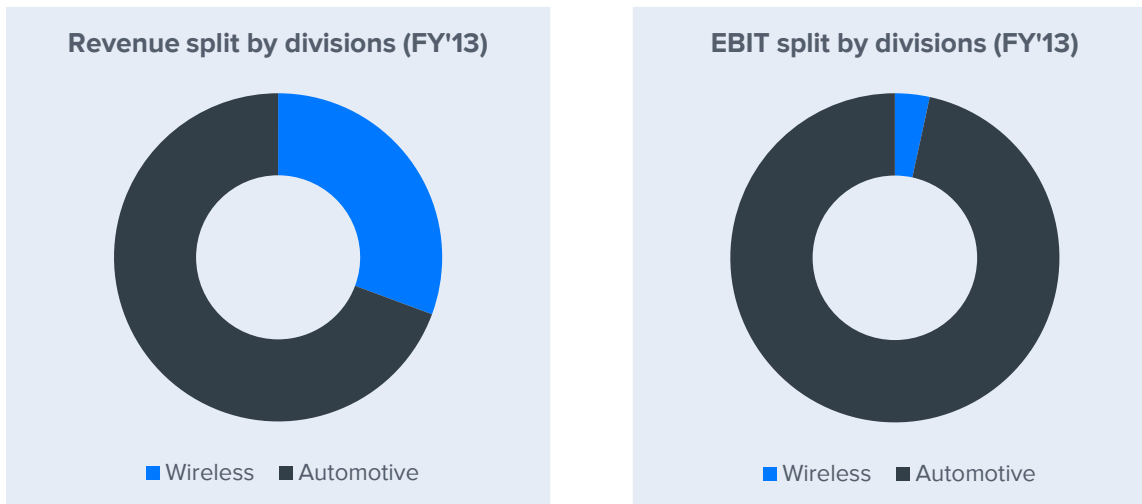
EB develops advanced and demanding technology specializing in embedded software and hardware solutions for the automotive industry and wireless technologies.

Company's business is divided in two different business segments: Automotive and Wireless.

Elektrobit (EB) develops advanced and demanding technology specializing in embedded software and hardware solutions for the automotive industry and wireless technologies. Company's business is divided in two different business segments: Automotive and Wireless. Within these business segments that have very little synergies between each other at least for now, EB has a mixture of service business and product based business.

The value of EB is driven by Automotive, which is clearly the more important business segment for the company. It has been developing exceptionally during the past few years and also has excellent prospects for the future. We expect Automotive's net sales to be around 170 MEUR and EBIT 17.4 MEUR in 2014. At the same time Wireless has been struggling; the segment is currently going through a transformation process and the outlook is also relatively uncertain. Still, we do see significant potential also in Wireless, especially in the product based business that is still in an early phase. In 2014, we expect the net sales of Wireless to be around 54 MEUR and EBIT slightly negative.

Revenue and EBIT of EB's two business segments



Source: Inderes

EB Automotive offers in-car software products and development services for the automotive industry.

EB Wireless offers product development services as well as products and product platforms for defense and public safety markets as well as for industrial use.

EB Automotive business segment offers in-car software products and development services for the automotive industry. In addition to the development of products, the company specializes in product development services and consulting for the automotive industry, supplying implementations of serial software solutions for a broad range of AUTOSAR and FlexRay, Infotainment, Navigation, HMI and Driver Assistance systems. EB Automotive serves car manufacturers (OEMs), car electronics suppliers and automotive chipset suppliers.

In the Wireless business segment EB offers product development services and customized solutions for wireless communications markets and for companies needing wireless connectivity for their products. In addition to this, EB Wireless offers products and product platforms for defense and public safety markets as well as for industrial use.

3. Automotive - now at a different level

EB Automotive offers a range of standard software products and professional tools that support the whole process of the in-car software development.

The offering includes secure & safe technologies and solutions for Car Infrastructure and Driver Assistance, Infotainment solutions containing navigation and HMI technologies being already now connected.

EB Automotive has almost two decades of experience in the business area and during this time it has established itself internationally as one of the important suppliers of embedded software solutions for the automotive industry. In Automotive the entrance barriers for new competitors are high.

EB Automotive has strong references and important strategic partnerships with Audi and Daimler.

EB Automotive has excellent long term growth drivers behind it. The amount of electronics inside cars, their complexity and software needed to control them is growing fast. Through joint venture with Audi, EB also has an excellent position to grow inside the massive Volkswagen Group.

We value EB Automotive business currently rough at 325 MEUR (EV). This gives it an EV/EBIT of 15x with FY'15 estimates, which is high but justified by the fast growth EB Automotive. Automotive could also be an acquisition target for a bigger player and then the price tag would probably be much higher.

EB Automotive business segment offers a range of standard software products and professional tools that support the whole process of the in-car software development. EB offers software products and R&D services for carmakers, car electronics suppliers and other suppliers to the automotive industry.

The offering includes secure & safe technologies and solutions for Car Infrastructure and Driver Assistance, Infotainment solutions containing navigation and HMI technologies being already now connected. EB creates customized solutions for the automotive industry by combining its software products and R&D services. EB's software products include EB street director navigation software, EB GUIDE HMI development and speech dialogue platform, EB tresos product line of software components used in ECUs and tools for their configuration and EB Assist product line with tooling and a software development kit for driver assistance solutions. These software products generate license fees and are typically combined with R&D services for customized solutions.

EB Automotive has almost two decades of experience in the business area and during this time it has established itself internationally as one of the important suppliers of embedded software solutions for the automotive industry. EB Automotive's references include companies like Audi, BMW, Daimler, Ford and Fiat, but it has been doing business with most of the large OEMs in the automotive business. One very interesting and important part of EB is its joint venture with Audi, which is part of Volkswagen Group. EB Automotive owns 51 % of e.solutions GmbH, while 49 % is owned by Audi Electronics Venture GmbH (a 100% subsidiary of Audi AG). EB Automotive also has a partnership with Daimler focusing on developing Daimler's embedded driver assistance software, meaning that EB Automotive has the flexibility to work with different companies in an attempt to find the best technologies in the industry.

EB Automotive has excellent long-term growth drivers behind it. For a still relatively small player, yet already well-established in the field, there are still vast growth opportunities in the sector. The amount of electronics inside cars, their complexity and software needed to control them is growing fast. Very important industry trend, where hardware and software is separated, is also currently in action. This creates more opportunities for EB Automotive and we believe that the segment can continue its high growth rates also in the future. Through joint venture with Audi, EB is in an excellent position to grow inside the Volkswagen Group that is one of the biggest car manufacturer in the world.

In Automotive the entrance barriers for new competitors are very high especially in the safety critical areas Car Infrastructure (CIS). Due to high complexity and connection within different systems, the barriers are high also in infotainment. EB has 14 year experience in security solutions for the industry. This is why we believe EB to be in an excellent position to take advantage of the growth opportunities. However, it's worth pointing out that there are some really big challengers arriving to the field current. These include Google and Apple; Microsoft has been in the field for a long time at least in some degree.

We believe that the biggest weaknesses of Automotive are the limited pricing power and scalability of the business, which is relatively weak in R&D services. The amount of license fees therefore correlates strongly with the profitability of the company and the visibility to the license sales is limited.

The key elements of Automotive

Basics

EB Automotive business segment offers R&D services for auto manufacturers and their Tier 1-suppliers as well as a range of essential technologies, platform products' and professional tools that support the whole process of the in-car software development. The technologies and platform products need to be customized, as there are no standardized hardware platforms available amongst the car industry.

We estimate that around 25 % of Automotive's net sales derive from software sales (license fees). This is the most scalable and therefore the most attractive part of the business. The rest of net sales (estimate 75 %) come from services, where the scalability is limited and the price pressure significantly higher. Minor part of EB's net sales are directly related to the sales volumes of the cars that the company has worked with.

Profitability

EB Automotive's track record regarding profitability was poor until the year 2013. The cumulative EBIT of 2010-2012 was 6 MEUR (2.1 % of net sales), when the EBIT of 2013 was 8.5 MEUR (6.2 % of net sales). The company was clearly prioritizing sales growth over profitability and might still be doing this to some extent, but now it seems that the business has found the critical mass and is able to produce solid results while growing. We believe that the business could reach EBIT-% of 15 % or even higher in a bull scenario (FY'14e EBIT-% 10.3 %), but this probably would require a larger share of scalable business.

Growth potential

The growth potential of the business is huge and in this regard also the track record is solid; during the last five years (from 2007 to 2014e) net sales have increased to 2.7 times the original. Due to the company's strong position in Volkswagen Group as well as many other major car manufacturers, we believe that the growth of Automotive will clearly exceed the market growth. The automotive electronics market is expected to grow over 6 % annually in the coming years. Automated driving has become a new interesting area that is also relevant for EB Automotive.

Potential & risks

We see very significant potential in the Automotive business. If the company can raise its profitability further, the earnings growth will exceed the already rapid sales growth and the value of Automotive will only increase as the company improves its position in an attractive market. Especially we see potential in scalable software products, where the margins can be in a whole another level than in traditional service projects.

Automotive still has limited pricing power and scalability of the business is relatively weak in R&D services. The biggest risk we see is that the currently EBIT-% level, which is at a clearly all-time high level, eventually turns out to be an abnormal. This could be e.g. higher revenues deriving from car sales volumes. In addition to the typical business risks we see some threats in the horizon when it comes to the competitive landscape; giant companies like Google, Apple and Microsoft are increasingly interested in the automotive market. If there would be more standardization in the field, they could change the whole dynamics of the software business.

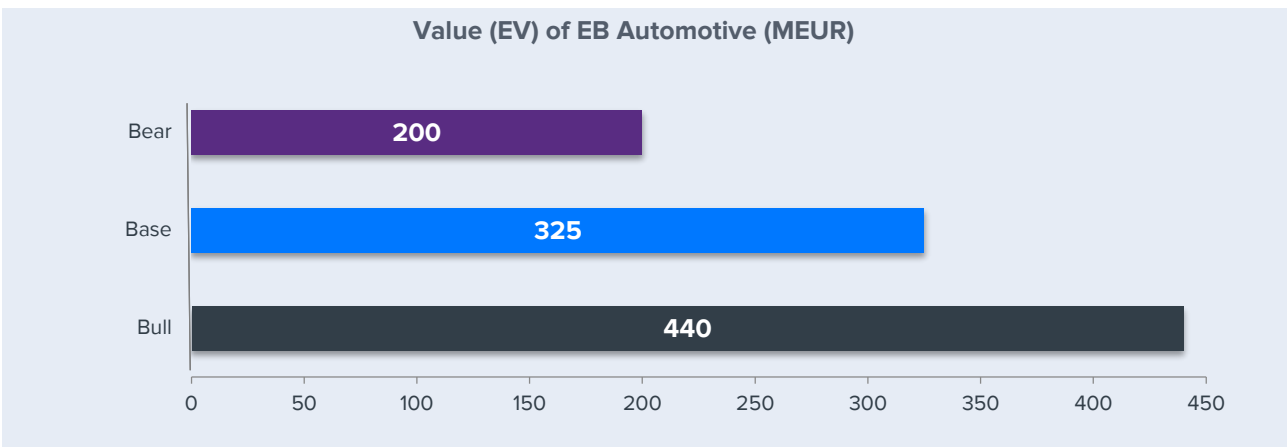
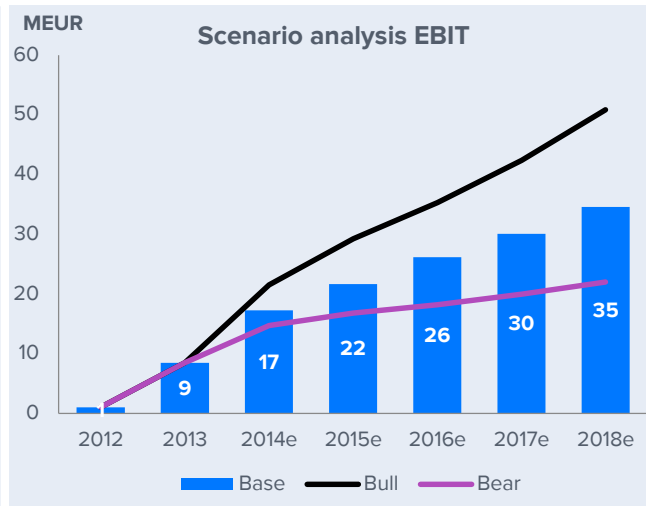
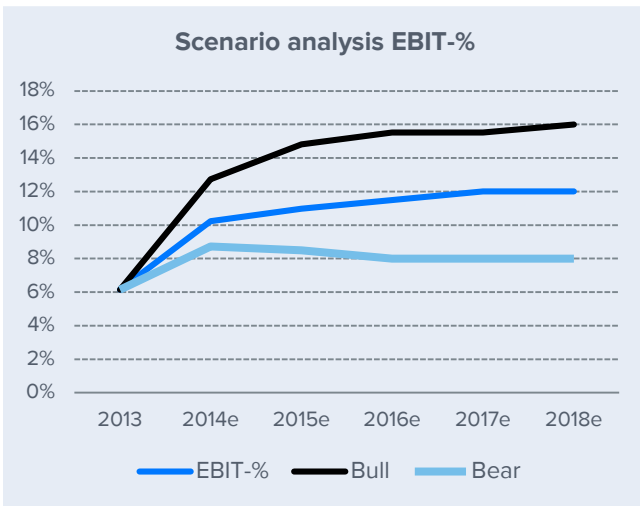
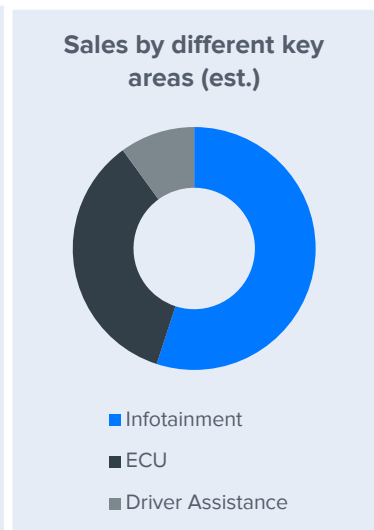
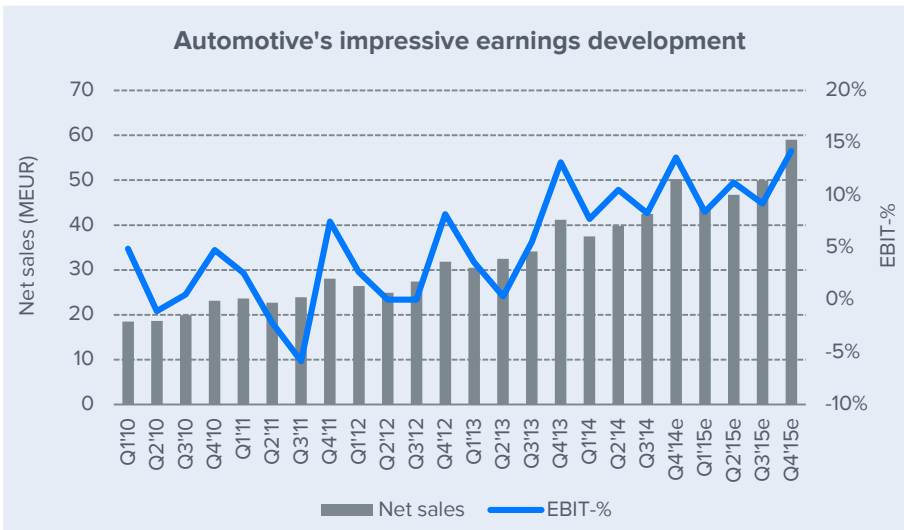
Valuation

We currently accept an EV/EBIT-multiple of 15x with the FY'15 EBIT estimate for Automotive. This means a clear premium against Automotive's peer group, where the median FY'15e EV/EBIT is only 10x. We believe that EB is in a better position to grow both in terms of net sales (at least >15 %) and earnings than the average company in the peer group. However, we must note that the FY'15 estimate already includes significant earnings growth and the high valuation also includes significant downside risks – there's a significant leverage also to the negative direction.



Value 325 MEUR

EB Automotive key figures in a graphical form



Source: Inderes

3.1 Overview of the automotive software industry

Normal development cycle of a car model is around 3 years, which is the time period when EB's R&D services. The frame agreements are typically long and normally the changes of suppliers regarding on-going projects is very low, which provides reasonable visibility.

There are practically no standards in the industry and OEMs need to differentiate, so there is a tremendous need for customization.

German car manufactures, EB's main client group, have generally kept the R&D projects running despite uncertainty. This has served them well in the past and there's no reason for this to change, since the companies are financially strong.

The amount of electronics inside cars, their complexity and software needed to control them is growing fast. Therefore EB's market is growing rapidly and should continue this in the future.

Car manufacturers are also willingly to invest in e.g. connected infotainment as they provide a chance to differentiate from others. Even if the software and systems would be standardized, which they are not, different brands still require their own look-and-feel.

EB is one of the companies specialized in installing, integrating and modifying these systems.

Normal development cycle of a car model is around 3 years, which is the time period when EB's R&D services (including EB product customizations), are asked for and when suppliers are selected for various parts for a new car model that is under development. Even though the customers may not always place purchase orders for a large project at one time or/and may not give firm long-term purchase commitments or volume commitments, the frame agreements are typically long and normally the changes of suppliers regarding on-going projects is very low. Therefore visibility of the business is typically a relatively good. A typical lifetime of car model is around six years with one facelift around the middle and due to the tough competition in the automotive market there's continuous need for development. We'll discuss the dynamics of the business further in the following chapters.

The car manufacturers continue to be under pressure in the current low economic growth environment, but we do not believe that the technologically leading car makers to be cutting their R&D efforts. There are practically no standards in the industry and OEMs need to differentiate, so there is a tremendous need for customization. Even in the crash after the financial crisis, EB Automotive's sales continued to grow. Unless there are significant changes inside the business area (e.g. competitive situation), the external effects shouldn't have a strong impact on EB's business. German car manufactures, EB's main client group, have generally kept the R&D projects running despite uncertainty, which has served them well in the past. When the demand has normalized, these companies have been able to introduce new improved models to the markets. We see no reason for this to change in the current situation, since the companies are financially strong.

Market growth and trends

The amount of electronics inside cars, their complexity and software needed to control them is growing fast. For example, a Roland Berger study estimates the share of electronics of cars' value will grow from 23 % in 2010 to 33 % until 2020. The study "Future Industry Structure of Automotive (FAST) Electronics 2025" from Berylls assumes a growth of automotive electronics from EUR 215 billion in 2012 to EUR 456 billion in 2025 (CAGR 6%). In another study, the estimated annual automotive software market growth rate until 2019 is expected to exceed the growth rate of passenger car production volume that is estimated to be 5.5 % CAGR (LMC Automotive's Q4 2012 Forecast). In summary, EB's market is growing rapidly and should continue this in the future.

Car manufacturers are also willingly to invest in, for example, connected infotainment as they provide a chance to differentiate from others. Even if the software and systems would be standardized, which they are not, different brands still require their own look-and-feel. EB is one of the companies specialized in installing, integrating and modifying these systems.

The key is customizing the technology and knowhow according to the clients' wishes. Overall complexity of these critical systems is very high, and demand is growing for EB's expertise.

Separation of hardware and software is already an ongoing trend

Another important trend for EB is the separation of hardware (HW) and software (SW). In the past, HW and SW used to be clearly connected and responsibility of the same vendor. Now these two areas are becoming separated.

With software knowhow and expertise in embedded systems and their integrations, new business opportunities continue to open up.

Electronically cars will become more and more complicated to control and all the different will most likely become more and more integrated. This is another reason why the market for EB's expertise will continue to grow rapidly.

Another important trend to understand is the separation of hardware (HW) and software (SW). In the past, HW and SW used to be clearly connected and responsibility of the same vendor. Now these two areas are becoming more and more separated, and the vendors might be different and co-operating only in a certain area.

This is an important trend for EB, since it's not involved in the hardware side and as a consequence was left out of the projects before. Now the vendors that have both HW and SW no longer have an advantage over vendors that are concentrating only in SW (like EB Automotive). Therefore the traditional Tier 1 suppliers are on the losing side of this trend, especially since the hardware is becoming bulk production and added value is in the software side.

With the growing complexity, the software side is coming more and more important. With software knowhow and expertise in embedded systems and their integrations, new business opportunities continue to open up.

Electronically cars will become more and more complicated to control and all the different parts such as infotainment, CIS (Car Infrastructure) and driver assistance will most likely become more and more integrated. This is another reason why the market for EB's expertise will continue to grow rapidly.

R&D cycle and business dynamics

The business dynamics of EB Automotive are heavily influenced by the development cycle of cars.

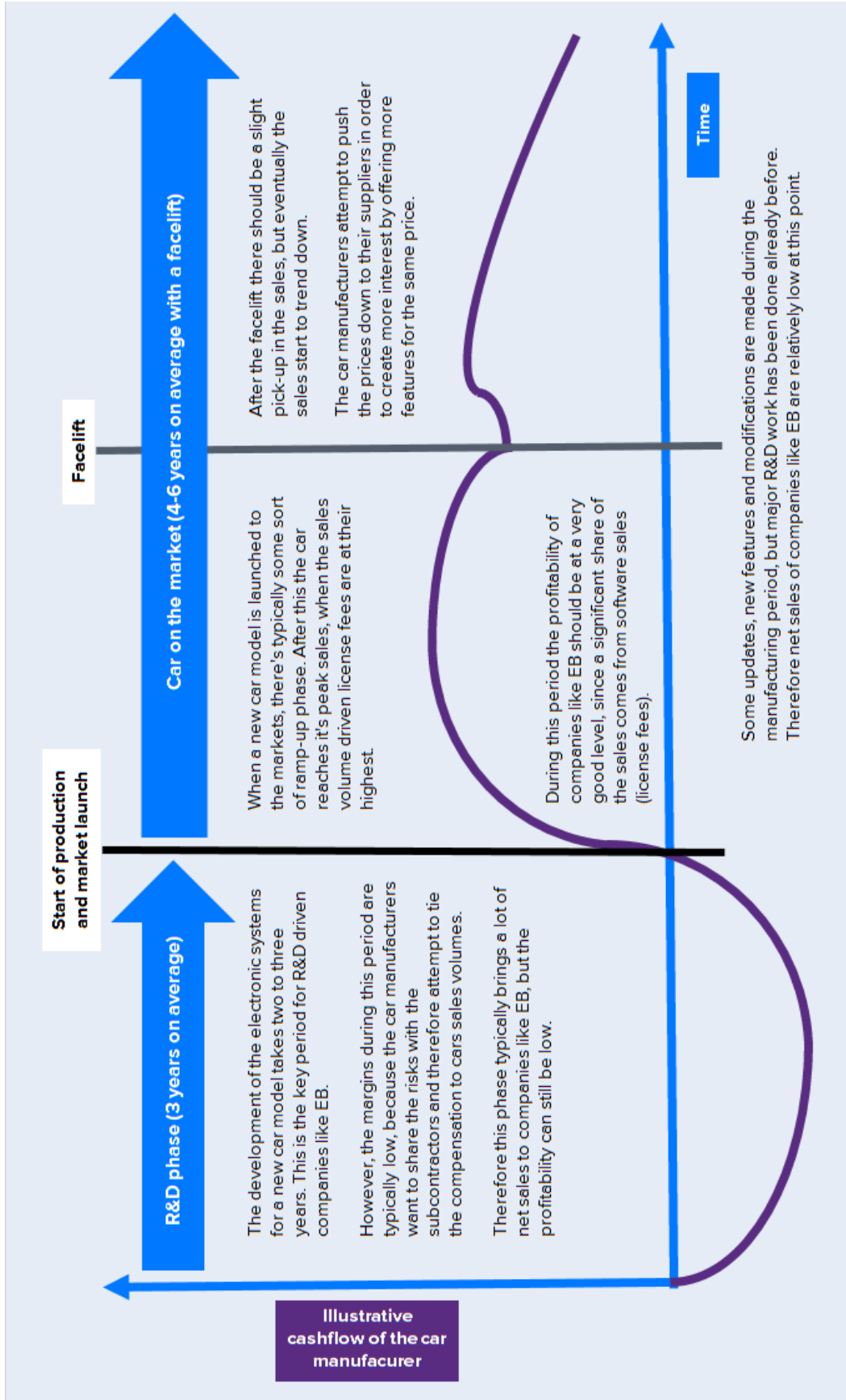
We have demonstrated the R&D cycle and tried to open up the meaning of this for EB in the graph on the next page, which includes many key elements of the business.

One of the key points of understanding in R&D work of cars is the typical development cycle. This is also crucial in understanding the business dynamics of EB Automotive. We have demonstrated the R&D cycle and tried to open up the meaning of this for EB in the graph on the next page, which includes many key elements of the business. We have also tried to open up how these business dynamics should reflect on EB Automotive's net sales and profitability.

Of course it's important to note that the company has many of these kinds of processes ongoing at the same time in different stages. Even though EB is still a relatively small company, it is typically involved in multiple different R&D projects for new car models at the same, which naturally limits the effect of a single project and its stage.

Note that the illustrative cash flow of the car manufacturer in the following graph is not cumulative. It is supposed to demonstrate the situation periodically.

Illustrative example of car's development and sales cycle



R&D phase of a new car model (around 3 years)

The development of a new car model takes around three years, which is the key period for EB Automotive. A lot of R&D work relates to customizing the technology and knowhow according to clients wishes.

Even though this is the most intense part of EB and its peers that focus on the R&D services, the margins during this period are typically low.

Start of production is the critical deadline for the R&D work. After this a new car model is launched to the markets and there's a ramp-up phase. After this the car is likely to reach its peak sales in few years.

During this period the profitability of companies like EB should be at a very good level. If the sales volumes are as good as expected, the suppliers are now making profits with the license fees, regular maintenance as well as feature upgrades. Suppliers are also compensated by the risk that the car manufacturer shared with them.

The car manufacturers tend to make a facelift for car models around the middle of their sales cycle. Average car model is sold for around 5-6 years.

In later phases of the cycle the car manufacturers attempt to push the prices down towards the end in

The development of a new car model takes around three years. This is the key period for R&D services companies like EB Automotive. A lot of R&D work relates to customizing the technology and knowhow according to clients wishes. Breakthrough technologies are introduced gradually to lower the risks. In general the Automotive industry is investing into breakthrough technologies such as autonomous driving, but most of the work is about the leveraging the base knowledge in order to find the best possible solutions for the customer. Therefore there is some scalability in the services that EB offers, but naturally the customization still has to be done for all the car models separately in order to create client's own look-and-feel as well as the features required.

Even though this is the most intense part of EB and its peers that drive from the R&D services, the margins during this period are typically low. This is because the car manufacturers want to share the risks with the suppliers and therefore attempt to tie the compensation to the sales volumes of the car model. Therefore this phase typically brings a lot of net sales to companies like EB, but the profitability can still be low.

Launch and the first sales phase (2-3 years before a facelift)

After the development has been completed, the car model is ready for the production. Start of production is the critical deadline for all the R&D work. After this a new car model is launched to the markets and typically there's a ramp-up phase. After the ramp-up the car is likely to reach its peak sales in few years, depending on the market situation, model's success and the car manufacturers marketing and distribution network. At the peak sales license fees that are driven by the volumes are naturally also at their highest.

During this period the profitability of companies like EB should be at a very good level – the level of net sales is low, but the expenses have been sunk in already before. If the sales volumes are as good as expected, the suppliers are now making profits with the license fees, regular maintenance as well as feature upgrades (e.g. Infotainment) and are compensated by the risk that the car manufacturer shared with them.

Naturally there are cases, when the sales volumes are disappointing. The car manufacturers have a tendency to be positive about the volumes, as they can justify cheaper prices during the R&D phase with a promise of higher revenues from the volumes. Therefore positive surprise are probably less likely than negative ones. Experience plays a big role here, so that the supplier knows how to negotiate a solid deal for itself.

Facelift and the second sales phase (2-3 years)

The car manufacturers tend to make a facelift for car models around the middle of their sales cycle. Average car model is sold for around 5-6 years after it's replaced with a new one. It's worth noting that in the US the time period is much shorter and a new model could be introduced every year. The facelift can include some minor changes in the car features, modifications and updates in the software and systems, possible also engines. Generally the underlying technology is still pretty much the same and the changes are more in the "bells-and-whistles" as well as in appearance, which gives the car model more time in the market.

order to make the “old” model more attractive to the buyers. Generally the licenses paid to subcontractors also decline over time, which means that net sales decline further for companies like EB.

After the facelift there should be a slight pick-up in the sales, but eventually the sales start to trend down. The car manufacturers attempt to push the prices down towards the end in order to make the “old” model more attractive to the buyers. Generally the licenses paid to subcontractors also decline over time, which means that net sales decline further for companies like EB.

Next growth areas: connected car and automated driving

Currently the hottest areas are probably connected car and automated driving. Elektrobit is in a good position to take part in both of these trends with its knowhow and investments in these areas.

Currently the hottest areas are probably connected car and automated driving. Elektrobit is in a good position to take part in both of these trends with its knowhow and investments in these areas. Again it's important to note that EB is currently developing those cars that we might see in the market in few years and naturally most of the R&D efforts are put in the premium models. Therefore we need to look into the future when thinking about the current developments.

Connected car cloud connections enable bringing of new applications and enhancements to car functions, for example real-time traffic information or map updates for navigation.

Connected car cloud connections enable bringing new applications and enhancements to car functions, for example real-time traffic information or map updates for navigation. The increasing demand to better integrate mobile devices with the car has been reflected in consumer electronics companies such as Apple's CarPlay or Google's announcement of Open Automotive Alliance.

New active safety systems and driver assistance applications are being brought to the market as automated driving is becoming one of the key trends and an area with significant investments.

Elektrobit has also said that new active safety systems and driver assistance applications are being brought to the market as automated driving is becoming one of the key trends and an area with significant investments. Different kinds of driver assistance systems, that are improving the safety and comfort of drivers as well as passengers, will continue to develop and become more and more common. For example parking and lane change assistants are already regular in more expensive car models and eventually they'll arrive also to lower categories.

Automated driving is already technologically possible. For example Daimler drove autonomously from Stuttgart to Pforzheim.

Automated driving is already technologically possible: a car can drive itself from a location to a destination. This has been most famously presented by Google car, but similar exercises have been conducted by many others also. For example Daimler drove autonomously from Stuttgart to Pforzheim, which is in a completely different scale than the drives that Google has done.

The two major challenges in autonomous driving are the accuracy of maps and location services. Naturally the most accurate maps are just one part of the story, as they cannot foresee “objects” such as pedestrians crossing the road. Sophisticated car sensors are needed in order to immediately react on unforeseeable situations, which are the other crucial part of the solution.

The first major challenges in this kind of a venture are the accuracy of maps and location services. Normally GPS is “close enough” if it's within meters of the actual location, but if a car turns couple of meters too late to a road, it's a completely different situation. There are also many other similar features that are either already in the market or currently in the development. Naturally the most accurate maps are just one part of the story, as they cannot foresee “objects” such as pedestrians crossing the road. This is the second major challenge. Sophisticated car sensors are needed in order to immediately react on unforeseeable situations, which are the other crucial part of the solution.

When it comes to EB, these present significant business opportunities in the future.

Naturally these kinds of challenges require more and more real-time information for the car, which is collected by a rising amount of sensors and other technologies. Again, this means a rising amount of information that the car has to collect and analyze. Handling this data is going to be a significant business in the future, because many companies are interested in it.

When it comes to EB, all these present significant business opportunities in the future further enhance the growth potential of the company.

3.2 EB has a solid position in the field

EB has a strong position in Automotive as it is a trusted supplier with many major car manufacturers. It also has a strong partnerships with Audi and Daimler.

Considering also the company's current position in the bosom Volkswagen Group and with strong partnerships with many others, the future looks very bright for the company.

Despite its relatively small size, EB Automotive is a very well-established company in the Automotive software sector and has a solid reputation. EB Automotive's references include companies like BMW, Daimler, Ford and Fiat. In addition, through joint venture with Audi, EB has excellent position to grow inside the Volkswagen Group. Considering also the company's current position in the bosom Volkswagen Group and with strong partnerships with many others, the future looks very bright for the company. We see great possibilities for further growth both in short and long term.

We believe that EB is currently in such a good position in a fast growing market that it should make clear strategic mistakes or there should be a drastic change in the market for it not to succeed to some degree.

Some references of EB Automotive



Audi



Mercedes-Benz

Source: Company materials

High entry barriers for new competitors

Automotive software business has very high entrance barriers for new competitors especially in the safety and security critical areas. Due to high complexity and connection within different systems, the barriers are high also in infotainment.

The automotive industry is also conservative. There is a relatively small number of trusted subcontractors and it's a difficult market to enter as a new comer.

This also makes EB Automotive attractive as a possible acquisition target for companies looking for a piece of the automotive software market.

Despite some efforts to form more standardization to the business area, there are no universal standards and probably won't be in a very long time.

When there is a business area with such a positive outlook, one must always worry about new competitors trying to take their share in it. In Automotive software business the entrance barriers for new competitors are very high especially in the safety and security critical areas (like CIS). Due to high complexity and connection within different systems, the barriers are high also in other areas like infotainment. This is why we believe EB to be in an excellent position to take advantage of the high growth opportunities, and we don't expect significant rise in the number of significant competitors in the near future. This also makes EB Automotive attractive as a possible acquisition target for companies looking for a piece of the automotive software market. It should be one of those business areas, where it's easier to "buy-in" than go through the otherwise very long "qualifying process". This is naturally very positive from the shareholders point of view.

It's also worth mentioning that the automotive industry is conservative. There is a relatively small number of trusted suppliers and it's a difficult market to enter as a new comer. EB Automotive is currently in the inner circle of most of the significant car manufacturers, which gives it a significant edge over any new challengers.

Due to critical nature of the systems, especially ECU, there are plenty of standards and control in the industry. AUTOSAR (AUTomotive Open System ARchitecture) is a worldwide development partnership of car manufacturers, suppliers and other companies from the electronics, semiconductor and software industry. However, even with the AUTOSAR becoming more common, there is a huge amount of different variables and the different

Currently the different models within a company or group are slowly becoming close to same standards, so industry-wide standard is clearly far away.

If there would be wide-spread standardization in the future, it would change the nature of the business significantly.

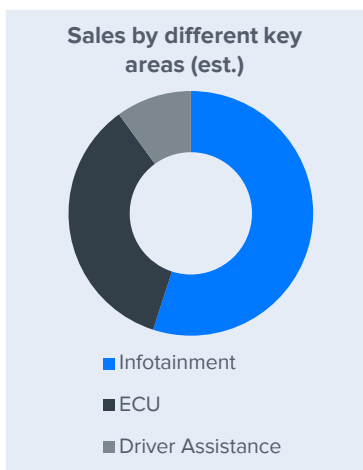
standards are loose at best. Each one of the car manufacturers wants others to follow their way, and no one wants to give in. Currently the different models within a company or group are slowly becoming close to same standards, so industry-wide standard is clearly far away.

All in all, the industry has a very long way to go until it reaches any real standardization. This makes it a very challenging field to operate and create scalable products, but in the other hand, it creates a lot of business for different services such as integration and customization services. It also keeps the big software companies, for example Microsoft, Apple and Google, from taking over the industry. If there would be one platform for all the cars, it would be quite a different market.

3.3 EB's different offerings in Automotive

EB's core business in the automotive sector is software engineering. There are no specific figures available of how EB's sales are divided among services and own products, but services form still clearly majority of the business.

We estimate that EB's own products account for around one quarter (25 %) of total sales of Automotive, the rest being different services. EB Automotive's sales can be divided in the following categories:



It is essential for EB to be on all the three areas, because they depend on each other in a car. In the long run all the systems are coming more and more together, when understanding the whole as well as different aspects becomes more critical and demanding.

EB's core business in the automotive sector is software engineering, where it has a competitive edge through long experience in different software and embedded systems within the whole software stack in cars from the bottom to the top. With decades of experience in the R&D services in automotive industry, EB has acquired a profound knowledge about the practices of the automobile manufacturers and their processes. EB provides OEM and Tier 1 in all phases of the development cycle and is based on the existing experience in a position to assess appropriate technology and identify the most appropriate solution for the customer. Software engineering is a particularly important aspect of increasingly complex systems in the infotainment domain as well as in software and system integration.

There are no specific figures available of how EB's sales are divided among services and own products, but clearly the different services are still majority of the business. We estimate that EB's own products account for around one quarter (25 %) of total sales of Automotive, the rest being different services. EB Automotive's sales can be divided in the following categories:

- Infotainment (estimated to account for 55 % of sales)
- ECU (estimated to account for 35 % of sales)
- Driver Assistance (estimated to account for 10 % of sales)

EB Automotive still has only few "out-of-the-box" products, and it's difficult to say where the line between products and services actually should be drawn. Generally there's a certain technological platform, but it still has to be customized for all the clients because they have a huge pressure to differentiate in the competition. By far the most important part of the business is services and software engineering.

All the three product areas mentioned above have interconnection that seems to be developing stronger over time. It is very essential for EB to be on all the three areas, because they depend on each other in a car. In the long run all the systems are coming more and more together, when understanding the whole as well as different aspects becomes more critical and demanding. Reliable, secure connection between ECUs within a safe environment for DAS technologies (a significant contributor to active safety systems) that can detect danger signs, alert drivers and (if necessary) intervene, using connected services / information from the cloud via navigation is perhaps the final goal for the purpose of autonomous driving.

Infotainment is probably the most visible for drivers, which means to information and entertainment systems in cars. Normally these include things like cd-player and navigation system.

CIS, standing for Car Infrastructure, is crucial embedded system inside the car. It is the system that makes sure that, for example, when driver steps on the brake pedal, the car also actually brakes.

EB Automotive has been investing a lot in navigation during the past years and it has been also bearing fruit. The management of Automotive was already thinking one step further from basic navigation to integrating different driver assistance and safety applications to more accurate navigation system.

It's clear that navigation will be more and more integrated to other systems in cars, which puts pressure on the traditional "navigator companies". We believe that EB has a good position also in navigation.

One very interesting and important part of EB is its joint venture with Audi, which is part of Volkswagen Group. EB Automotive owns 51 % of e.solutions, while 49 % is owned by Audi (through a subsidiary).

The financial development of e.solutions has been impressive since its formation in 2009. The growth figures have been great, but also the profitability has been in a good level.

Automotive's products are somewhat difficult to demonstrate for investors, but most of car owners have used these systems. Infotainment is probably the most visible for drivers, which means to information and entertainment systems in cars. Normally these include things like radio, cd-player and navigation system integrated with HMI (Human Machine Interface) that are made with OEM's own look-and-feel. In more sophisticated models DAS applications are already everyday products. DAS functions can include things like adaptive cruise control, traffic jam assist, automatic emergency braking, blind spot detection and side impact sensing.

CIS, standing for Car Infrastructure, is crucial embedded system inside the car. It is the system that makes sure that, for example, when driver steps on the brake pedal, the car also actually brakes. Therefore mistakes cannot be made and trust is essential. Due to high safety requirements and the complexity of modern car's electronic systems as well as the requirement of absolute security (from intrusion) and real-time communication within car infrastructure Therefore the entry barriers for vendors with no reputation in the market are very high. This is probably one of the most challenging areas to entry in the software industry.

EB Automotive has been investing a lot in **navigation** during the past years and it has been also bearing fruit. The management of Automotive was already thinking one step further from basic navigation to integrating different driver assistance and safety applications to more accurate navigation system. In the future navigation will be an integrated part of car's control system and a significant part of the car's control system with applications regarding safety and driver assistance.

In navigation business EB's main competitors are companies like TomTom and Garmin. These companies that still have external navigators are also working together with car OEMs in order to be part of the integrated systems. We believe these will be losing market share also in the future, since they cannot offer anything else than navigation in the more and more complex framework. Another competitor in Nokia HERE that has a very strong position in the maps and has been looking into automotive also in a wider perspective. Still, the strength of EB's competitive edge in this area depends on future development to more exact navigation and its applications.

3.4 e.solutions – Joint Venture with Audi

One very interesting and important part of EB is its joint venture with Audi, which is part of Volkswagen Group. EB Automotive owns 51 % of e.solutions GmbH, while 49 % is owned by Audi Electronics Venture GmbH. The company was formed in 2009 and in the first full operational year 2010 the company's net sales amounted to 11.6 MEUR and made a net profit of 0.618 MEUR. In 2011 the corresponding figures were already 18.9 MEUR and 0.786 MEUR, meaning that sales grew 63 % in a year (source: Germany's trade register). In 2012, the net sales of e.solutions were 34.6 million euros (up ~83 %) and the operating profit 2.9 million euros - another huge jump. The 2013 figures were not available when writing this report, but we believe that the growth story has continued in a similar track.

This figures not only make e.solutions a significant part of EB Group - they make it one of the most lucrative parts of it. The EBIT-% of e.solutions was around 8.4 % in 2012, much higher than EB Automotive's 3.8 %. Since that Automotive's 2012 figure also includes e.solutions, the other businesses were

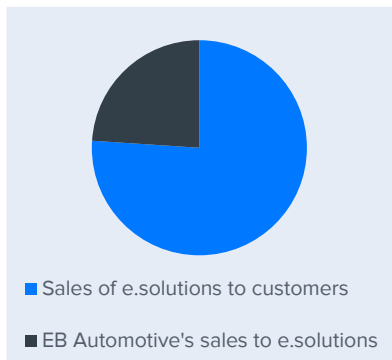
clearly behind it. However, EB's figures are presented in IFRS and e.solutions goes by German accounting, so the numbers are not fully comparable.

The Volkswagen Group is one of the world's leading automobile manufacturers and the largest carmaker in Europe. With its various brands it has a lot of potential, if the solutions of e.solutions would be rolled out to more models.

So far e.solutions has focused on sales to VW Group companies only, and has no sales to other customers. VW Group looks at the joint venture as part of its competitive edge. Still there's plenty of growth potential in the VW Group.

In 2013 EB Automotive and Audi decided to expand the activities in e.solutions. There should be scalability in rolling out existing platforms to different models, which is a massive opportunity for EB. It is interesting to follow how well EB can capture this market inside VW.

The growth of e.solutions could, in a negative scenario, lower the sales of EB Automotive to the company. However, there are currently no signs that this would be happening.



Volkswagen Group that includes brands such as Volkswagen, Audi, SEAT, ŠKODA, Bentley, Bugatti, Lamborghini, Porsche, Ducati, Volkswagen Commercial Vehicles, Scania and MAN. The Volkswagen Group is one of the world's leading automobile manufacturers and the largest carmaker in Europe. In 2013, the group's deliveries to customers were up 4.9 % and totaled 9.73 million vehicles. IHS Automotive estimated that the global auto sales were around 82.8 million vehicles (up 4.2 % from 2012), so Volkswagen's market share could be around 11.7 % globally. The company's earnings were also solid and the outlook is reasonable good.

So far e.solutions has focused on sales to VW Group companies only, and has no sales to other customers. While this is quite understandable, since VW Group surely looks at the joint venture as part of its competitive edge and isn't too excited about sharing it with competitors, this could limit EB's opportunities. The possible problem is that Audi and VW Group demands "internal pricing" for the services and software, and is reluctant to outside sales. Then the profitability of the joint venture would be constantly under pressure despite the huge potential. However, since the JV has been one of the most profitable part of EB, this concern seems to be unjustified.

The growth of e.solutions is expected to continue

EB Automotive and Audi decided to expand the joint venture activities in e.solutions to include systems engineering and provide systems integration services to AUDI AG and other VW Group companies for their future connected infotainment solutions in 2013. To build the required engineering competences and capacity, the joint venture established a new site in Ulm, Germany. They hired up to 100 R&D engineers in Ulm, leveraging the existing knowledge base and competency in systems integration and software development. This was a massive jump forward considering that e.solutions employed "over 100" persons according to Q3'12 interim report, and it was also visible in the huge sales growth of e.solutions in 2013 and 2014.

While EB's infotainment system has been e.g. in Audi A3 (one of the rare published references), the growth possibilities inside VW Group are still huge. The system should be relatively scalable to all Audis with slightly different "levels" and later basically to all Volkswagen Group's cars. This is naturally a massive opportunity for EB as well as e.solutions. It is extremely interesting to follow how well EB can capture this market inside VW, especially since it's difficult to quantify the potential realistically.

However, the extremely rapid growth of e.solutions and new investment to it are not necessary only positive for EB. The new capacity recruited might decrease EB Automotive's share of sales to e.solutions, which have been reasonable large in the past. In 2012 EB Automotive's sales to e.solutions were roughly 11 MEUR, which is a very large part of e.solutions' net sales (34.6 MEUR in 2012). However, this hasn't been a problem so far.

3.5 Competitive situation of Automotive

EB's main competitors differ from area to area. In software engineering competitors can be giants like Wipro, in ECU company's main competitors are Vector Group, KPIT Cummings and Mentor Graphics and in navigation competitors are companies like Nokia HERE and Garmin.

Infotainment area is filled with players like Harman, Conti, Visteon Bosch, Denso and other brands that people used to see for example in traditional cd-players. These companies can be both competitors and customers.

Companies like Bosch, Denso and Conti are a major players in the field in general, but especially in the driver assistance its offerings cross with EB's.

One industry specific factor to understand in the automotive business is that competitors can also be partners in different projects.

EB's main competitors differ from area to area. In software engineering competitors can be giants like Wipro, in ECU company's main competitors are Vector Group, KPIT Cummings and Mentor Graphics and in navigation competitors are well-known names like Nokia HERE, Garmin and TomTom. Nokia might be a significant competitor in navigation software also as the company is attempting to grow in the connected car area. Infotainment area is filled with players like Harman, Conti, Visteon Bosch, Denso, Alpine and other brands that people used to see for example in traditional cd-players. These companies can be both competitors and customers. Bosch, Denso and Conti are a major players in the field in general, but especially in the driver assistance its offerings cross with EB's. It's also worth pointing out that especially in the R&D services in-house is naturally a very important "competitor" and outsourcing decisions in general are very important.

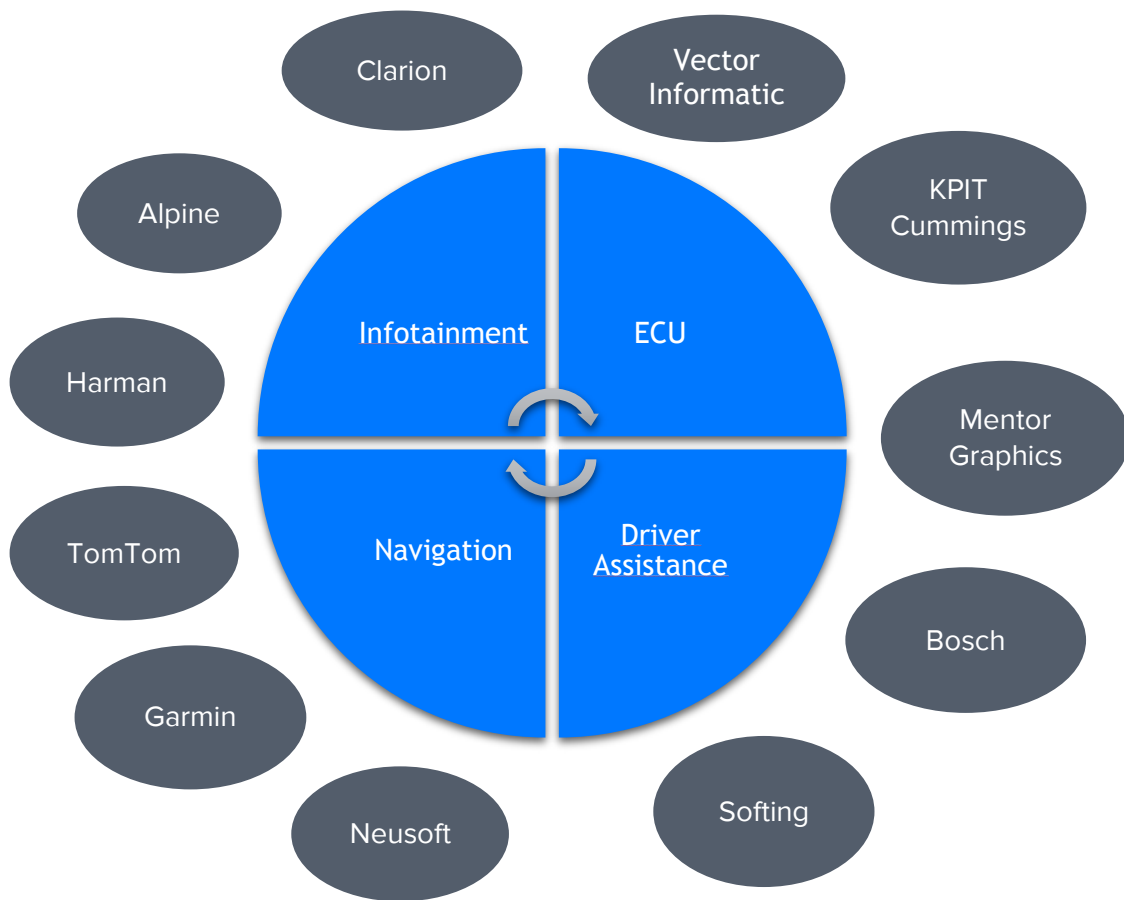
One industry specific factor to understand in the automotive business is that competitors can also be partners in different projects. For example EB has been integrating its competitors' products according to OEM's wishes; in the end the car makers that are the end-customers control the combination of suppliers. There are strategic partnerships, and if OEM's choose EB's product in certain area, competitors must respect this and co-operate to make successful integration of products. So it's not always a straight-forward delivery chain; EB has client relationships both directly with OEMs as well as Tier 1-suppliers.

We'll shortly go through main players in the field, and analyze their strengths and weaknesses compared to EB. A summary of the competitors and some comments about the overall situation as we see it can be found below. Note that the table below doesn't cover all the activities of the companies. It is supposed to only mark significant competitors concerning EB Automotive.

EB Automotive's main competitors in the main business areas

Main competitors	Software Engineering	Infotainment	ECU	Driver Assistance	Navigation
EB Automotive	X	X	X	X	X
Bosch	X	X	X	X	X
Vector Informatik			X		
KPIT Cummins	X		X		
Mentor Graphics		X	X		
Wipro & similar	X				
Alpine		X			X
Harman		X			X
Clarion		X			X
Garmin					X
TomTom					X
Aisin		X	X		
Neusoft	X	X			X
Technisat					X

* Note that the Tier 1-suppliers like Alpine, Harman, Clarion and Bosch can be also customers.



Source: Inderes

Our key takeaway is the amount of competitors in infotainment and navigation versus ECU/CIS and driver assistance.

We believe that there's an underlying business logic; there are fewer competitors in the operations most critical regarding the safety aspects of cars. The market entry is also more difficult to these areas, which makes EB's position in them more valuable.

When looking at the graph above, it's easy to see the main competitors. Bosch is operating in all the key areas regarding EB, but can be also a customer for EB. KPIT Cummings and Mentor Graphics are both significant competitors in ECU/CIS, but in this area the main competitor is probably Vector Group that is focused on ECU/CIS. Software Engineering, even though we limit it to Automotive sector, is such a wide category that it's difficult to make key conclusions through this. KPIT Cummings is active also in this field, while Mentor Graphics is active also in Infotainment.

Our key takeaway is the amount of competitors in infotainment and navigation versus ECU/CIS and driver assistance. While navigation category has eight companies competing, there are six competitors in ECU/CIS and only one in driver assistance. Even though this can be partly explained by the choices made when creating the table, we believe that there's also underlying business logic; there are fewer competitors in the operations most critical regarding the safety aspects of cars. The market entry is also more difficult to these areas, which makes EB's position in them more valuable.

3.6 Earnings potential and future estimates

The profitability of Automotive has increased radically during the past 18 months. However, the potential profitability of the business is still somewhat unclear.

The biggest question mark in the valuation of EB Automotive is the normalized profitability of the business. This is heavily dependent on the business logic and the scalability of the business.

We believe that the huge jump in profitability has been driven at least partly by higher license income. EB Automotive should be able to grow the scalable business side together with the other business, meaning that the profitability (EBIT-%) should remain in a strong level if not strengthen further.

Regarding profitability, EB Automotive is currently relatively close to the middle of the peer group. Average EBIT-% among the group is expected to be 9.5 % in 2014, while we expected EB Automotive's EBIT-% to be 10.2 %.

We believe that EB Automotive could realistically reach EBIT-% of 20 % in the future, but this would require higher sales from licenses and other scalable business. We would consider a 15 % EBIT-% already an excellent level for the current business portfolio. In our base case the EBIT-% of Automotive reaches 12 % in 2017, but doesn't improve from this level.

The profitability potential depends heavily on the amount of software business (vs. bulk hardware) and services (especially charge by the hour type).

The quick and large jump in the profitability of Automotive has proven that the business has a high earnings potential and the company is going towards it faster than we had estimated earlier. However, it's still uncertain where the limit for the current business model is and how the profitability will development in the coming years.

Our view of the normalized profitability

Perhaps the biggest question mark regarding the valuation of EB Automotive is the normalized profitability of the business. The best performing peers of Automotive can reach 20% EBIT levels, but many are also below 5%. This is heavily dependent on the business logic, especially the scalability of the business. This again is effected by the services vs. own products mix, which is probably key factor here. Bulk (hardware) products generally have low margins, but software products and products with IPR generally have high margins - clearly higher than those of services. Therefore those companies that have a large portion of software products tend to have a higher EBIT-%.

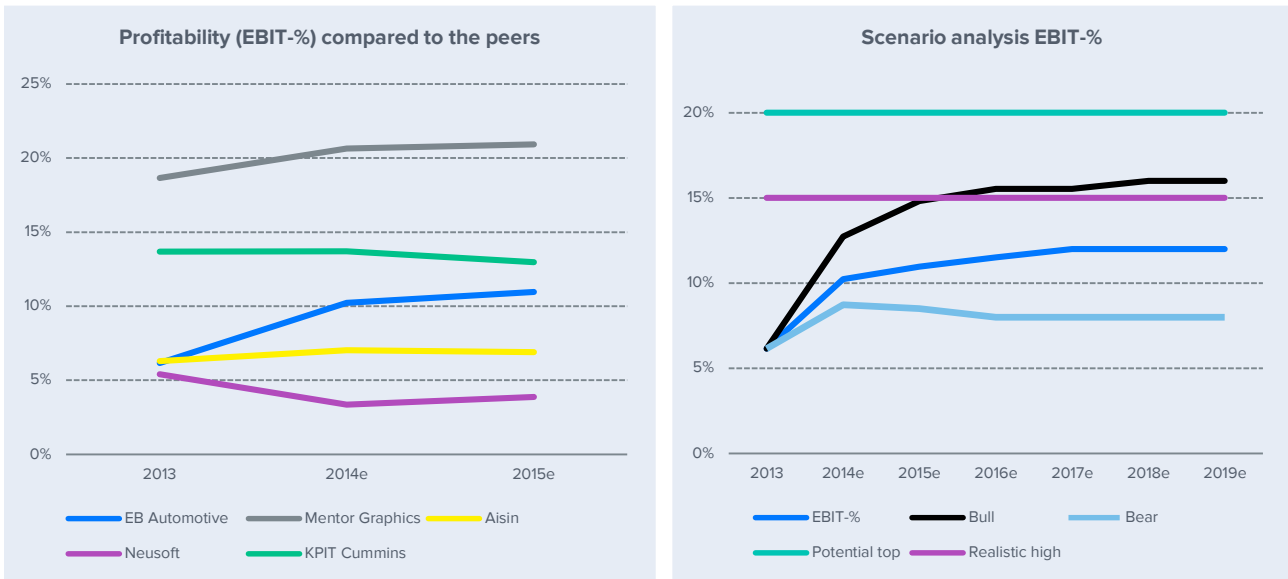
EB Automotive has been improving its profitability quickly over the last 18 months. We believe that a significant part of this improvement is driven by higher license income (more discussed in the following chapter). However, the growth here should be relatively stable and there's no reason to expect a decline, so it doesn't have a radical effect on the normalized profitability. EB Automotive should be able to grow the scalable business side together with the other business, meaning that the profitability (EBIT-%) should remain in a strong level if not strengthen further.

In the following graph we have collected some of the best performers among Automotive's peers as well as some on the other end of the spectrum. Mentor Graphics has been close to 20 % EBIT margin and is expected to break the level this year. However, Mentor Graphics has a unique position in the area of tooling, which raises its profitability. Mentor is mostly selling tools that are used during R&D phase, meaning that its business model (and profitability potential) differs greatly from EB. EB Automotive is currently relatively close to the middle of the peer group. Average EBIT-% among the group is expected to be 9.5 % in 2014, while we expected EB Automotive's EBIT-% to be 10.2 %.

We believe that EB Automotive could realistically reach EBIT-% of 20 % in the future, but this would require higher sales from licenses and other scalable business. We would consider a 15 % EBIT-% a more realistic and already an excellent level for the current business portfolio - if the company could reach this, the value of Automotive would once again go up significantly. In our base case the EBIT-% of Automotive reaches 12 % in 2017, but doesn't improve from this level. This might be cautious, but we believe it's too dangerous to estimate a significant improvement from the current level that is already much higher than ever before seen by the company.

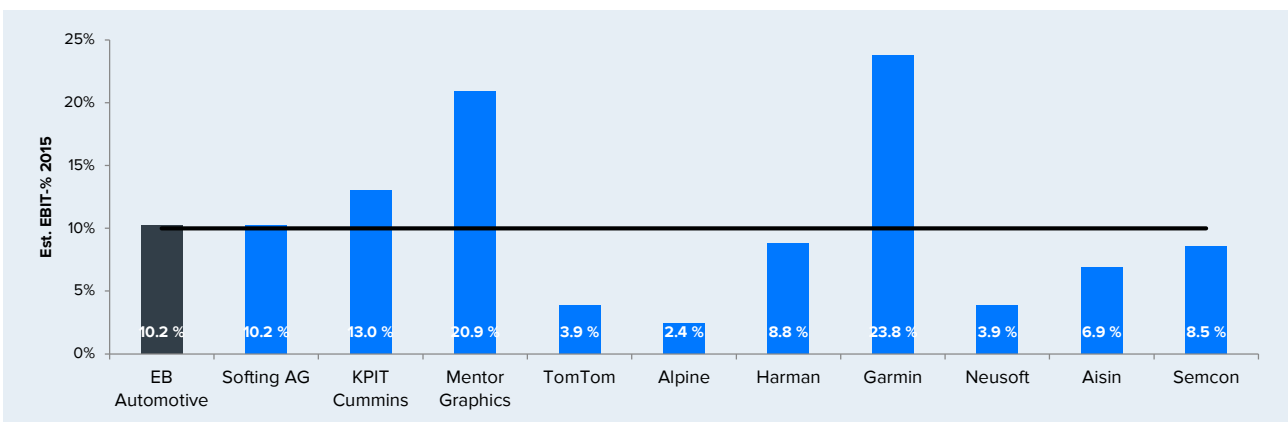
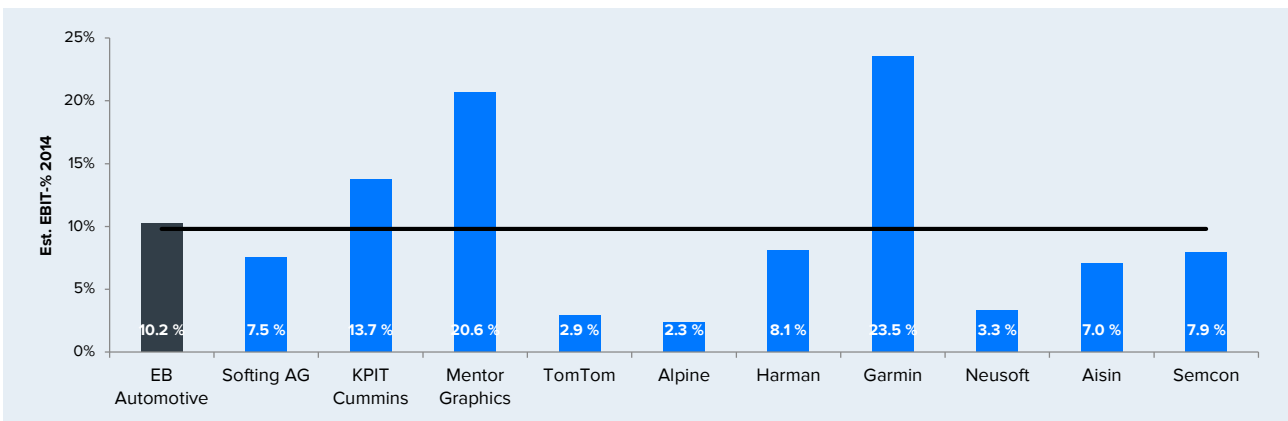
We have opened up the profitability of the peer group we are using with EB Automotive in the following page. There one can see the significant variance between different companies, which is mostly derived from different business models. There's a significant difference between more software and hardware driven businesses as well as product vs. services heavy businesses.

Profitability of Automotive against selected peers and the potential



Source: Thomson Reuters as of 9.9.2014 and Inderes

EBIT-% of the peer group (2014e and 2015e estimates)



Source: Reuters as of 6.11.2014 and Inderes

Scalability of the business and license fees

There is a huge difference in profitability potential and the valuation of businesses that are scalable and those that are not. Therefore the share of scalable business is crucial also when determining the value of EB.

The company hasn't shared this information to investors, so we have to make our own estimates. We believe that the share of product based business in Automotive is around 25 % of the consolidated net sales. Minority of this are license fees that come almost directly to the EBIT. They can have a large impact on profitability, even though they are only a minor part of net sales.

We believe that a significant portion of the profitability improvement of Automotive has been due to the rising license volumes. However, EB shouldn't have any especially large fees this year, which means that the current level of profitability should be maintainable.

The fourth quarter has typically been the best quarter for licenses as well as the profitability.

There is a huge difference in the profitability potential and therefore the valuation of businesses that are scalable and those that are not. A good example of the almost fully scalable business is a pure software company. After it has invested in the new software product, the gross margins of the product are extremely high. Successful software companies can therefore have very high EBIT-%, though they are developing new programs all the time and use plenty of money to sales and marketing. Services business is typically not very scalable, even though many companies are attempting to productize their services into service products. Especially if expert services are sold by the hour, the price competition can be very difficult. When prices are easy to compare the clients often choose the cheaper one, even though the quality would be questionable.

Therefore the share of scalable business is crucial also when determining the value of EB. The company hasn't shared this information to investors, so we have to make our own estimates. We believe that the share of product based business in Automotive is around 25 % of the consolidated net sales. This means that around 25 % derives from product sales, where the margins are expected to be higher than in services, and a minority of this derives directly from license fees. License fees come almost directly to the EBIT line, since almost all the expenses have been buried already in the product development phase. Therefore licenses can have a large impact on profitability, even though they are only a minor part of net sales.

We believe that a significant portion of the profitability improvement of Automotive has been due to the rising license volumes. Just to demonstrate their effect theoretically; if Automotive business segment would receive 5 MEUR (or 3.0 % of net sales) license fees in 2014 and they would have 100 % EBIT-% (since the costs are already behind), the license fees would amount to 29 % of Automotive's EBIT (2014e 17.3 MEUR). Therefore even small changes in the license income can have a large effect on the profitability of Automotive. Just as a curiosity, if the figures in the illustrative example above would be correct, the EBIT-% of the Automotive would be about 7.5 % in 2014 excluding the licenses (now the estimate is 10.3 %).

Since the license fees can have a significant impact, it's important to note that EB shouldn't have any especially large fees this year. The company has indicated that the license fees have been growing more or less in-line with the net sales. There should not be any large pumps coming up in general, but the fourth quarter has typically been the best quarter for licenses as well as the profitability.

Future estimates of Automotive

We believe that EB Automotive will continue to grow quickly in the coming years, but expect the growth to slow down to around 15 % level. This is well behind the past growth (>20%), but it's typical that the growth slows down as the company matures. The automotive software market is likely to grow around 5-8%.

We believe that EB Automotive will continue to grow quickly in the coming years. Our 2014 sales growth estimate is 23%, but we are expecting the growth rate to decline to 17-18% in 2015 and towards 15% level in 2016. This is well behind the past growth that has been clearly above 20%, but it's typical that the growth slows down as the company matures. The automotive software market is likely to grow around 5-8% and EB can probably grow twice as fast, considering its position in the market.

Est. sales growth-%

2013	25.2 %
2014e	23.0 %
2015e	17.5 %
2016e	15.0 %
2017e	15.0 %

Regarding profitability, we are using the 2014 level as a new normal, even though the level is clearly an all-time high for the company. We are assuming that level is sustainable.

As the license fees are expected grow in-line with the net sales, the profitability will increase naturally to some degree. There's also limited scalability in services business as the fixed cost base shouldn't grow much.

These levels are also relatively challenging against the peer group. The visibility to earnings is general is relatively low, so there's also a significant disappointment risk in profitability development.

Est. EBIT-%

2013	6.2 %
2014e	10.3 %
2015e	11.0 %
2016e	11.5 %
2017e	12.0 %

The annual growth of 15% would still be an excellent performance and clearly above market growth, so it's difficult to say that it would be modest. Still, it is low against the track record of Automotive and should be feasible considering EB's excellent position in fast growing market. There is potential for much more, for example if the company can strengthen its position inside the Volkswagen Group further.

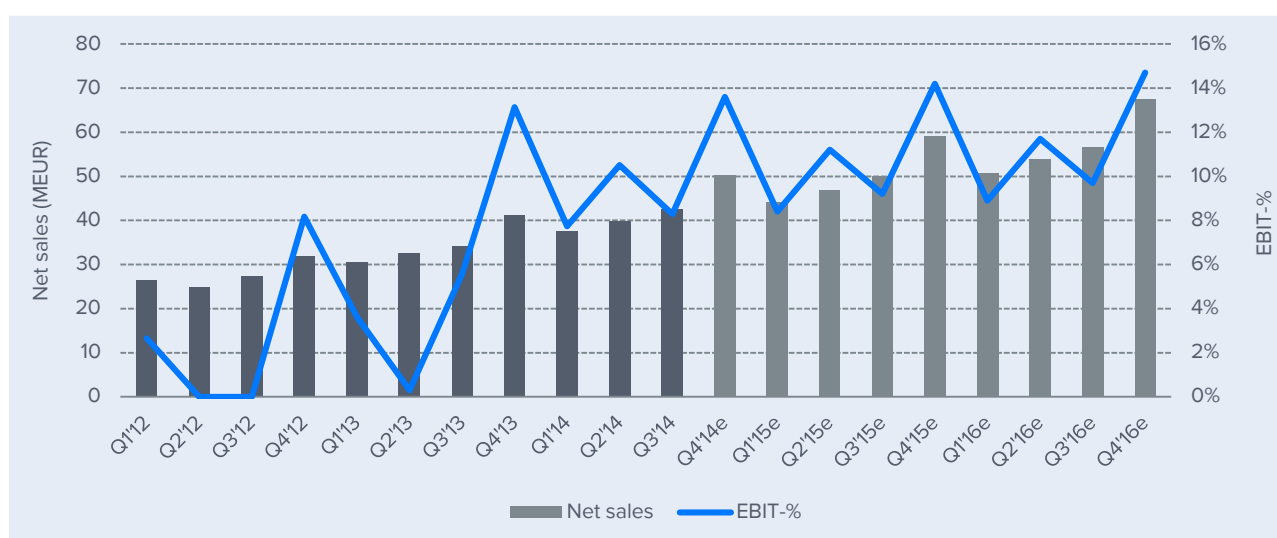
There's always a question about the available resources also. So far EB has been able to find reasonable priced engineers in Germany, but the resources are scarce there right now. The latest expansion outside of Germany just happened in Finland, where Wireless is located.

Estimating the profitability of Automotive is even more challenging than the growth, because there are so many things that influence it in the short term. In our base case we are assuming that the 2014 level is sustainable and doesn't include higher than normal share of licenses. In general we are using the 2014 level as a new normal, which could be dangerous, since the level is clearly an all-time high for the company. Our 2014 EBIT-% estimate is 10.3% for Automotive, while EBIT-% was 6.2% in 2013 and only 3.0% in 2012 (which was still the record for the company at the time).

As the license fees are expected growth somewhat in-line with the net sales, the profitability will increase naturally to some degree. There's also limited scalability in services business as there shouldn't much pressure to increase to fixed cost base. All in all, we are expecting the EBIT-% of Automotive to increase to 11% in 2015 and steadily rise to 12% reaching it in 2017. At this point, we aren't expecting further improvements. There's still upside potential in profitability, at least to 15% in our opinion, but this would require excellent performance in projects and possible certain shift in the business dynamics (products vs. services). As there are also risks related to the 2014 level, we think it's prudent to be cautious when thinking about the earnings potential.

These levels are also relatively challenging against the peer group of the company, so they aren't easy to reach. The visibility to earnings is general is relatively low, so there's also a significant disappointment risk in the profitability development. Investors should take this into account.

Automotive's key figures and estimated development



Source: Inderes

4. Wireless - looking for the breakthrough

The Wireless business segment offers development services and customized solutions for wireless communications markets. It also has own product platforms to industrial internet and wearable markets and products and product platforms for defense and public safety markets.

Wireless has an interesting mixture of businesses and also the earnings logic varies even within businesses. All this is tight together by their relation to radio technology, which is the key expertise of EB Wireless.

Currently the Wireless business segment is going through a transformation process, where it is moving more towards product based business model from the old service focused model.

We believe that the profitability has been pushed down by R&D costs related to the new defense products, their marketing efforts as well as the poor market situation in general (including key clients).

We expect the profitability to improve significantly in the coming years, but the visibility in general is still relatively low.

The history of EB Wireless has many structural changes and M&A has always played a significant part in EB's business. We believe that the defense and authorities product business could be an interesting target for many larger companies, if EB could make an international breakthrough there.

The Wireless business segment offers development services and customized solutions for wireless communications markets, development services based on own product platform to industrial internet and wearable markets and products and product platforms for defense and public safety markets. It has an interesting mixture of businesses and also the earnings logic varies even within businesses. Everything is tight together by their relation to radio technology, which is the key expertise of EB Wireless. We see this as a very important factor, since a small company can easily try to do too many things, and succeed in none. The basis is the same every business area, and the main question is more how to leverage this knowhow.

Currently the Wireless business segment is going through a transformation process, where it is moving more towards product based business model from the old service focused model. The concrete products that the Wireless business segment currently sells are for defense and authorities sectors only, and they are still early in the product cycle. EB is targeting to make an international breakthrough with these products, which could change the dynamics quickly. The R&D service business isn't very attractive in our eyes, but there's definitely potential in the product based business.

Defense sector is dominated by group of giant companies that generally dominate their home markets, as countries generally prefer domestic suppliers for the defense products and services. If EB would be able to capture a fraction of the market or even convince right people of the technological advantage of the products, Wireless could be a potential target for acquisition. If one of the larger companies would see EB's products as a way to increase their own competitiveness or enter new market through already established sales channels, the potential synergies could be very large. Then the added value and the acceptable price could be very substantial, when comparing them to the current situation of EB Wireless.

During the past few years the cost structure of Wireless has been too high for profitable business, since Test Tools business is no longer sharing the fixed costs. The company has answered to this problem with the cost savings measures, but the profitability has remained at a very low level to this date. We believe that the profitability has been pushed down by R&D costs related to the new defense products, their marketing efforts as well as the poor market situation in general (including key clients). We believe that the profitability is going to improve significantly in the coming years, but the visibility is still relatively low. We hope that EB would clarify its long term strategy in Wireless business, which would improve the visibility and possible strengthen the investment case.

The history of EB Wireless has many structural changes and M&A has always played a significant part in EB's business. Therefore the structure of Wireless has changed strongly during the past 10 years. EB sold its Test Tools Business to Anite Plc in January 2013. The company had a solid position in testing tools with Prosim product family and this mature business provided cash flow and know-how for developing the future businesses. In our opinion the EV of 31 MEUR was still a very good price for the business.

The key elements of Wireless

Basics

We believe that EB Wireless has an interesting mixture of businesses build around a knowhow of radio technology. Technologically we are confident on the company's abilities, but believe that the business side has been lacking in the engineer dominated business. We believe the main challenge is the commercialization of the expertise. EB has had plenty of potential technologies, but too few have been profitable also for the shareholders. The core business of Wireless, R&D services, doesn't have a great outlook and the profitability has been low for a long time. However, there are interesting opportunities in new market areas like Connectivity Solutions, Special Devices and Defense.

Transformation process

Wireless is currently going through a transformation, which basically began when the Test Tools business was sold in the beginning of 2013. The business segment is moving more towards product based business model from the old service focused model. This would lead into a more scalable business model, but it naturally requires success in the product business. Currently the key factors are the defense and authorities products. In addition EB is focusing in Connectivity Solutions, where company now has a significant reference in Adidas (miCoach smart watch). This is an interesting opportunity, as the company also has ready product platforms to offer.

Defense products and their potential

The underlying potential of the new defense products is significant, especially in Tactical Communications and in Signals Intelligence. EB Wireless has been in a good position to develop the products with the support of Finnish army, but the company has IRPs for products that have a lot of potential. We believe that a significant, large scale breakthrough to the international defense sector is still far away, but it could change the dynamics of the segment.

Potential & risks

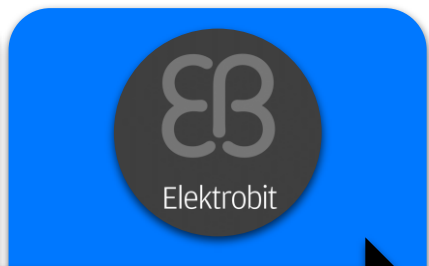
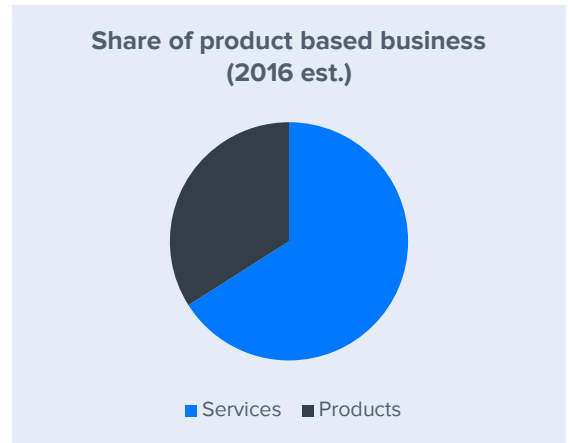
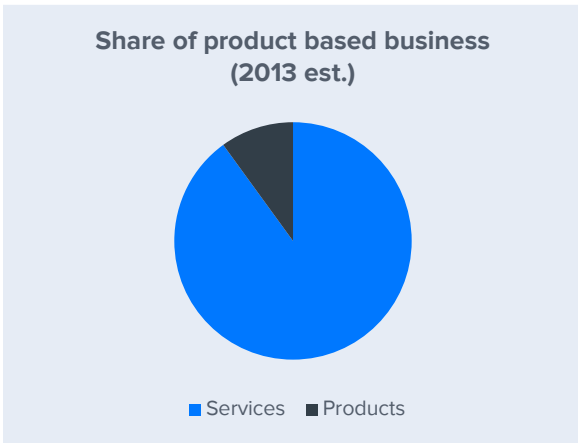
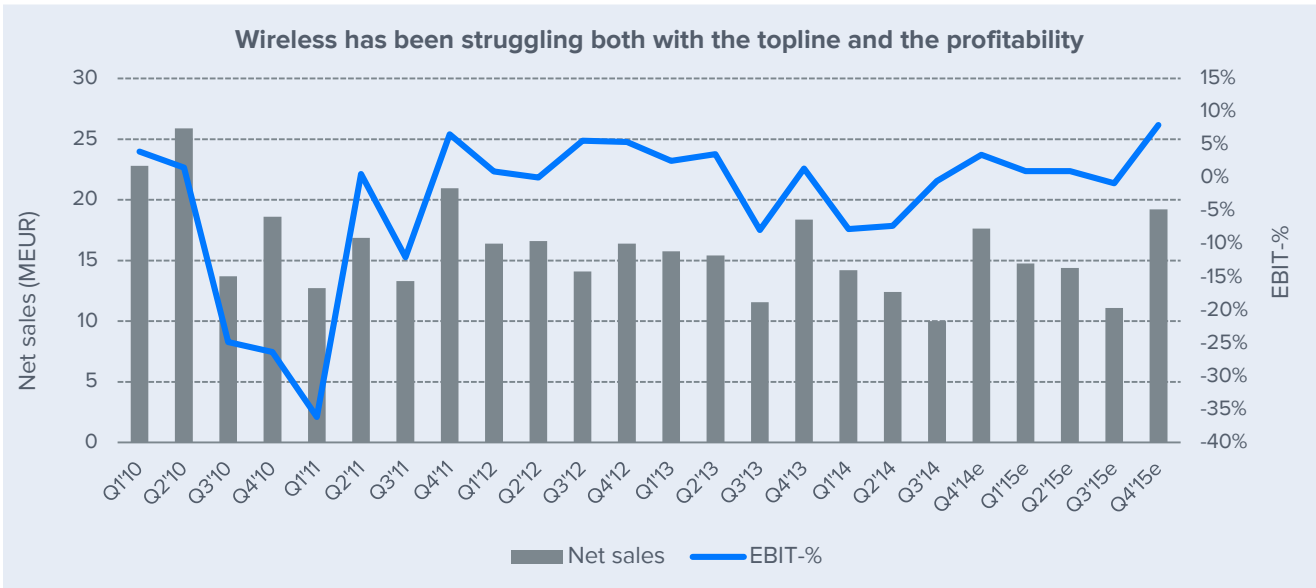
Scalability of the services business is relatively weak. Unless defense or authorities products make a major breakthrough, this will be a challenge also in the future limiting the potential profitability of the segment clearly below 10 % (this would be a maximum level). We believe that the biggest risk is related to losing few major clients that bring significant portion of the net sales. It's also easy to demonstrate the risks of the business with the case example of TerreStar. Pretty much everything that could go wrong went wrong with TerreStar and a significant amount of shareholders money was destroyed in the process.

Valuation

We believe that the value of the EB's Wireless business is roughly 60 MEUR. This value requires meaningful success of the products in the international markets and succeeding in the transformation of the company. With the current low earnings the value is mostly derived from the future potential, which is naturally not a reliable method to value a company. However, it's important to understand that Wireless is currently going through a major transformation. The earnings based multiples are very high with the current earnings, but they would normalize with the profitability in positive scenario. We also see a noteworthy possibility for an acquisition, where the value could in a different level. Due to the low visibility regarding both the business and the industry, there are significant risks related to both the estimates and the valuation.



Value 60 MEUR



Portfolio around radio technology; main drivers are technological change and LTE

Defense
 Products for tactical communications, electronic warfare and signals intelligence.
 Combining commercial and proprietary technology.

Special Terminals / Devices (for Authorities)
 Specialized Device Platform
 Rising safety needs, cost pressures

R&D Services
 1. Telecom
 2. Connectivity Solutions
 New devices becoming connected

4.1 The business areas and main offerings

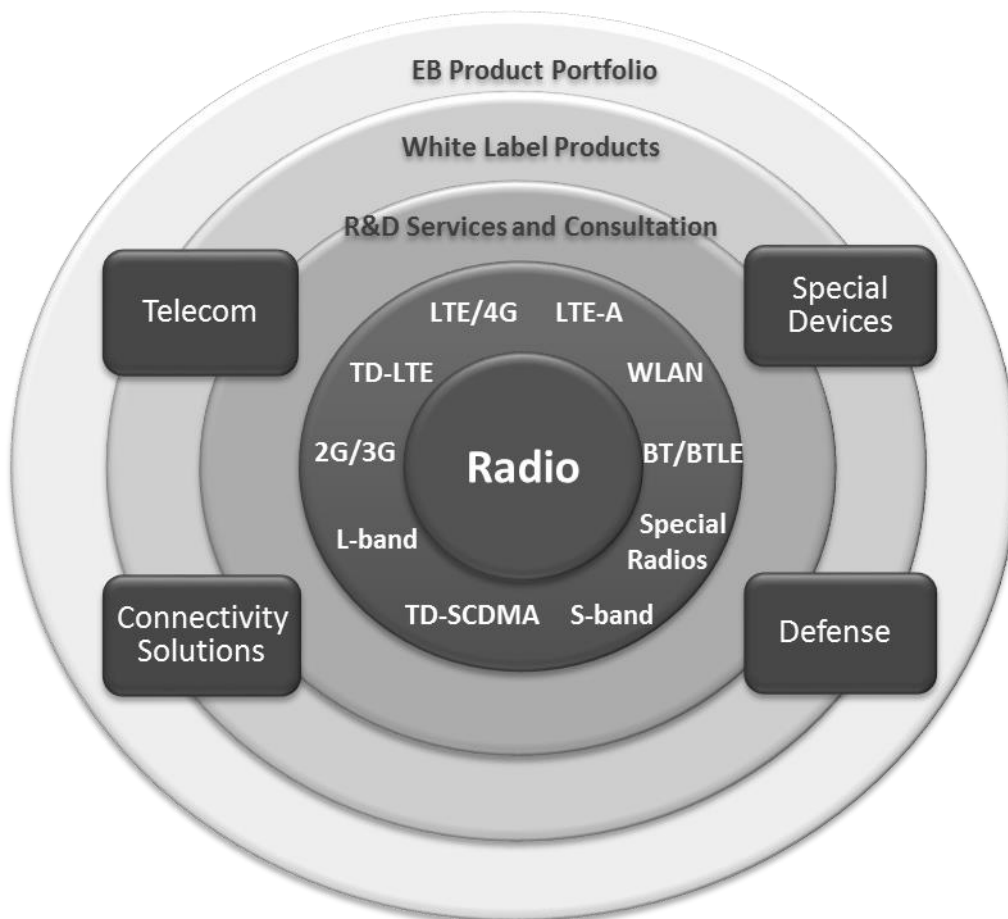
We have divided Wireless into three categories that are **Defense, Special Devices and R&D Services**. R&D Services can be also divided into two sub segments, **Telecom and Connectivity Solutions**.

Two major drivers for the Wireless segment are **LTE Technology and technological change**.

We have divided Wireless into three categories that are Defense, Special Devices and R&D Services. R&D Services can be also divided into two sub segments, Telecom and Connectivity Solutions. There could be also Chipset vendors, but its contribution is limited and therefore we haven't separated it into its own sub segment. All the categories are all connected by the expertise in radio technology, and all of them have at least two common drivers: LTE Technology and technological change. Importance of these vary between segments, but they are significant for all.

In the following graph we have demonstrated the business areas of EB Wireless, the basis of the offering as well as the technologies behind them. This hopefully helps to identify the different aspects of the businesses, which we'll discuss more in the following chapters.

EB Wireless Business Areas



Source: Elektrobit

R&D Services - Telecom and Connectivity Solutions

Telecom R&D services used to be the heart and soul of Wireless, but their significance has gone down as other businesses have risen. Connectivity Solutions is a clearly growing area in the R&D services business. We believe that these businesses represent clearly more than 50 % of EB Wireless net sales.

With Telecom the underlying driver for the market continues to be the use of LTE standard that expected to continue to gain strength.

Good example of Connectivity Solutions is the deal with Adidas smart watch, where EB did the R&D work of the product on the existing platform.

EB has expertise in wireless technology and embedded system, therefore giving a solid platform to help OEM's with new features to perhaps ordinary products that are now taken "online". More devices are becoming wirelessly connected, so this market can be expected to grow in the future. The biggest problem of this business is the intensive competition.

EB used to be very much involved with the cellular and smartphone market, but the market has pretty much dried up in the past years.

Defense category is the most interesting opportunity in the long term. EB's products for defense sector are now ready to be launched to the international markets. However, this is a very difficult market to entry even with very competitive technology.

We have divided R&D services to two sub categories that are its main customer segments, Telecom and Connectivity Solutions. We believe that these businesses represent clearly more than 50 % of EB Wireless net sales (official figures haven't been disclosed). The majority of this derives from Telecom, even though the Connectivity Solutions is growing its share quickly and has significant growth potential also in the future. Good example of Connectivity Solutions is the deal with Adidas smart watch, where EB did the R&D work of the product on the existing platform.

Telecom's customer segments are Network & Infra OEM's and the customers Connectivity Solutions are Device OEM's. Basically EB offers OEM's access to the latest technology knowhow within the wireless domain. With Telecom the underlying driver for the market continues to be the use of LTE standard that expected to continue to gain strength. LTE technology is based on multi-antenna technologies that create demand for advanced radio channel emulation tools when introducing LTE technologies.

Telecom used to be the core business of Wireless. It's still the most important part of it, but its significance has gone down as the others have risen. While Telecom is more of a "traditional business" of EB, we find Connectivity Solutions especially interesting in this area. More devices are becoming wirelessly connected, and this is a trend that can be expected to continue. EB has expertise wireless technology and embedded system, therefore giving a solid platform to help OEM's with new features to perhaps ordinary products that are now taken "online". This Internet of Things creates an interesting trend for EB in this area: companies outside traditional wireless markets have a growing interest towards connectivity solutions creating value for their own products, which creates demand for EB's R&D services. Examples of these new markets are sport and welfare, industrial manufacturing and automotive segments. EB is also having own platform development in this business area like in Special Devices. The biggest problem of this business is the intensive competition.

EB Wireless serves device OEMs and ODMs, telecommunication and professional radio manufacturers, semiconductor vendors, cellular and special operators and defense and public safety authorities. EB used to be very much involved with the cellular and smartphone market, but the market has pretty much dried up in the past years. Considering the current development in the smartphone market, we don't see many opportunities for EB in the device R&D services. Luckily this isn't a significant part of EB's portfolio anymore.

Defense sector products

Defense category is the most interesting opportunity in the long term in our opinion. There is a vast market for communications and intelligence solutions targeted for the sector. EB's products for defense sector, developed in co-operation with Finnish armed forces, are now ready to be launched to the international markets. These markets are extremely harsh for newcomers, but if EB would gain fraction of this market, it could become a solid business for it. The sales cycles are extremely long, the buyers are conservative (and want to buy from domestic companies) and the defense budgets have been under heavy pressure lately. Overall, this is a very difficult market to entry.

The trend of adopting new commercial technologies and combining them with proprietary military technology to gain cost efficiency is a very important trend for EB.

Special Devices (or Special Terminals) for Authorities is another interesting category where we see significant potential. Its offering is based on EB's Specialized Device Platform that is targeted to Public Safety, Security, and other professional markets

EB announced during summer that it chose the Qualcomm Snapdragon chipset for its next-generation device platform. This means more efforts and expenses in R&D in the short-term, but should also result in a competitive product.

EB introduced the EB Tough Mobile smartphone just before releasing this study. EB Tough Mobile is designed and built for demanding Mobile Security and Public Safety markets. We see this launch as an interesting opportunity, because mobile security is currently a very hot topic and with the Qualcomm technology and EB Special Device Platform it should be competitive in the markets.

Market entry in this area should be significantly easier, since there is original commitment (both financial and strategically) as large as in defense here. Still, we do not expect much from the current products.

The trend of adopting new commercial technologies, such as LTE and smart phone related software applications, and combining them with proprietary military technology to gain cost efficiency, is a very important trend for EB. This trend is expected to continue and get stronger, especially due to the budget pressures caused by financial burdens of countries around the world. This should open up new opportunities for companies like EB.

Products for Authorities

Special Devices (or Special Terminals) for Authorities is another interesting category where we see significant potential. Its offering is based on EB's Specialized Device Platform that is targeted to Public Safety, Security, and other professional markets, enabling them to lower the development cost and shorten their smartphone or tablet development schedule. The EB platform gives fast access to latest commercial device technology, such as LTE and new Android releases, reducing the overall development program risk. The key selling points relate to higher security demands that the authorities are facing.

EB announced during summer that it chose the Qualcomm Snapdragon chipset for its next-generation device platform. The new processor will be integrated into advanced LTE devices targeted at public safety, cyber-security and other professional markets. We believe this means more efforts and expenses in R&D in the short term, but should also result in a competitive product in the end. The value of the EB Special Device Platform comes from its scalability and versatile feature set, performance, industrialization options, and extended product life cycle.

EB introduced the EB Tough Mobile smartphone just before releasing this study. EB Tough Mobile is designed and built for demanding Mobile Security and Public Safety markets. It's Android-based and according to the company it is a tool for professional users such as government agencies, authorities, first responders and other professionals with the need of communicating securely and reliably in critical communication situations. EB Tough Mobile incorporates a special hardware-based security platform with features like tamper-detection as well as firmware and hardware integrity check to ensure end-user security and privacy. EB Tough Mobile provides support for global LTE frequencies. We see this launch as a very interesting opportunity for the company, because mobile security is currently a very hot topic and with the Qualcomm technology and EB Special Device Platform it should be competitive in the markets. However, it's very difficult to estimate its sales potential at this point.

The drivers for Special Devices are therefore pretty much the same as in Defense. However, the market entry should be significantly easier here since there original commitment (both financial and strategically) isn't so large here. Therefore we are expecting a faster entry to the markets in this area and also a noticeable sales contribution already in 2015. Still is a significant breakthrough definitely isn't easy in this area either.

4.2 Core of Wireless: R&D services

The core business in Wireless is the R&D services for its clients that are generally companies that are somehow involved with different advanced wireless technologies.

We believe that EB's biggest client in this area is the telecom company Ericsson. Its portion of the net sales is probably very significant, though no official figures have been disclosed.

The basic R&D services business model scales up only with the number of engineers, and thus has its limitations and cannot reach very high profitability. 10 % EBIT margin would already be extremely high for this kind of business.

The competitive situation is fierce in this business area. Especially the Asian competitors are pushing down the prices.

The development of Nokia and some other companies have left many engineers without a job in Oulu area. As both the clients and the competitors are mostly international nowadays, the competitive situation hasn't changed much. However, EB Wireless has more resources available for a suitable price, if the demand increases.

Wireless has gone through cost cutting and lowered its cost structure during the past years, but its fixed expenses are still quite high. There would be operational leverage, if the company could increase its net sales.

The core business in Wireless is still the R&D services for its clients. They are generally companies that are somehow involved with different advanced wireless technologies. In the past Nokia was clearly the most important client and EB was known as "one of the subcontractors of Nokia" for a long time, but for the current EB this title would be totally misleading. Nokia is still a client of EB, but its contribution to EB's sales is very limited. We believe that telecom company Ericsson is now much more significant than Nokia and probably clearly the biggest client of EB Wireless (such figures haven't been disclosed).

However, company's Wireless business is still concentrated few main clients, which creates a significant risk for EB. We believe that in the future EB will bring much more clients outside of the typical business sector, when the wireless technology is moving into "everyday products". It's not difficult to guess that different wireless technologies will continue to spread, which should provide many opportunities for experts in this area.

Even though we believe that the demand for Wireless services will be growing in the future, R&D services isn't a goldmine businesswise. The basic R&D services business model scales up only with the number of engineers, and thus has its limitations and cannot reach very high margins (profitability). Typically 10 % EBIT margin is already extremely high and requires pretty much full usage of personnel resources as well as solid pricing. EB hasn't been anywhere near this level for years, and we believe the main challenge is the commercialization of its expertise as well as tough competitive environment.

There's a severe competition in the field, especially after Nokia's development has weakened the overall demand and left lots of resources unused. After the most recent developments, there are plenty of engineers without a job in the Oulu area, where the headquarters of Wireless is located. This has created some smaller companies and competition, but the clients as well as the major competitors are mostly international companies nowadays. Therefore we don't see the current situation in Oulu relevant when it comes to competition – it's more likely that EB Wireless has more resources available for a suitable price, if the demand increases. The biggest competitive pressure comes from Asia, where the competitors are pushing down the prices quite effectively.

Wireless has gone through some cost-cutting and lowered its cost structure during the past years. Even with significant progress in this area, the fixed expenses are still quite high. Most of EB's personnel expenses are fixed, even though theoretically they could be cut ruthlessly if the demand drops. However, this could lead into losing the expertise that the whole business is based on. Also business needs support functions that also build in some costs. Overall Wireless is currently in a position where the profitability would be growing with significant leverage compared to net sales. The company can utilize the same basis and personnel, and top line growth should appear to bottom line.

4.3 Future potential is in the defense products

EB Wireless has developed new products for the defense sector that hold a large potential, if EB is able to build a solid partner network for sales and able to reach the right customers.

However, this isn't an easy task. The first significant client (outside of Finland) is the hardest to get; it will require a great deal of time and patience.

The R&D work of the products has been done over last few years that has been paid by the Finnish Defense Forces, but without normal margin requirements of EB. In addition EB has made some own investments. Therefore this business has been dragging down the profitability of Wireless, but now EB owns the intellectual property right (IPR) for these products.

The most relevant products of EB are Tactical Wireless IP network, Tough VOIP and specialized platform (also for military use).

The role of challenger, even if it has technologically superior products with cheaper prices, is a major disadvantage in a market that is very suspicious for newcomers. Sales cycles are very long and solid reputation is priceless in the sector.

Despite the challenges, there is a realistic possibility to gain share in specific niches. This just requires creating a solid sales network and possibly reaching some co-operation agreements.

Partnerships are unlikely to happen in tactical communications, but they should be possible in other areas that are not so critical for the larger companies.

EB Wireless has developed new products for the defense sector, where it has leveraged its knowledge in radio technology. These products have been developed in co-operation with the Finnish armed forces, from where EB also published a significant 15 MEUR order in the autumn of 2011. Further orders for product deliveries were announced in 2013 and 2014. These products hold a large potential, if EB is able to build a solid partner network for sales and is able to reach the right customers. This isn't an easy task, but basically even one major contract could be very significant for a small company. The first significant client (outside of Finland) is the hardest to get; it will still require a great deal of time and patience.

If defense products fail to fly, the company won't stand to lose much anymore, since majority of the development of these products has been financed by Finnish Defense Forces. However, the potential upside is significant and defense sector could theoretically grow into a substantial business area inside of EB. It is very important to notice the early phase of these products. The R&D work has been done over last few years that has been paid by the client, but without normal margin requirements of EB. In addition EB has made some own investments to the products. Therefore this business has been dragging down the profitability of Wireless, but now EB owns the intellectual property right (IPR) for these products, which hold great potential in the future.

The most important products of EB to the defense and authorities are:

- EB Tactical Wireless IP network for tactical communications
- EB Tough VoIP tactical IP-based communication
- EB specialized device platform for specialized markets (incl. custom made LTE smartphones and tablets)

In addition to these, EB has a Wideband COMINT Sensor for Signals Intelligence product and a Counter RCIED platform for electronic warfare, but especially the latter is no longer relevant as the market has pretty much died.

The biggest challenge in the defense market is that EB is relatively unknown outside of Finland and naturally a tiny player compared to behemoths in the area. The role of challenger, even if it has technologically superior products with cheaper prices, is a major disadvantage in a market that is very suspicious of any newcomers. Sales cycles are very long, probably around three years, and a solid reputation and right contacts are priceless in the sector.

However, EB has a significant advantage coming at least from two factors: it's coming from Finland that is generally acknowledged as both trustworthy and politically neutral country in general, and it has strong support and reference from the Finnish armed forces after years of co-operation. So even though conquering the market from the big players sounds unlikely, there is certainly a realistic possibility to gain share in some specific niches. This just requires creating a solid sales network and possibly reaching some co-operation agreements. After all, EB is aiming for niche markets of defense sector, where strategic partnerships could be achieved. However, we do not see this option in tactical communications. Tactical communications are large scale projects that are at the core of many defense companies - this isn't a system to be bought outside for a large company in the industry. However, for example the Tough VOIP isn't such a critical part of the system, and it already has a significant amount of distributors in the business area.



Source: Elektrobit

The US is by far the biggest market in defense. However, as in many other countries, this sector is dominated by domestic companies.

However, the market is relatively open outside of the major defense countries. These are the key markets for EB Wireless.

It is difficult to determine the markets and competitors for EB Wireless, because it has a unique combination of businesses.

The United States is by far the biggest spender when it comes to defense. According to some calculations US spends more in defense than rest of the world combined. After US, the world's largest military spenders are China, Russia, the United Kingdom and France. This information is of little relevance for EB, but it's important since the defense market is always leaning to the local companies. Typically the "big spenders" have created a defense industry in their countries.

This is also the reason why there is a lot of defense sector knowledge and knowhow in countries like US, UK and France. However, the market is relatively open outside of these countries, and many countries have very little to offer in the business. Even though Finland is small, it has some expertise in the area and it is also an exporter in the field.

4.4 Competitive situation in different segments

It is difficult to determine the markets and competitors for EB Wireless. By concentrating in certain technology instead of certain business area, EB Wireless has a unique combination of businesses. Just to clarify to different areas, we have simplified them in the following table.

The table doesn't cover all the areas where EB is active, only the most important ones. We have now divided the competitors according to the same categories than before, representing the main offerings and customer segments of EB Wireless.

The main competitors of EB Wireless in different segments

Main competitors	Products		R&D Services	
	Defense	Special Terminals	Telecom	Connectivity Solutions
EB Wireless	X	X	X	X
Sasken		(X)	X	X
HiQ		(X)	(X)	X
Ixonos			X	X
Tieto		(X)	X	(X)
Wipro			(X)	
Aricent			(X)	
Asian ODMs		X		X
Kongsberg Gruppen	X			
Motorola Solutions		X		
Sonim		X		
Harris	X			
Ultra Eletronics	X			
Thales	X			

Categories: 1) competitors marked by X, 2) similar offerings but little direct competition marked by (X)

Source: Inderes

Different categories all have different competitors, but they also have a lot common factors. It's very difficult to generalize the competitive situation.

Different categories all have different competitors, but they also have a lot common factors. Also, for example R&D Services includes concept work, software and hardware development, integration, testing, transfer to production, support, general consultancy as well as customization. Basically it includes the whole process involved with the device development, and there are plenty of companies that are significant in some parts of the chain. Competitors are can be completely different in different parts of this process, and often companies are more focused on hardware, software or general consultancy. Therefore it's very difficult to generalize the competitive situation.

4.5 Earnings potential and future estimates

The earnings and profitability potential varies greatly between different business areas.

In our opinion the earnings and profitability potential varies greatly between different business areas. Therefore we'll go through the potential by business segments within EB Wireless.

A great majority of the Telecom business is R&D services, which means that the scalability is relatively weak. Also the clientele is very concentrated, limiting the pricing power.

Telecom (mostly R&D services)

Telecom is the biggest business area of EB Wireless and has formed the basis for everything else. However, a great majority of the business is R&D services, which means that the scalability is relatively weak. Due to the nature of the business, 10 % EBIT margin would be a great accomplished for the business and would require an excellent personnel utilization level. The competition in this field is tough and pushes down the prices constantly.

While we believe that EB is competitive and has a good position in this area especially within its key clients, this is a low margin business. We would be satisfied if the company could reach 5 % EBIT margin consistently in this area.

In Connectivity Solutions EB can utilize its technological platforms in client's R&D work. This creates some scalability, though products must naturally be customized according to the OEMs wishes.

Most of the business is still typical R&D work and the competitive situation is fierce also in this area, so we would be satisfied with EBIT-% of around 5-10 % depending on the volumes.

We believe that Special Devices is currently clearly in the red. EB is developing a new device platform with Qualcomm Snapdragon chipset, which has to incur significant costs. We also believe that the area's net sales are currently low.

If EB is able to develop a competitive new product platform, this business area has significant earnings potential. At least the negative effect of R&D work should be over relatively soon, which would influence the earnings positively.

EB has some pure products for the defense markets. The products have high margins (probably around 40-50 %), so the earnings potential is very significant. However, the biggest question is still whether the

Also the clientele is very concentrated, meaning that few key customers (such as Ericsson) contribute a very large portion of the net sales (specific figures haven't been disclosed). This creates some additional risks.

While we believe that EB is competitive and has a good position in this area especially within its key clients, this is a low margin business. We would be satisfied if the company could reach 5 % EBIT margin consistently in this area. The pricing power has to be weak against the key clients and the competitive environment is harsh, so this business is never going to be huge earnings contributor in our eyes. However, it creates the basis for the other businesses and is strategically very important.

Connectivity Solutions

Connectivity Solutions is a growing business area, where we see a lot of potential in general. EB has competitive technological platforms that can be used as a basis for client's R&D work. This creates some scalability, though all the products must naturally be customized according to the OEMs wishes. A good example of this is the Adidas Smart Watch project. If there would be more of these kinds of projects, there would be some repetition. However, clients can demand exclusivity (both regarding technology and personnel).

However, the competition is also fierce in this business area. We believe that EB is very competitive in certain areas, but high margins are still very difficult to reach due to the pricing pressure from competition. Still, the margins of this business areas are likely to be higher than in Telecom, if the company can take advantage of its platforms. Most of the business is still typical R&D work, so we would be satisfied with EBIT-% of around 5-10 % depending on the volumes.

Special Devices

We believe that Special Devices is currently clearly in the red. This is due to the fact that EB is developing a new device platform with Qualcomm Snapdragon chipset as well as the EB Tough Mobile smartphone, which has to have incurred significant costs. The new processor will be integrated into advanced LTE devices targeted at public safety, cyber security and other professional markets. At the same time the older version of the specialized device platform was already more or less out-of-date, so we believe that the area's net sales are currently low.

However, if EB is able to develop a competitive new product platform and / or the EB Tough Mobile becomes a success, this business area would have significant earnings potential. The security aspect is becoming more and more important in mobile phones and in communication in general, so there should be plenty of demand for solutions in this area. At this point we do not want to speculate further, but there's a possibility for scalable business in this area. Still, the negative effect of R&D work should be over soon, which would already influence the current earnings positively.

Defense

Like discussed earlier, EB has some pure products for the defense markets. The company has developed these for years, mainly under a R&D contract of Finnish Defense Forces, but also with its own investments. The products have high margins (probably around 40-50 %), so the earnings potential is very significant if there are sales. However, the biggest question is still whether the company can make the international breakthrough that it is looking for. The

company can make the international breakthrough that it is looking for.

Potentially the international breakthrough could change the whole dynamics of the Wireless business. Even a single client like Finland for the tactical communications solution would bring tens of millions in sales, and the profitability should be solid.

We see a large opportunity in this business, but it is pretty much impossible to determine a “normalized” profitability for the business area.

2014 is a transformation year for Wireless; EBIT will be slightly negative and the net sales will decline. We are focusing into 2015.

We are currently expecting a slight recovery in the market situation in Telecom sector and expect some growth from Connectivity Solutions in 2015. We aren't expecting much from Defense and Special Devices in 2015, but they should contribute significantly more in 2016.

When it comes to profitability, we are expecting a significant improvement in 2015. With rising net sales in Telecom, the company should be able to improve capacity utilization and cover the fixed costs better. In addition, we believe that the R&D costs related to Special Devices as well as Defense products should be lower in 2015.

Our current estimates are based on a similar composition of business than now. If there would be a significant breakthrough e.g. in Defense, the estimates would be adjusted radically.

Finnish Defense Forces is a good client and can carry the business to some point, but more is needed to make Defense a significant part of the overall EB.

The potential margins and earnings of this business are very high. If the company would make the international breakthrough, which is still uncertain, it could change the whole dynamics of the Wireless business. If the company would be able to sell its tactical communications solution to a single country comparable to Finland, the deal size would be tens of millions over the years and the profitability should be solid. In addition to this, there would be maintenance business and stronger references for the next opportunity. Therefore we see a large opportunity in this business, but it is pretty much impossible to determine a “normalized” profitability for the business area.

Many of EB's products are still early in their product cycle. These might have a large potential, but they are not really visible in sales or profits yet. Still developing them has produced some costs, even though EB has been able to charge some of these from its clients (especially in defense sector). Therefore they have been pushing down profitability of Wireless, but the actual effect is impossible to quantify.

Future estimates of Wireless

At this point it's clear that 2014 is a transformation year for Wireless; EBIT is expected to be slightly negative and the net sales will decline clearly. Like the markets in general, we are already looking into 2015.

We are currently expecting a slight recovery in the market situation in Telecom sector, which should already provide some growth in 2015. In addition, we believe that the Connectivity Solutions will continue to grow, though this might require another significant order like Adidas in 2014. We are not expecting much from the defense sector in 2015; there should be some net sales, also to the international markets, but it seems that investors will have to wait for larger orders (e.g. tactical communications) for a longer time. Considering the ramp-up and long proceedings, these might be more relevant in 2016.

All in all, we are expecting net sales to recover to the 2012-2013 levels in 2015. Currently we are estimating a growth of 9.7% for 2015 and about similar growth figures also to the following years, as the Special Devices and Defense should start to contribute more. Naturally the visibility is very low to these years, as it's already limited to 2015. Also a single order can make a significant difference in the figure of Wireless and it's impossible to say when or even if these will be received. Therefore it is fair to say that the uncertainty related to the estimates is very high.

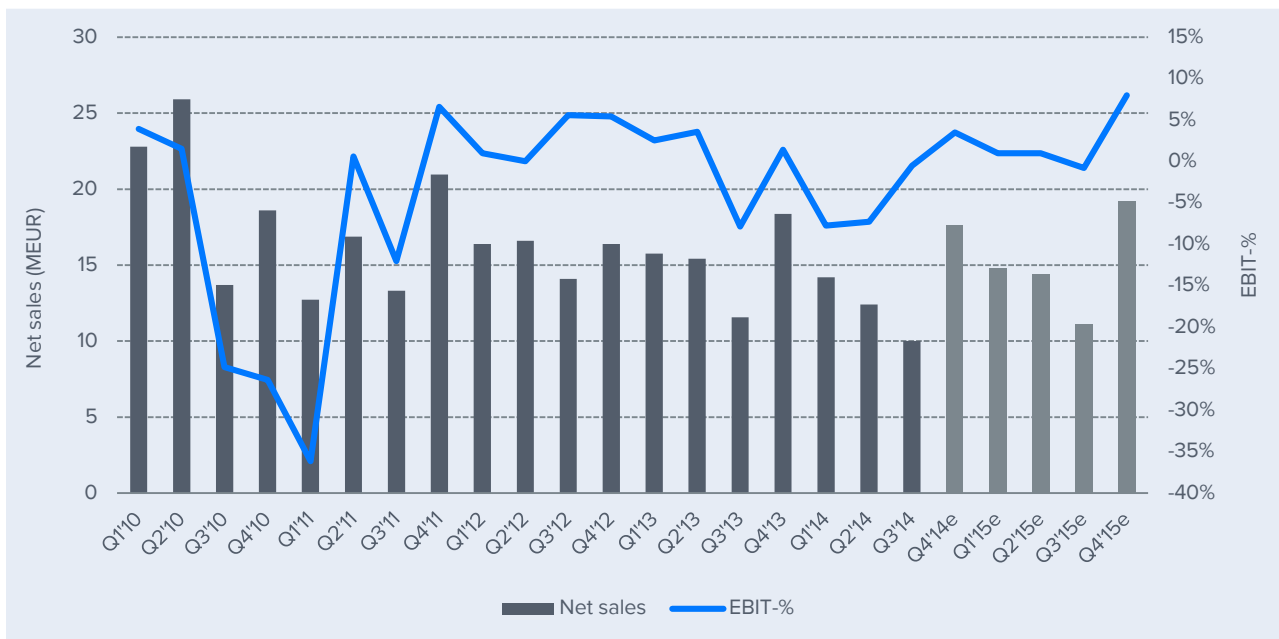
When it comes to profitability, we are expecting a significant improvement in the coming years. With rising net sales in Telecom, the company should be able to improve capacity utilization and cover the fixed costs better. In addition, we believe that the R&D costs related to Special Devices as well as Defense products should be lower in 2015 (vs. 2014). We are not expecting EBIT-% of 2.9% in 2015, which isn't an acceptable level but it's still a clear improvement (2014e -2.6%). We aren't expecting Wireless to reach its full potential in the coming years, but we are estimating steady, positive development. There isn't much point to make long term scenarios regarding profitability, as it depends so heavily on the success of the products and the general development of net sales.

We must stress that the uncertainty related to our estimates is very high, as the visibility is low.

Currently our EBIT-% estimate for 2016 is 4.0%, but it's important to note that this is based on a similar composition of business than now. If there would be a significant breakthrough e.g. in defense products, the estimates would be adjusted radically.

The visibility to earnings of Wireless is generally low; the company has many different business areas that follow different drivers, it's still very dependent on few key clients and in the other hand, one significant order (e.g. tactical communications) could change the picture completely. Therefore we must stress that there's a significant amount of uncertainty in the estimates.

The key figures and estimated earnings of Wireless



Est. sales growth-%

2013	-3.8 %
2014e	-11.3 %
2015e	9.7 %
2016e	10.0 %
2017e	11.0 %

Est. EBIT-%

2013	0.5 %
2014e	-2.6 %
2015e	2.9 %
2016e	4.0 %
2017e	5.0 %

Source: Inderes

5. Balance sheet is solid

Elektrobit's balance sheet is currently very strong. We believe that the company will have a significant amount of "extra" capital in the end of the year, perhaps around 40 MEUR. This could be used for M&A activity, if a suitable opportunity would be available.

We believe that a gearing-% around 0 % would be appropriate for the company's current businesses. Currently we are estimating a modest dividend payout of >50 % in the coming years.

EB's financial position has varied significantly over the years. Both (weak) financial success and extra dividends have played a role.

The company has also been relatively active in M&A in the past and has done many large deals.

The latest significant change happened after the Test Tools transaction from which company received a hefty 28 MEUR of net cash flow during H1'13. We think that the balance sheet is now clearly overcapitalized again.

Elektrobit's balance sheet is currently very strong. The company's equity ratio was 64 % and gearing -39 % in the end of Q3'14. Since Q4 should be strong, the company should have a significant amount of "extra" capital in the end of the year. We believe that the company has around 40 MEUR that it could use for M&A activity, if a suitable opportunity would present itself. Naturally this could be also paid to investors as dividends in the coming years. This would be 0.30 euros per share. However, we aren't expecting this as a dividend - we are estimating a modest payout of slightly over 50 % in the coming years.

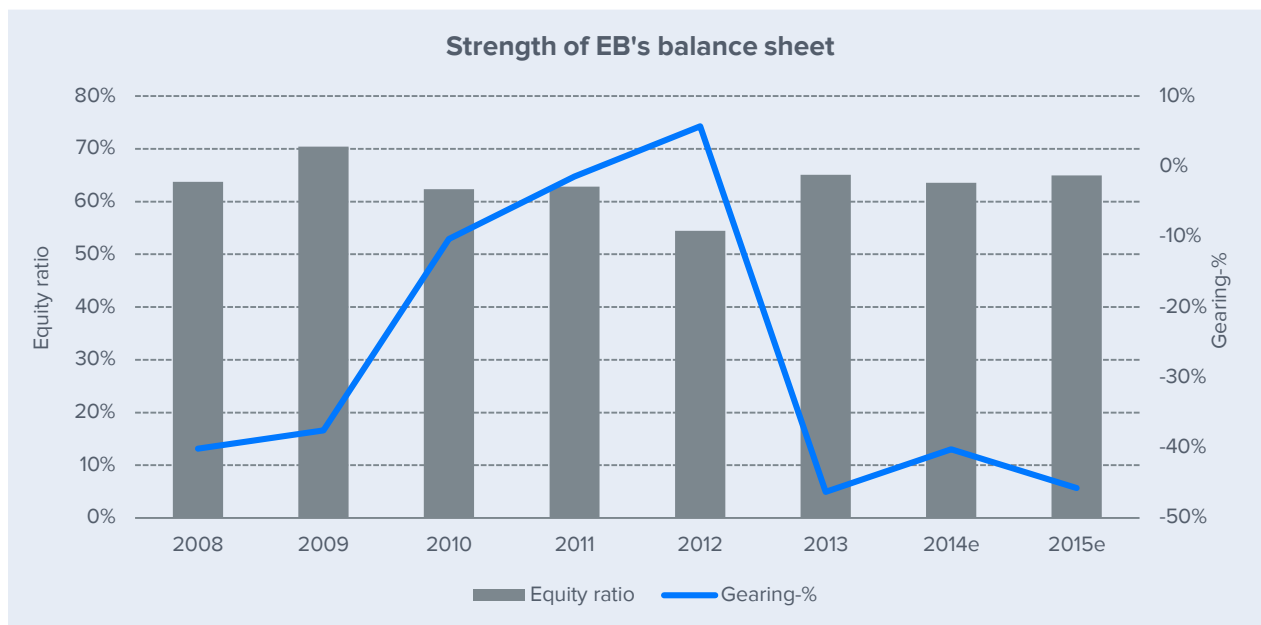
We believe that an equity ratio of around 50 % and gearing-% around 0 % would be appropriate for the company's current businesses. Due to rapid growth and potentially very large projects especially in Automotive that ties up working capital, we believe company needs some buffer and a strong balance sheet. We would find a situation where the company would have no net debt good; the company should have enough cash to fund its growth, but there would be no extra capital that might lead into temptations like unprofitable expansion or too expensive acquisitions.

Financial position has varied significantly over the years

If we go all the way back the year 2006, the company's balance sheet was undoubtedly overcapitalized. Company's gearing was almost 50 % negative in 2006, meaning that company's balance sheet was full of cash (107 MEUR) and the company had very little debt. After this the cash flows have been relatively weak and company also paid some capital back to investors. As a result, EB's balance sheet has been weakening clearly over the past five years until 2012.

The shareholders were distributed 0.20 euros per share from the share premium fund back in 2009, meaning around 25.9 MEUR in total. This was a large "dividend" and the excess capital was mostly paid out. However, shortly after this the TerreStar catastrophe hit the company both to the balance sheet (writedown of receivables) and to the income statement (effect on net sales and profitability). In 2009 company had 59 MEUR of cash in the balance sheet, but in 2010 this was down to 20.6 MEUR. TerreStar situation was mostly finalized in Q3'12, when company received cash flow of 13 MEUR after finding an agreement with TerreStar. In Q3'14 the whole situation was finalized with a minor payment and some tax decisions.

The situation changed once again after the Test Tools transaction from which company received a hefty 28 MEUR of net cash flow during H1'13. The normal dividend was still only 0.01 EUR / share for the financial year of 2012, but the company paid also an extra dividend of 0.11 EUR per share in the end of 2013. Since the company received around 0.22 EUR / share from the Test Tools deal and the company's balance sheet was already strong, it is now clearly overcapitalized again.



Source: Inderes

We believe that EB is saving firepower for acquisitions

The very strong balance sheet would give a good basis even for a larger acquisition. We believe that the most likely targets are in the automotive sector that's growing rapidly.

EB has made relatively large acquisition compared to its size, but in our opinion the less risky strategy in acquisitions would be smaller bolt-on strategy. It works well if company can buy smaller companies that have complimentary expertise and offerings to those of EB Automotive.

However, the company isn't under any pressure to do major acquisitions as it is in a very good position to grow also organically.

If the company doesn't find suitable and reasonable priced acquisition, the company could pay higher and growing dividends annually in the future. High but stable dividend yield supports the share price over the long term and keeps the

Naturally we can only speculate with the matter, but it wouldn't too much of a stretch to think that company is preparing for acquisitions. We believe that the company has around 40 MEUR of "extra cash" in the balance sheet by the end of the year and more coming after it. This would give a good basis even for a bit larger acquisition.

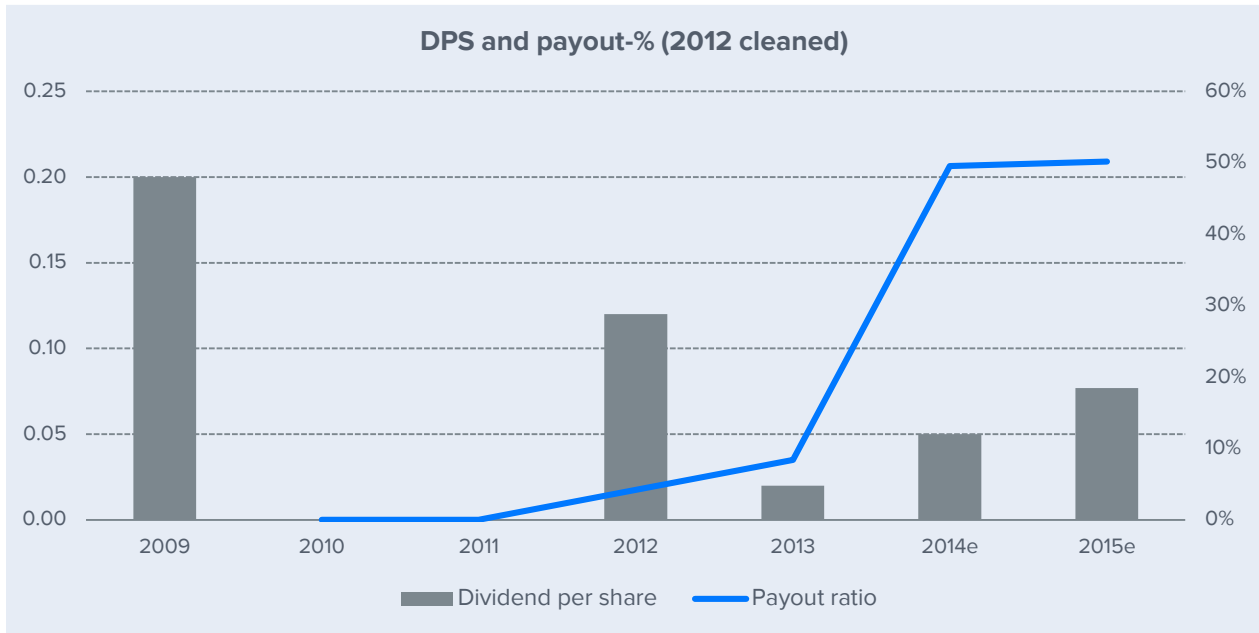
We believe that the most likely targets are in the automotive sector that's growing rapidly. In the past EB has made relatively large acquisition compared to its size, but in our opinion the less risky strategy in acquisition would be smaller bolt-on acquisition. Bolt-on strategy works well if company can buy smaller companies that have complimentary expertise and offerings to those of EB Automotive. If the offerings were to complement each other, EB could use its good customer relationships and capture larger part of the clients' purchased in the field. In the future there might be a simply need for resources and possible a chance to widen the international coverage of the company. We believe that this would be the most direct way to gain synergies and enhance the growth. However, it's worth noting that for now the organic growth has been so fast (>20 %) that there hasn't been much need for a boost from acquisitions. They might be more suitable when the organic growth path becomes more challenging, and this should take years. So the company isn't under any pressure to do major acquisitions.

In the history of EB there are good acquisitions that have created shareholder value (like the 3SOFT where current the Automotive business mostly derives from), but there are also strategic mistakes (like WiMAX and RFID in Wireless). We are interested to see what happens, and do not take a stance either for or against acquisitions at this point. However, we do understand that some investors might be worried that "cash is burning in the pockets" of EB.

firepower available for a long timer, if an opportunity rises.

Of course there are other possibilities also. If the company doesn't find suitable and reasonable priced target for acquisition, the company could pay higher and growing dividends annually in the future. Naturally we hope that company won't do an acquisition just for the sake of growth, because normally that ends poorly for the shareholders. High but stable dividend yield supports the share price over the long term and keeps the firepower available for a long timer, if an opportunity rises. Solid implementation acquisition strategy requires patience both from the management as well as shareholders.

Dividend per share and payout ratio 2009-2015e



Source: Inderes

6. Group cost structure and profitability

While competent employees are crucial for EB's business success, their salaries are also clearly the most important piece in company's cost structure. In 2013 personnel expenses were slightly over 60 % of EB's all expenses.

While the product sales have significant influence on the financials, the personnel and its utilization will be a key factor also in the future.

Our main conclusions from the cost structure are the following:

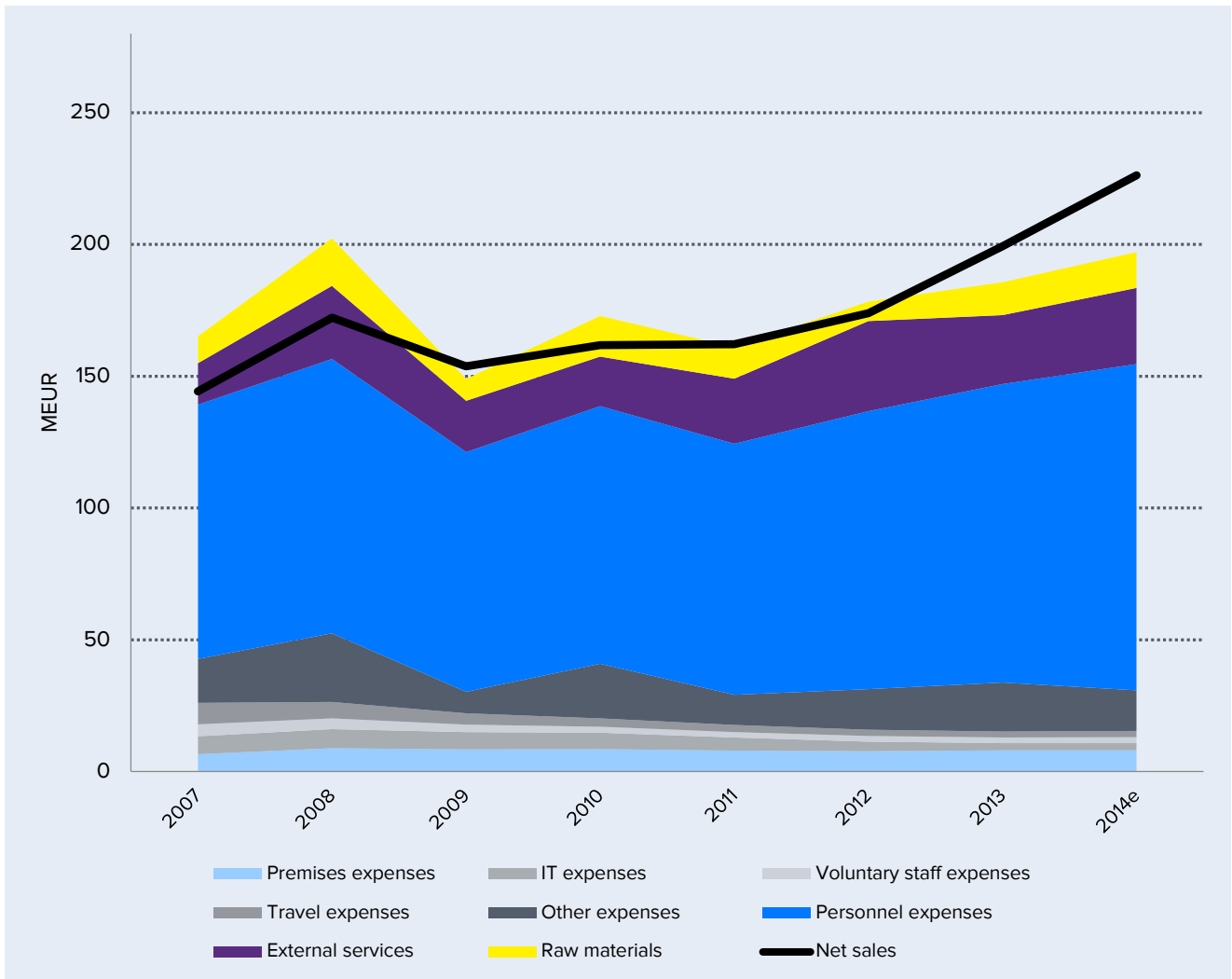
- **The development of salaries in Germany are likely to be the biggest contributor to cost inflation.**
- **Fixed expenses, such as premises and IT expenses, excluding personnel expenses are relatively low.**
- **Utilization of personnel, simplified to sales per employee, is a key factor regarding EB's profitability.**
- **The operational leverage is currently quite modest due to low relative share of product sales, but could be increasing significantly in the future.**

While competent employees are crucial for EB's business success, their salaries are also clearly the most important piece in company's cost structure. In 2013 personnel expenses were roughly 113 MEUR, which is slightly over 60 % of EB's all expenses. The number of employees, average salary, salary inflation, usage of personal (sales per employee) and the development of these are crucial for EB's financial success. Naturally the product sales mentioned earlier have also significant influence on the financials, but the personnel and its utilization will be a key factor also in the future.

We have opened up the cost structure in the following graph that includes all the expenses that the company has specified in its annual reports. There are also future expenses that should demonstrate how we expected costs to develop, if the estimated sales growth would materialize. Our main conclusions from the cost structure are the following:

- Clearly the most important factor in cost structure is personnel expenses. Most of the personnel is in Germany (Automotive) and Finland (Wireless). Salaries are higher in Germany, but neither one is a "cheap labor" country. In Finland the salary inflation can be expected to be very low in the coming years due to a good supply of capable engineers, but in Germany the situation is different. There is a shortage of capable engineers in Germany currently, which is bound to lead into salary inflation. This is one of the main reasons that EB Automotive has been expanding to Romania and now to Finland.
- Fixed expenses, such as premises and IT expenses, excluding personnel expenses are relatively low. There shouldn't be any significant need for investments either. However, large part of personnel expenses should be considered fixed in the medium term, as company's business naturally derives from the knowhow and competence of employees. The fixed costs are clearly higher in Wireless when remembering the scale of the business.
- Utilization of personnel, simplified to sales per employee, is a key factor regarding EB's profitability. This is natural, since the majority of EB's sales derive from services. The significance of this would be smaller if the product business would grow significantly, but this will be important also in the future.
- The operational leverage (how much margins improve by top-line growth) is currently quite modest due to low relative share of product sales, but could be increasing significantly in the future. Still, profitability should improve significantly with sales. Most of the growth in expenses should occur in personnel, external services and raw materials, when net sales will grow. Other expenses should be more or less stable.
- Related to the group structure, we note that the company has a significant amount of confirmed losses (especially in Finland) that can be used as a tax shield, which means that the actual taxes paid are lower significantly from the ones we are estimating in the income statement. This adds some value for the investors.

EB's cost structure on annual level 2007-2014e



Note that the cost structure in the graph doesn't include depreciation, amortizations or impairments.

Source: Inderes

7. Valuation: sum of the parts

The value of EB's share is a sum EB Automotive and EB Wireless businesses as well as the net cash of the group. Our main valuation method is the sum of the parts that we support with the traditional multiples as well as DCF.

We also see some acquisition potential both in Automotive and Wireless, but we still value them as stand-alone businesses.

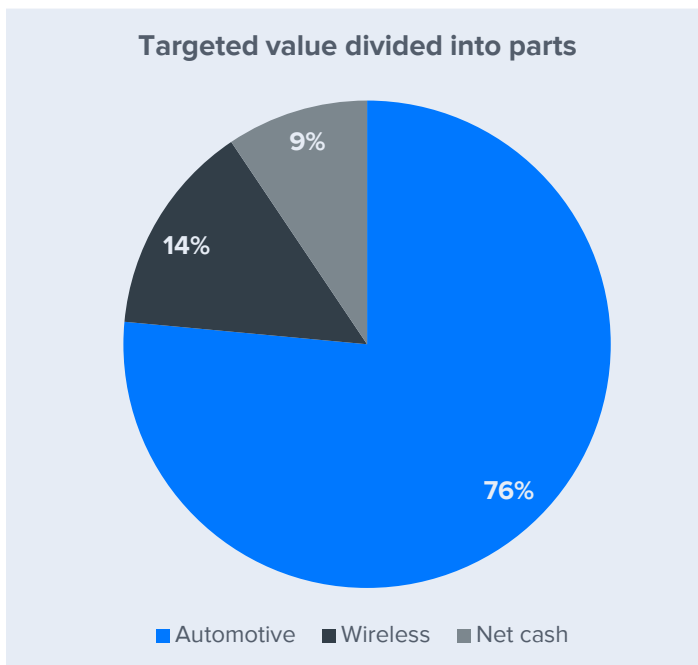
We believe that around 76 % EB's value is currently coming from the Automotive business. Therefore its success will mostly determine also the direction of the share price.

To put it simply, the value of EB's share is a sum EB Automotive and EB Wireless businesses as well as the net cash of the group. Therefore our main valuation method is the sum of the parts that we support with the traditional multiples as well as DCF calculations. We have started the valuation from the view of business segments, but we believe that the group multiples have to support the result also. When it comes to DCF value, we regard it as more theoretical, but it also has to support to conclusion to make it valid.

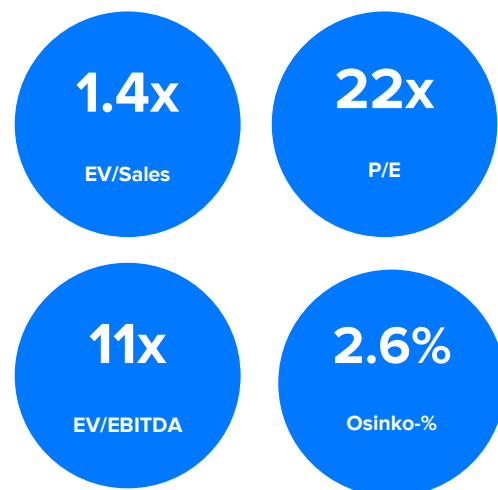
We also see some acquisition potential both in Automotive and Wireless. This was demonstrated by the divestment of Test Tools, where the value of the business was significantly higher than we would have acceptable as a stand-alone business. Therefore this option should carry some value also, but we still note that the basis for our analysis is that both businesses as separate, stand-alone units. When we discuss value in this chapter, we are referring to Enterprise Value (EV) unless stated otherwise.

We believe that around 76 % EB's value is currently coming from the Automotive business. Therefore its success will mostly determine also the direction of the share price. We have also included some key multiples below, though they aren't our main focus.

The value of EB is driven by Automotive



EB multiples 2015e



(Calculated with the share price of 3.00 €)

Source: Inderes

7.1 Automotive has to deliver also in the future

Automotive segment has a bright future outlook and we are confident about its success also in the future. We believe that Automotive should be valued with a premium compared to its peers group median multiples, because it has clearly been on the winning side of the sector.

We are assigning Automotive a value of 325 MEUR. This means that EV/EBIT of 15x. When comparing with the peer group, the multiple is very high as the median is only around 10x. We consider the sector valuation to be quite modest considering the positive outlook.

However, the earnings growth of EB is clearly faster than the group in general. It also has a unique position with its strategic partnerships. Therefore we believe that the clear premium is justified, but we must stress that the company has to continue to outperform its peers with a wide margin.

We believe that the peer group analysis provides some guidance about the acceptable valuation. At the same time we note that the differences between the companies included are so large that the value of the information is limited.

These are the multiples we are currently using for Automotive (based on 2015 estimates).



Automotive segment has a bright future outlook and we are confident about its success also in the future. We believe that Automotive should be valued with a premium compared to its peers group median multiples, because it has clearly been on the winning side of the sector and it has major trends behind it. Also the successful joint venture with Audi makes it more attractive. Like discussed earlier, we are assigning Automotive a value of 325 MEUR now. This means that EV/EBIT of 15x with our 2015e earnings estimates that already include a significant improvement compared to 2014.

When comparing with the peer group, the valuation of EB is very high (peer group graphs are in the following page). Median EV/EBIT-multiple in the peer group of Automotive is only around 10x with 2015e estimates, which we are focusing on at this point of the year. We consider the sector valuation to be quite modest considering the positive outlook. KPIT Cummins, which is listed in India, is valued with very low multiples. We believe that this is mostly due to the worries about the local accounting standards.

Companies that are more involved with “bulk” business (e.g. Aisin that also involved in many other businesses) or focused heavily on services (e.g. Semcon) are deservedly valued with lower multiples. We would value EB Automotive closer to Softing and Mentor Graphics that have EV/EBIT-multiples of 18x and 11x. When thinking about the growth prospects and earnings growth of EB Automotive we believe that the EV/EBIT-multiple can be even higher.

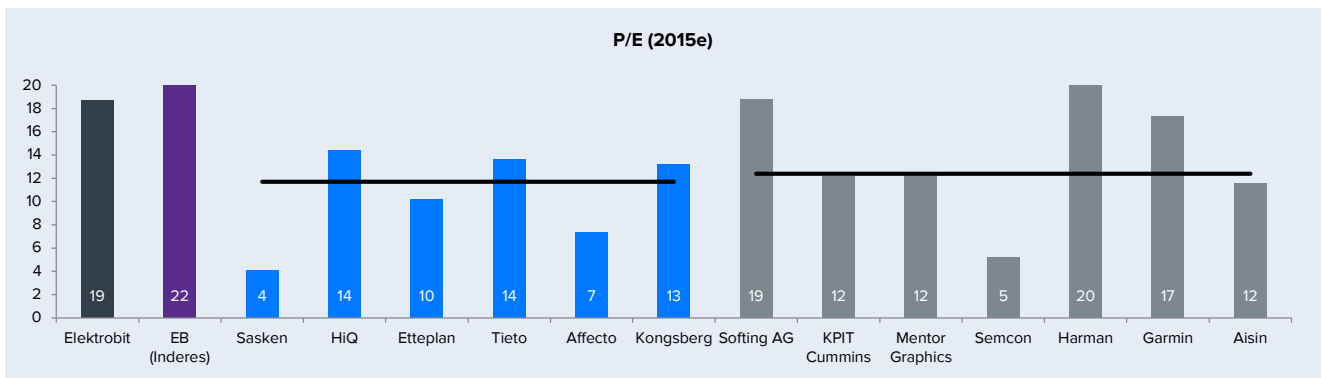
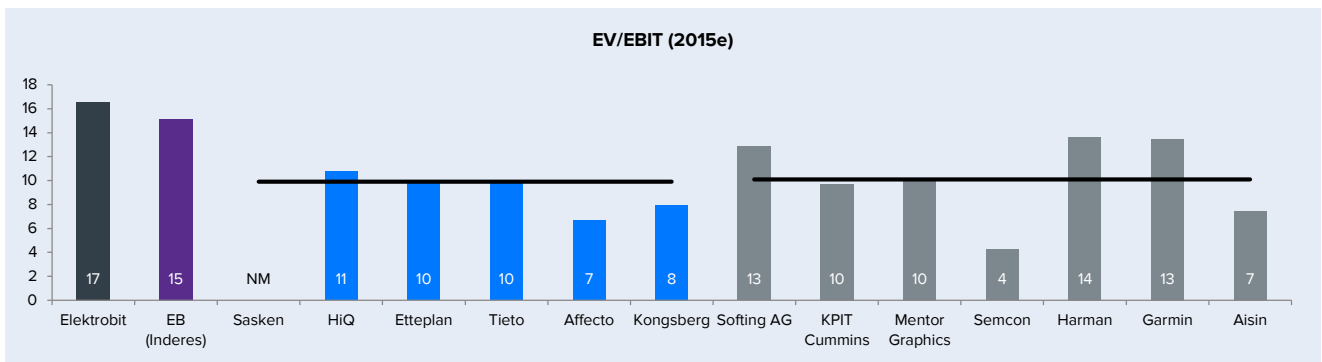
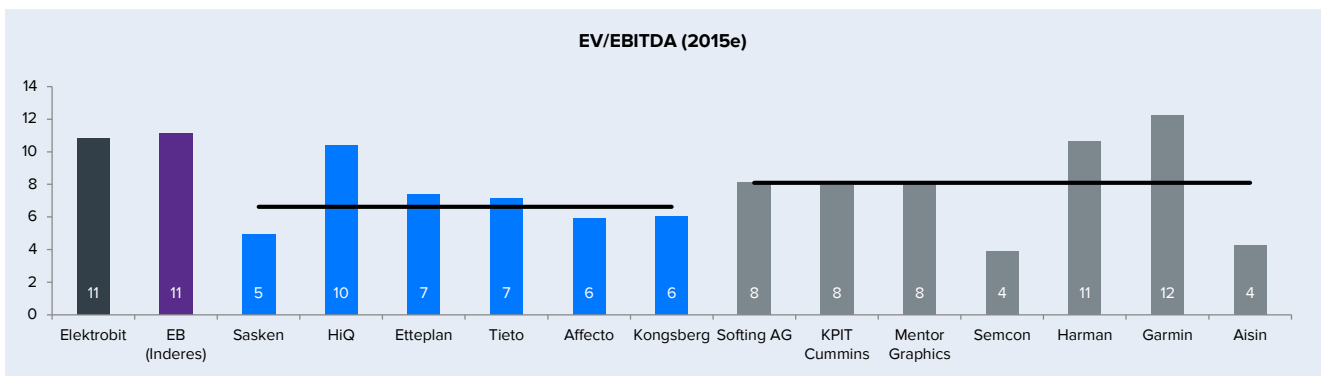
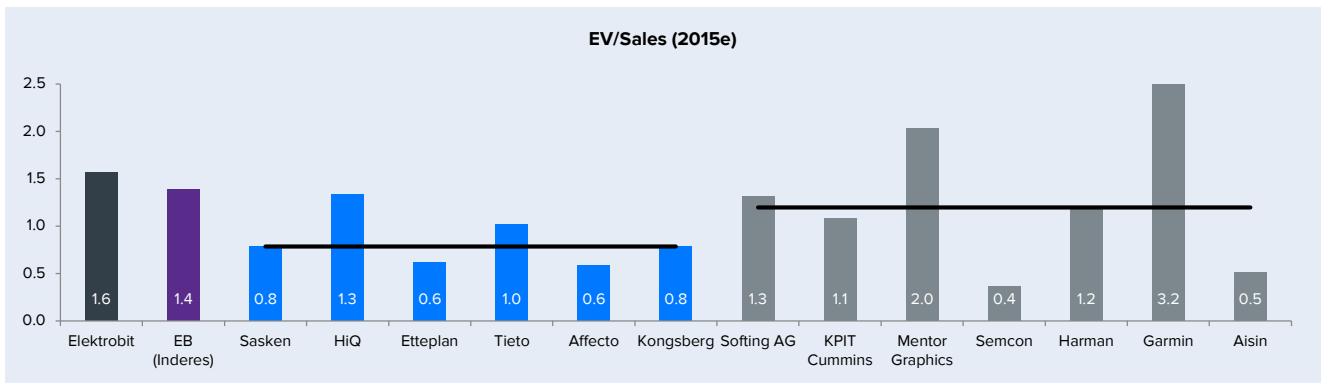
When looking at the Automotive’s peer group we also need to note that the earnings growth of EB is clearly faster than the group in general. It also has a unique position with its strategic partnerships. Therefore we believe that the clear premium can be justified, but at the same time we must stress that the company has to continue to outperform its peers with a wide margin also in the future in order to justify the current valuation. If there are any problems, earnings disappointments or such, there’s definitely plenty of down side also. While we believe that the valuation is justified, it’s definitely very challenging and there’s no upside in the valuation multiples. Therefore the potential upside in the share price comes directly from the expected earnings improvements.

It’s also worth noting that valuations in the case of M&A in this field would probably be much higher than those discussed here. We don’t expect that EB would even consider selling Automotive business without a hefty premium to these multiples. Depending on synergies and other opportunities they might still be very good deals and create value for shareholders. The possible acquisition of EB Automotive would probably be the quickest way to unlock the full potential that we see, but this naturally isn’t the basis for the analysis.

All in all, we believe that the peer group analysis provides some guidance about the acceptable valuation. At the same time we note that the differences between the companies included are so large that the value of the information is limited.

We have also included the peer group of Wireless in the following graphs and will refer to it later in chapter 7.2. The consensus estimate data is from Thomson Reuters expect in when specified as Inderes. The data was collected on 6.11.2014 and therefore probably doesn’t include any revisions made after EB’s Q3 report that was published the same day. Our estimates have been updated post-Q3, but the estimate revisions made were minor.

Peer group valuation of EB (blue for peers of Wireless, gray for Automotive)



Source: Reuters 6.11.2014 and Inderes

7.2 Wireless - potential is difficult to value

Wireless is currently going through a transformation and is therefore very challenging to value.

We see significant potential in the defense products and even one customer like the Finnish defense forces would provide a big jump both in earnings and credibility.

Due to the uncertainty and large scale between different scenarios it's very difficult to estimate the value of this; defense is kind of a large startup company right now.

We don't find the core service business of Wireless very interesting or valuable. R&D services are driven by people, the scalability is low and the business environment is tough.

The biggest problem is that it's almost impossible to estimate the normal level of EBIT-% and also the net sales now. However, it's clear that there's a significant improvement possibility from the current level.

We have given EB Wireless a value of 60 MEUR (EV) at this point. However, we stress once again that this is mostly based on the potential that we see in the turnaround and the product business.

As the earnings of Wireless are currently very low, there's no way to use multiples in a constructive way, leaving the valuation vulnerable for wrong assumptions.

The Wireless business is currently going through a transformation and is therefore very challenging to value. We find the opportunity in defense sector very interesting; positive possible outcome of a large scale breakthrough could be huge, but the probability of this is still small as we see it. However, even one new international customer like the Finnish defense forces would provide a big jump both in earnings and credibility. Due to the uncertainty and large scale between options it's very difficult to estimate the value of this; defense is kind of a large startup company right now. Still we see it as a valuable addition to the current business as the costs are now mostly sunk in.

We don't find the core service business of Wireless very interesting or valuable. R&D services are driven by people, the scalability is low and the business environment is tough. Wireless has relatively few clients that make up a large sum of the sales, which increases the risk profile. Even though there are some positive drivers for the future, the outlook still isn't too bright in our eyes especially due to the rising competition coming from countries like China and India. In general the competition is probably going to increase even further due to pressure coming from developing countries, mostly Asia. Pricing power of Wireless is limited towards typically large clients.

This year is still a transformation year for Wireless just like the year 2013 was after the Test Tools divestment. It's difficult to estimate what kind of margins EB Wireless might be able to produce in "normalized" conditions, since it has been going through major changes during the past years. Since the track record is weak or irrelevant for the current business portfolio, the earnings potential of Wireless is very much an educated guess that has to be based on the business dynamics and likely scenarios. There are major differences in EBIT margins within the peer group also and they are mostly related to the business model and services/products mix. Anyway, EB Wireless is nowhere the median EBIT-% level (2014e 9.5%) and at least our estimates are in a very modest level also in the future. The business is at a point where it has to prove itself much like Automotive was still around a year ago. Naturally there is significant potential for profit improvement from the current levels, but it's very difficult to quantify it, which makes the valuation extremely challenging. The biggest problem is that it's almost impossible to estimate the normal level of EBIT-% and also the net sales now.

Like discussed earlier, we have given EB Wireless a value of 60 MEUR (EV) at this point. However, we stress once again that this is mostly based on the potential that we see in the turnaround and the product business. As the earnings of Wireless are currently very low, there's no way to use multiples in a constructive way, leaving the valuation vulnerable for wrong assumptions. In a positive scenario Wireless could grow to completely new size in few years with a breakthrough of defense products. Since this product business is scalable and the margins are high, the earnings potential is huge. However, at this point Wireless is an option that has significant value, but the strike of the option is already high.

7.3 Consolidating the value

The value of EB's share consists of:

- Automotive 325 MEUR
- Wireless 60 MEUR
- Net cash 37 MEUR (2014e)

This adds up to about 3.25 EUR per share, which is also our target price.

The target price is supported by DCF-analysis, which we use as a reality check in our analysis.

In general we want to point out that the current valuation of EB is high. While it is acceptable, there is no safety margin for mistakes. If the earnings growth continues in the coming years, it will create more upside, but there's also a significant downside risk.

We currently estimate that EB will have around 35-40 MEUR of net cash in the end of 2014 (Q3'14: 33.4 MEUR). When we add this to the estimated value of Automotive 325 MEUR and Wireless 60 MEUR, we find that the value of EB is currently around 420-425 MEUR. EB currently has around 131 million shares, which means that the value per share is around 3.25 EUR. This is also our target price.

Currently our DCF-analysis gives EB a value of 3.44 EUR/share and therefore supports our fair value for the share. The assumptions and the actual calculations can be found in the following attachments. However, we remind investors that DCF is very sensitive to different assumptions and we use it only as a reality check in our analysis.

In general we want to point out that the current valuation of EB is high. While we find it to be acceptable and justified, there is no safety margin for any mistakes. If the progress of Automotive continues to be excellent also in the coming years, the earnings growth will create more upside, but we do not see room to grow in the valuation multiples. Therefore there's also a significant downside in the share price, if the company cannot deliver the significant earnings improvements expected in the coming years. The profitable growth story that the company is currently offering isn't cheap nor is it without significant risks.

Selected historical valuation multiples of EB

Pricing and key ratios	2010	2011	2012	2013	2014e	2015e	2016e
Share price	0.67	0.38	0.65	2.66	3.00	3.00	3.00
Market Cap	87	49	84	346	394	394	394
EV	81	49	88	308	359	351	338
P/E	-5.4	-9.4	37.1	11.2	33.9	21.8	17.8
P/FCF	-10.2	-7.8	8.9	6.0	562	27.9	16.9
P/BV	1.2	0.8	1.3	4.2	4.3	3.9	3.4
P/S	0.5	0.3	0.5	1.7	1.8	1.5	1.3
EV/EBIT	-4.7	-12.2	82.6	38.0	21.1	14.9	11.6
EV/EBITDA	-9.2	10.6	10.9	18.0	14.0	10.9	8.6
Payout ratio	0 %	0 %	686 %	8 %	57 %	56 %	50 %
Dividend yield (%)	0.0 %	0.0 %	18.5 %	0.8 %	1.7 %	2.6 %	2.8 %

Source: Inderes

8. The biggest risks and possibilities

Perhaps the most important risk factor is relatively high dependence on few big clients. We believe that Ericsson is a very significant client for Wireless and replacing it would be very challenging. Similar risks are found also in Automotive business, but they aren't quite so severe.

In both business areas EB is relatively small compared to many competitors and clients. This can e.g. limit the pricing power.

One significant risk that relates directly to this analysis is the difficulty of estimating the normalized margin levels. This is valid point in both segments, but especially in Automotive, where the profitability has been rising rapidly and the expectations are high now. If the profitability wouldn't be in a sustainable level, the negative effect on the value would be very large.

Both EB's business segments have assets that are interesting for many companies. Automotive software industry has strong growth drivers and high entry-barriers, which makes EB's position on this segment very valuable and interesting for many companies.

We would be surprised if EB Automotive wouldn't be an acquisition target for some companies. In Wireless the defense products, at least some of them, could be an interesting target also.

All the businesses have risks as well as opportunities. We are not going to explain all the general risks here, but we will point out some that investors should consider. We have also mentioned some opportunities from the investors' point of view.

Perhaps the most important risk factor is relatively high dependence on few big clients. This is the case especially in Wireless as TerreStar case demonstrated. We believe that Ericsson is a very significant client for Wireless and if it were to be lost, it would be very challenging to replace. In Automotive segment ten biggest clients account for around 60 % of sales. Still, the risk is significant also in Automotive, since the end-client might be the same even though EB's official client might be tier 1 supplier. When considering this, one OEM might account for around 30 % of sales, making risk of losing it very big.

In both business areas EB is a small company and its resources are limited compared to many competitors. It's also small compared to most of its clients, which puts pressure on the company's pricing power. This combination makes EB quite vulnerable for radical changes in the business areas. However, it also makes company and its business segments potential acquisitions, which isn't a negative thing for shareholders providing that the "price is right".

One significant risk that relates directly to this analysis is the difficulty of estimating the normalized margin levels. This is valid point in both segments, but especially in Automotive, where the profitability has been rising rapidly and the expectations are high now. If the profitability wouldn't be (like assumed) in a sustainable level, the negative effect on the value would be very large.

EB has been receiving relatively large amount of government grants in the past years, for example 1.8 MEUR in 2012 and 1.4 MEUR in 2013. Though these are insignificant compared to net sales of the company, they are still important when considering EBIT. Such grants are uncertain in the future, but we have expected them to continue close to similar levels also in the next few years. This isn't necessary one of the biggest threats, but still worth mentioning since it could put pressure on the margins.

Both EB's business segments have assets that are interesting for many companies. Automotive software industry has strong growth drivers and high entry-barriers, which makes EB's position on this segment very valuable and interesting for many companies. We would be surprised if EB Automotive wouldn't be an acquisition target for some companies, even though we don't have any concrete suggestions for this. If Automotive were to be sold, which is purely speculation at this point, the price could be very considerable compared to the current market value of Elektrobit. The potential upside in this case is very large, and therefore it's an interesting possibility for investors.

In Wireless we don't see the industry in general so attractive, but if EB would gain some share in the defense product market, it might be one an interesting target for behemoths of the defense industry. This is mostly relating to those technologies that are not part of the core of the buyer, because defense companies are generally not really fond of buying critical elements from "outside". However, we would see a strategic partnership more logical in this field, not necessary a direct acquisition. A solid strategic partnership could be very positive for EB also, because it would benefit greatly from the sales network that a large partner could provide.

P&L statement, balance sheet and DCF-model

Profit & Loss statement

Key Figures	Q1'13	Q2'13	Q3'13	Q4'13	FY'13	Q1'14E	Q2'14E	Q3'14E	Q4'14E	FY'14E	FY'15E
Net sales	46.2	47.9	45.7	59.5	199	51.7	52.2	52.5	67.9	224	259
Wireless	15.8	15.4	11.6	18.4	61	14.2	12.4	10.0	17.6	54	59
Automotive	30.5	32.5	34.1	41.2	138	37.5	39.8	42.5	50.3	170	200
EBITDA	2.9	2.9	3.3	8.0	17.1	4.1	5.1	6.7	9.9	25.7	32.3
Depreciation & amortization	-2.2	-2.2	-2.3	-2.3	-9.0	-2.2	-2.0	-2.1	-2.4	-8.7	-8.6
EBIT	0.7	0.7	1.0	5.7	8.1	1.9	3.1	4.6	7.5	17.0	23.7
EBIT excl. NRIs	1.5	0.7	1.0	5.7	8.9	1.9	3.1	3.5	7.5	15.9	23.7
Wireless	0.4	0.6	-0.9	0.3	0.3	-1.1	-0.9	0.0	0.6	-1.4	1.7
Automotive	1.1	0.1	1.9	5.4	8.5	2.9	4.2	3.5	6.8	17.4	21.9
NRIs	-0.8	0.0	0.0	0.0	-0.8	0.0	0.0	1.1	0.0	1.1	0.0
Net financial items	0.7	0.7	1.0	5.7	8.1	1.9	3.1	4.6	7.5	17.0	23.7
Pre-tax Profit	0.6	0.2	0.9	5.4	7.2	1.9	2.8	4.2	7.3	16.3	23.5
Discontinuing operations	23.6	0.0	0.7	0.0	24.3	0.0	0.0	0.0	0.0	0.0	0.0
Taxes	0.0	0.0	-0.1	-0.5	-0.6	-0.2	-1.0	-1.6	-1.8	-4.6	-5.4
Minorities	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Net earnings	24.2	0.2	1.5	5.0	30.9	1.7	1.9	2.6	5.5	11.6	18.1
Net sales growth %	8.3 %	15.4 %	10.1 %	23.4 %	14.6 %	11.8 %	9.0 %	14.9 %	14.2 %	12.5 %	15.6 %
EBITDA %	6.3 %	6.1 %	7.3 %	13.4 %	8.6 %	7.9 %	9.7 %	12.7 %	14.5 %	11.5 %	12.4 %
EBIT %	1.5 %	1.5 %	2.3 %	9.6 %	4.1 %	3.7 %	5.9 %	8.7 %	11.0 %	7.6 %	9.1 %
EPS excl. NRIs	0.01	0.00	0.01	0.04	0.06	0.01	0.01	0.01	0.04	0.08	0.14
EPS only continuing	0.00	0.00	0.01	0.00	0.05	0.01	0.01	0.01	0.04	0.08	0.14

Key Figures	2011	2012	2013	2014e	2015e	2016e	2017e
Revenue growth	0.2 %	7.2 %	14.6 %	12.5 %	15.6 %	13.9 %	14.1 %
EBITDA-%	2.9 %	4.6 %	8.6 %	11.5 %	12.4 %	13.3 %	13.3 %
EBIT-%	-2.5 %	0.6 %	4.1 %	7.6 %	9.1 %	9.8 %	10.5 %
Asset turnover	1.4	1.3	1.4	1.4	1.4	1.4	1.4
ROI %	-4.7 %	1.7 %	9.7 %	18.4 %	22.3 %	24.9 %	27.3 %
ROE %	-7.7 %	3.4 %	41.7 %	13.5 %	18.8 %	20.4 %	21.8 %
Equity Ratio	62.8 %	54.5 %	65.1 %	62.7 %	63.2 %	64.1 %	64.7 %
Revenue/employee	104	110	121	124	128	132	136

Balance sheet

Assets (MEUR)	2011	2012	2013	2014e	2015e	2016e	2017e
Non-current assets	44.1	46.8	46.2	48.4	50.6	47.5	51.2
Goodwill	19.3	19.3	19.3	19.3	19.3	19.3	19.3
Other intangible rights	15.7	17.8	15.5	15.6	15.6	14.8	16.8
Tangible assets	9.0	8.7	9.7	12.0	14.2	11.8	13.5
Associated companies	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other investments	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Other non-current assets	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Deferred tax assets	0.1	0.9	1.5	1.5	1.5	1.5	1.5
Current assets	71.0	77.7	98.3	117.5	135.9	154.7	176.5
Inventories	1.8	0.4	0.8	0.9	1.0	1.2	1.3
Other current assets	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Receivables	59.3	63.0	54.3	69.5	80.4	91.5	104.4
Cash and cash equivalents	10.0	14.3	43.1	47.1	54.5	62.0	70.7
Balance sheet total	115.2	132.2	144.4	166.0	186.5	206.3	232.7

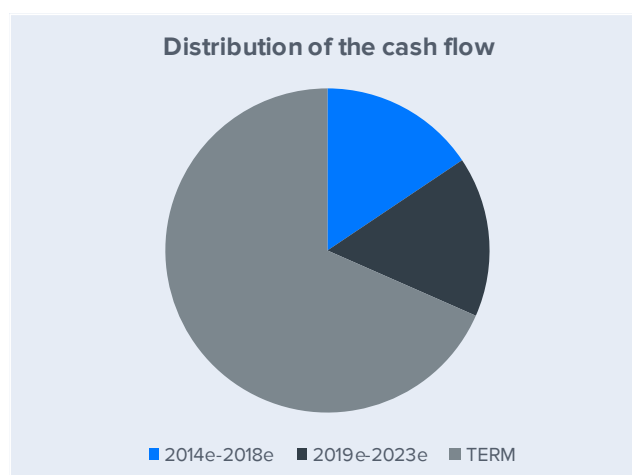
Liabilities (MEUR)	2011	2012	2013	2014e	2015e	2016e	2017e
Equity	65.5	66.5	81.7	90.8	102.3	114.3	129.9
Share capital	12.9	12.9	12.9	12.9	12.9	12.9	12.9
Retained earnings	13.4	14.3	43.7	52.7	64.3	76.3	91.9
Shares repurchased	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Asset revaluation reserve	0.4	0.6	0.6	0.6	0.6	0.6	0.6
Other equity	38.7	38.7	24.5	24.5	24.5	24.5	24.5
Minority interest	1.5	0.0	0.0	0.0	0.0	0.0	0.0
Deferred tax liabilities	1.0	0.7	0.5	0.5	0.5	0.5	0.5
Provisions	1.5	2.7	2.6	2.6	2.6	2.6	2.6
Non-current liabilities	5.3	6.8	5.4	7.8	7.7	7.1	7.1
Long-term debt	4.0	5.4	3.3	5.7	5.6	5.0	5.0
Convertibles	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other long-term liabilities	1.3	1.4	2.1	2.1	2.1	2.1	2.1
Current liabilities	40.3	55.5	54.2	64.3	73.4	81.8	92.6
Short-term debt	5.0	12.7	2.0	6.0	5.9	5.0	5.0
Non-interest bearing current liabilities	35.3	38.3	52.2	58.3	67.4	76.8	87.6
Other current liabilities (non-ib.)	0.0	4.5	0.0	0.0	0.0	0.0	0.0
Balance sheet total	115.2	132.2	144.4	166.0	186.5	206.3	232.7

DCF-valuation

DCF Valuation (MEUR)	2013	2014e	2015e	2016e	2017e	2018e	2019e	2020e	2021e	2022e	2023e	TERM
EBIT (operating profit)	8	17	24	29	35	37	36	35	37	39	40	
+ Depreciation	9	9	9	10	9	11	12	13	14	15	15	
- Paid taxes	-1	-5	-5	-7	-9	-9	-9	-9	-9	-10	-10	
- Tax, financial expenses	0	0	0	0	0	0	0	0	0	0	0	
+ Tax, financial income	0	0	0	0	0	0	0	0	0	0	0	
- Change in working capital	25	-9	-2	-2	-2	-2	-2	-2	-1	-1	-1	
Operating cash flow	41	12	25	30	34	37	37	37	40	42	45	
+ Change in other long-term liabilities	1	0	0	0	0	0	0	0	0	0	0	
- Gross capex	-8	-11	-11	-7	-13	-14	-15	-16	-16	-17	-17	
Free operating cash flow	34	1	14	23	21	23	22	22	24	26	27	
Other items	24	0	0	0	0	0	0	0	0	0	0	
FREE CASH FLOW TO FIRM	58	1	14	23	21	23	22	22	24	26	27	611
Discounted FCFF		1	13	19	16	16	15	13	13	13	13	285
Sum of discounted FCFF		417	416	403	384	368	352	337	324	311	298	285
- Interest-bearing debt		-5										
+ Cash and cash equivalents		43										
+ Market value of associated companies		0										
- Market value of minorities		0										
- Previous year dividend correction		-3										
Value of equity, DCF		452										
Enterprise Value DCF		417										

Cost of capital (WACC)

Tax rate, WACC	24.0 %
Target debt ratio D/(D+E)	10.0 %
Cost of debt	5.0 %
Equity beta	1.10
Market risk premium	4.8 %
Liquidity premium	0.0 %
Riskfree interest rate	4.0 %
Cost of equity	9.2 %
Weighted Average Cost of Capital (WACC)	8.7 %



Recommendation history, LTM

Date	Recommendation	Target	Share price
23.9.2013	Sell	1.25	1.35
8.11.2013	Sell	1.25	1.62
12.12.2013	Sell	1.60	2.00
18.12.2013	Reduce	2.00	2.10
21.2.2014	Sell	2.20	2.70
2.5.2.2014	Reduce	2.50	2.63
2.5.2.2014	Accumulate	2.75	2.49
7.11.2014	Accumulate	3.25	3.18

Summary information

Profit & Loss	2011	2012	2013	2014e	2015e	Per Share Data	2011	2012	2013	2014e	2015e
Sales	162	174	199	224	259	EPS	-0.04	0.02	0.24	0.09	0.14
EBITDA	4.7	8.1	17.1	25.7	32.3	EPS adj.	-0.04	0.05	0.06	0.08	0.14
EBITDA margin (%)	2.9	4.6	8.6	11.5	12.4	Operating cash flow/share	0.05	0.04	0.14	0.09	0.19
EBIT	-4.0	1.1	8.1	17.0	23.7	Book value per share	0.51	0.51	0.63	0.69	0.78
Pre-tax profit	-4.5	0.6	7.2	16.3	23.5	Dividend per share	0.00	0.12	0.02	0.05	0.08
Net profit	-5.2	2.3	30.9	11.6	18.1	Dividend payout ratio, %	0.0	686	8.4	56.5	55.8
EO items	0.0	0.0	0.0	0.0	0.0	Dividend yield, %	0.00	18.5	0.8	1.7	2.6
Balance Sheet	2011	2012	2013	2014e	2015e	Ratios	2011	2012	2013	2014e	2015e
Total assets	115	132	144	166	186	P/E	neg.	37.1	11.2	33.9	21.8
Shareholder's equity	67	67	82	91	102	P/B	0.8	1.3	4.2	4.3	3.9
Goodwill	19	19	19	19	19	P/Sales	0.3	0.5	1.7	1.8	1.5
Interest-bearing debt	9	18	5	12	12	P/CF	6.9	17.5	8.4	33.7	15.8
Cash Flow	2011	2012	2013	2014e	2015e	EV/Sales	0.3	0.5	1.5	1.6	1.4
EBITDA	4.7	8.1	17.1	25.7	32.3	EV/EBITDA	10.6	10.9	18.0	14.0	10.9
Change in NWC	3.4	-2.5	25.4	-9.2	-1.9	EV/EBIT	neg.	82.6	38.0	21.1	14.9
Operating cash flow	7.1	4.8	41.0	11.7	24.9						
Free cash flow	-6.3	9.4	58.2	0.7	14.1						
Company Description	EB develops advanced technology and transforms it into enriching end user experiences. EB specializes in demanding embedded software and hardware solutions for the automotive industry and wireless technologies. Source: Elektrobitt					Company Miscellaneous	CEO: Jukka Harju Phone +358 40 344 2000 CFO: Veli-Pekka Paloranta Webpage www.eletrobitt.com				
Major Shareholders											
						% of shares				% of shares	
Hulkko Juha						14.99	Harju Jukka, CEO			5.8	
Hildén Kai						8.2	Halonen Eero			5.4	
Veikkolainen Erkki						6.8	Varma			3.9	

Disclaimer

Inderes Oy (henceforth Inderes) has produced this report for customer's private use. The information used in report is gathered from publicly available information from various sources deemed reliable. Inderes's goal is to use reliable and comprehensive information, but Inderes cannot guarantee that the information represented is flawless. Possible contentions, estimates or forecasts are based on the presenter's point of view. Inderes does not guarantee the content or the reliability of the data. The primary information source of the report is information published by the target company unless otherwise mentioned. Inderes uses its own database for the financial figures tables presented in the report unless otherwise mentioned. Historical figures are based on numbers published by the company and all future forecasts are Inderes' analysts' assessment.

Inderes or their employees shall not be held responsible for investment decisions made by based on this report or other damages (both direct and indirect damages) what usage of this report might have caused. The information presented in this report might change rapidly. Inderes does not commit to inform for the possible changes in the information / contention of the report.

This report has been produced for information purposes and the report should not be taken as an investment advice, offer or request to buy or sell a particular asset. The client should also understand that the historical development is not a guarantee of the future. When making investment decisions, client must base their decisions on their own research and their own estimates on the factors affecting the value of the investment object and also to consider their own financial goals, financial status and when necessary they shall use advisor. Customer is always responsible for their own investment decisions and the possible causes of them.

The recommendations and target prices of Inderes are examined at least four times a year after company's quarterly reports. However, it is possible to change recommendation and / or target price at any time it is necessary. The amount of changes in recommendations or target prices is not limited.

Recommendations of Inderes are divided in the following categories and given based on the estimated upside potential of the share in the next 12 months. Note that possible dividends are also included in the potential.

Recommendation	Upside potential*
Buy	> 15 %
Accumulate	5 - 15 %
Reduce	-5 - 5 %
Sell	< -5 %

* Potential regarding to 12 month target price

No one is allowed to modify this report, copy it or to distribute it with third parties without written agreement from Inderes. Any parts of this report shall not be distributed or delivered in USA, Canada or Japan or to residents of any these countries mentioned above. There also might be restrictions in legislations in other countries about distributing this information and person who might be under these restrictions shall consider the possible restrictions.

Inderes has made a Corporate Broking agreement with the issuer. This agreement includes providing research on the share of the issuer. More information about research disclaimers can be found at www.inderes.fi/research-disclaimer

**inde
res.**

**Award-
winning
research.**