

Acconeer

Sector: Semiconductors

Under the Radar

Redeye recognizes that Acconeer is progressing slowly but surely. We lower the short-term estimates, although this is compensated by the Alps Alpine R&D agreement of SEK 70m, and a bit higher long-term auto sales. We reiterate our view of the case and continue to believe that the stock flies under the radar.

US Regulatory winds put additional pressure on car OEMs

In this update, we dive deeper into Child Presence Detection (CPD), which we believe is Acconeer's, by far, largest opportunity. We do not expect Euro NCAP delays to have any meaningful effects on the car OEMs since they were already far behind schedule. In US, a CPD mandate is coming closer, following the adoption of the Moving Forward Act in the Congress. Our take is that this will put additional pressure on the car OEMs. Since presence sensors can replace belt/seat sensors, the solutions will not add any cost, meaning there is, in our view, no valid counterargument for skipping them.

Today's levels are more than justified by automotive alone

We scrap our smartphone and lawn mower estimates due to no general radar hype for Google's Pixel 4, and (seemingly) lack of traction for Acconeer in lawn mowers, respectively. However, we include the SEK 70m R&D agreement with Alps Alpine, which is expected to be finalized during 2020.

Good risk/reward from e.g. cash of SEK 180m and a solid news pipeline

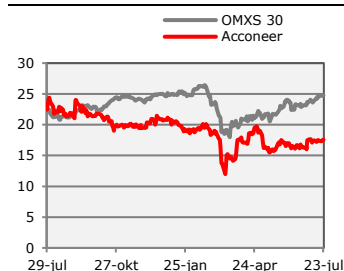
Shares have not experienced any Corona recovery but instead hovered around SEK 16-18 since the directed share issue on June 5. We believe the short-term selling pressure from the offering has now eased. Given the strong cash position and a solid news pipeline we think the current stock sentiment is too negative. In an utterly pessimistic scenario, assuming no lower burn rate ahead, the cash of SEK 180m (incl SEK 70m from the Alps Alpine MoU) will suffice for ~3 years. We think larger deals are required to move the share. The most likely catalysts in the short term, in our view, are additional CPD contracts. This segment alone is a multi-billion SEK market. In our view, today's valuation does not even properly discount the automotive potential, suggesting all other opportunities come for free. All in all, the risk/reward looks favorable, as the stock remains under the radar for most investors.

KEY FINANCIALS (SEKm)	2018	2019	2020E	2021E	2022E	2023E
Net sales	1	6	9	33	75	261
EBITDA	-31	-57	-55	-52	-49	17
EBIT	-35	-69	-67	-62	-59	7
EPS (adj.)	-1.8	-3.6	-2.9	-2.6	-2.4	0.3
EV/Sales	320.1	59.7	35.6	11.5	5.5	1.7
EV/EBITDA	-10.6	-5.8	-6.0	-7.4	-8.3	24.9
EV/EBIT	-9.2	-4.8	-5.0	-6.2	-7.0	58.1
P/E	-13.1	-5.9	-6.1	-6.6	-7.2	57.1

FAIR VALUE RANGE

BEAR	BASE	BULL
18.0	33.0	60.0

ACCON.ST VERSUS OMXS30



REDEYE RATING



KEY STATS

Ticker	ACCON.ST
Market	First North
Share Price (SEK)	17.5
Market Cap (MSEK)	408
Net Debt 20E (MSEK)	-75
Free Float	64 %
Avg. daily volume ('000)	0

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Under the Radar

Piece by piece, Acconeer is slowly but surely building its business, having now reached 22 (minor) customers. The company expects delays in projects and launches due to the Coronavirus, but it targets a solid pipeline where a few delays should not have any visible net effect. Moreover, it also sees a contactless trend that is here to stay and demand for new use cases driven by Corona, such as social distancing applications.

Child Presence Detection: Regulatory winds blowing in the US

We begin with Child Presence Detection (CPD), which we think is the company's, by far, largest opportunity. A sensor based CPD solution is necessary to perform the function because the majority of the recent heatstroke casualties have been related to children entering the car on their own, and then not being able to get out. A reminder for the driver that the door to the backseat was opened at the beginning of the trip will therefore not suffice. If a system should work in a parked car it needs very low power consumption, alternatively a solution that is activated when a door opens. We think it has become evident in the industry that radar is the only technology that can solve the CPD challenges as there is a need to be able to detect a sleeping child under a thick blanket. Radar is the only technology that can achieve this, by detecting the pulse. Big gestures that can be captured on a camera are not a typical behavior from a toddler suffering heatstroke.

It is still a bit early to understand exactly how Alps Alpine's CPD system will work (and differ from competition) when an infant has been detected in the back seat of a hot car, i.e. if it will start the air condition, sound the alarm, or open the windows etc. One should remember that the radar is only a small component of the entire system though. We assume Alps Alpine is a first mover, but just because Alps Alpine has the best radar, it is no guarantee that it will win the most business. Furthermore, even if Alps Alpine is hugely successful, we think it would be hard for it to capture more than 15-20% of the entire market (although in the end, this depends on the size of the OEMs, as a few of them account for around 10% of all cars sold). In general, Alps Alpine says there is no competition from mega tier-1s in its new areas, which coincides with our view. There are, however, several other tier-1s gunning for a position.

CPD is being procured now due to the Euro NCAP safety rating inclusion. It is the same type of case as Smart Eye ([find our research here](#)), with a 2-3 year lag. Acconeer has not experienced any Corona delays thus far, but it does not rule out changes in the production plans when the Corona situation has calmed down. However, we believe CPD is subject to the one-year delay from Euro NCAP, but this does not mean much for the car OEMs as their timetables already were extremely tight, not to say unrealistic. Car OEMs still need to hurry as much as they can. Radar is the only proven solution with won nominations at the moment, which might lower the incentives to experiment with e.g. ultrasound.

The Moving Forward Act (including the Hot Car Act), on mandated CPD in all new cars in the US, recently passed in the Congress. Moving Forward Act is a gigantic infrastructure investment package of USD 1.5 trillion. We are uncertain if it will pass, in its entirety, or current shape, as the proposal is from the Democrats, while the Senate is controlled by Republicans. Moreover, the President also needs to sign the new law. However, the proposal in itself could still put more pressure on the car OEMs. In this context, it should also be noted that virtually all car manufacturers that are active in US (except Tesla) have agreed to make CPD standard in 95% of all their cars by 2025. The Moving Forward Act could speed up the process. One crucial aspect that we have heard from several people in the industry is that a presence sensor can replace belt/seat sensors, meaning the solution will not add any cost. To conclude, we think it is just a matter of time before CPD will be universal in the US.

Acconeer has won three CPD design wins for a total contract value of SEK 90-120m, but we expect the OEM to make it a standard on all of its cars, which we think would mean a total contract value of around SEK 250-350m. Furthermore, we believe the OEM is merely a small premium car manufacturer, suggesting that CPD is a multi-billion SEK market for Acconeer. We think larger premium OEMs could yield three times larger initial contracts of SEK 270-360m, and please remember, this is just the premium market. The top-8 largest mass market manufacturers are 2-5 times larger than that, meaning incredible potential.

Other auto use cases: Rear-view detection could be another major auto opportunity

Alps Alpine reportedly continues to show steady progress in design wins. We do not know if this refers to any of the two contracts that Acconeer has already announced or newer not-yet-announced contracts. Some of Alps Alpine's design wins are for new products related to the integrated digital cockpit business and premium HMI, where we think Acconeer is an essential partner. Alps Alpine says recent design activities for new products already to 50% support its 2025 digital cabin sales target of ¥ 150 bn (SEK 12-13 bn). We do not know what these products are, or what this figure corresponds to in terms of Acconeer sales, but we think Acconeer will be in several of the new products.

Acconeer is involved in 10 use cases with Alps Alpine. Besides the two won contracts in CPD and tailgate, we believe they are currently participating in other types of procurements as well. One example of a major opportunity, in theory, is replacing the ultrasonic sensors in so called rear-view cameras that have been mandated by law in the US for all new cars since 2018. This implies a major market, since about 17m cars were sold in US in 2019. However, we believe exterior safety applications, like rear-view cameras, require Grade 2 AEC-Q100 certification, which should mean that these applications are still 3-4 years out. Acconeer has already received third grade certification (+85°C), but for some use cases it needs Grade 2 (+105°C).

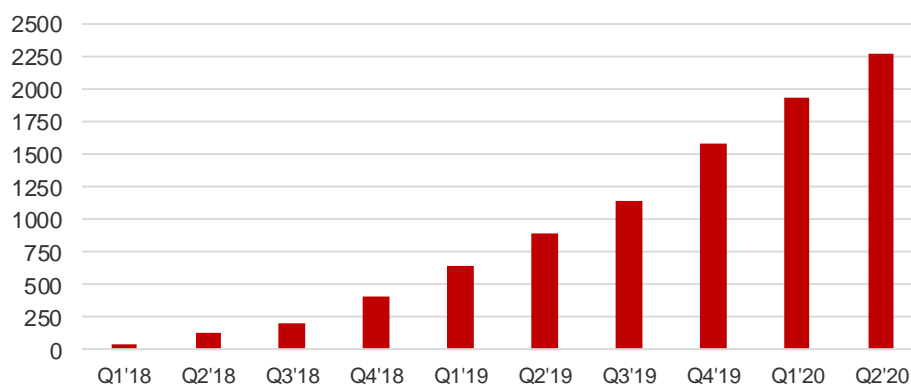
Since Acconeer sells hardware to be used in multiple units for up to 10 different automotive applications, we think its market is at least 50 times larger than Smart Eye's, although we assume the exclusivity with Alps Alpine de facto caps the addressable market at 20% of the total, i.e. a 10x larger TAM.

The most important aspect of the MoU with Alps Alpine, aside of cash needed for the development of the next-gen sensor for launch in 2023-2024, is increased trust. In addition, being backed by a large player like Alps Alpine will give Acconeer better conditions than it would have gotten on its own. Before the finalized R&D contract of SEK 70m, the product needs to be specified first, in order to know the budget and who is responsible for what etc.

Lower EVK sales

The 332 EVKs sold in Q2 means EVKs has entered a negative growth trend sequentially, as they were lower than both Q1'20 and Q4'19. However, EVKs will fluctuate a lot with the launches of new modules and sensors. Acconeer is satisfied with exceeding its target (three EVKs per day).

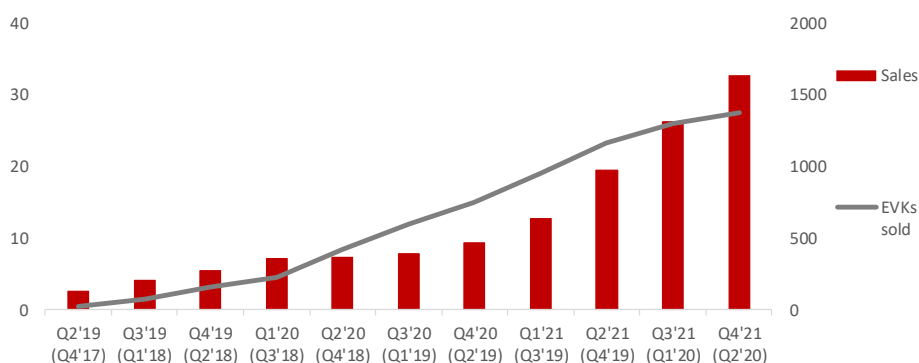
Total accumulated evaluation kits sold (excl. Sparkfun)



Source: Acconeer

Sales of EVKs are not important per se, but the number of EVKs are a proxy for the interest in the technology and one of the prerequisites for larger orders. Even though we think Q2 sales of SEK 1.6m were weak (expected 3.0m), we still see EVKs as an early, leading indicator for sales. The Q2'20 sales should primarily be based on EVKs sold up to 18 months earlier (i.e. Q4'18). In the graph below, we display sales in relation to the EVKs sold 18 months prior (on a trailing 12-month basis).

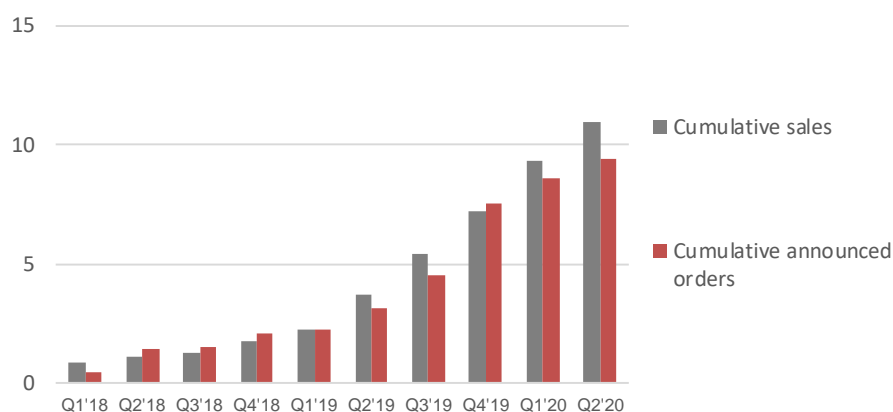
R12M Sales in relation to EVKs trailing 18-month



Source: Acconeer, Redeye Research

Announced orders in Q2 were down -3% y/y, but we suspect there were several un-announced orders below the new SEK 250 000 limit (previously SEK 100 000). Considering the seasonal effects from product launches mentioned above, we study the cumulative figures (see the graph below), with the important caveat that there will be more and more unannounced orders, suggesting a widening gap between sales and orders.

Accumulated sales & announced orders (SEKm)



Source: Acconeer, Redeye Research

All announced orders are summarized in the table below:

Known, announced, larger orders from distribution partners			
Date	Distributor	Products	Order value (SEKm)
jan-18	Digi-Key	Sensors & EVKs	0.29
mar-18	Digi-Key	EVKs	0.11
maj-18	Digi-Key	Sensors	0.42
jun-18	Digi-Key	EVKs	0.59
jul-18	BEYD	Sensors & EVKs	0.11
nov-18	Digi-Key	Modules & breakout boards	0.40
dec-18	BEYD	Modules, breakout boards & EVKs	0.12
jan-19	BEYD	Sensors & EVKs	0.21
apr-19	BEYD	Sensors & breakout boards (XB112)	0.25
apr-19	BEYD	Sensors	0.24
maj-19	Digi-Key	Dielectric lenses	0.14
maj-19	Restar	Sensors (A111)	0.12
jun-19	BEYD	Sensors (A111)	0.12
jul-19	Digi-Key	Modules (XM112) & breakout boards (XB112)	0.28
jul-19	Digi-Key	Sensors (A1) & EVKs (XC112/XR112)	0.31
aug-19	BEYD	Sensors (A111)	0.10
aug-19	BEYD	Sensors (A111)	0.13
sep-19	Digi-Key	Modules (XM122) & breakout boards (XB122)	0.43
sep-19	Digi-Key	Modules (XM112) & breakout boards (XB112)	0.17
okt-19	BEYD	Sensors (A111) & Modules (XM122)	0.16
nov-19	Digi-Key	Modules (XM112 & XM122), sensors (A1)	0.21
nov-19	BEYD	Sensors (A111), EVKs	0.28
dec-19	BEYD	Sensors (A111)	1.06
dec-19	Digi-Key	Sensors (A111)	0.24
dec-19	Restar	Sensors (A111)	1.02
feb-20	Glyn	Sensors (A111)	0.12
feb-20	Digi-Key	Modules (XM122)	0.15
feb-20	Codico	Sensors (A111)	0.61
mar-20	European customer	Sensors (A111)	0.14
apr-20	Digi-Key	Modules (XM112), breakout boards (XB112), lenses	0.30
maj-20	Chip Power	Sensors (A111)	0.27
jun-20	Digi-Key	Sensors (A111), reference boards (XR112)	0.32
Total			9.40

Source: Acconeer

As seen in the table above, Acconeer has received its first volume order from Chip Power in Taiwan, for parking sensors. Furthermore, the Japanese disti, Restar, has extended the distribution agreement to Americas. Restar is relatively small in US. We therefore assume it will mostly deal with Japanese customers that manufacture in US.

Following the five new launches in Q2, and 22 in total, the customer launches look like the following:

Launched products per application area and region in Q2'20		
Application	N.o. launches	Regions
Parking	12	South Korea (2), China (5), Europé (4) and Taiwan (1)
Level measurement	4	China (1), New Zealand (1), and Europe (2)
Online retail	1	US (Sparkfun)
Robotics	1	Japan (Lovot)
Waste managemen	1	Europe (1)
Presence detection	3	China (2), Europe (1)

Source: Acconeer

Q2: Weaker sales than expected

We expected more from Acconeer and its five new product launches than sales of SEK 1.6m (estimated 3.0m). We think most of the deviation is related to Corona. China is not yet fully back in business. The cash burn of SEK -13m was relatively in line with previous quarters though. Acconeer raised SEK 65m in a directed share issue in May, whereof half from Alps Alpine. The current cash position of SEK ~180m (incl. the SEK 70m from Alps Alpine) will suffice for three years in a worst-case scenario, in our view.

Expected vs. Outcome				
SEKm	Q2'19	Q2'20E	Outcome	Diff
Net sales	1.4	3.0	1.6	-1.4
EBITDA	-13.1	-16.2	-13.9	2.3
EBIT	-17.6	-19.1	-16.8	2.3
PTP	-17.5	-19.0	-16.8	2.2
EPS, SEK	-0.92	-0.82	-0.72	0.09
Salesgrowth	568%	111.9%	12.7%	
EBITDA margin	n/a	n/a	n/a	
EBIT margin	n/a	n/a	n/a	
EPS growth	n/a	n/a	n/a	

Source: Acconeer, Redeye Research

No radar hype for Pixel 4

There has been very little noise around Google's Pixel 4. Google has barely commented the reception of the phone, as opposed to the more successful Pixel 3. The battery life has been criticized, which could possibly be related to the power-hungry Soli sensor, although we have not seen that people have been particularly upset with the Motion Sense function in general. However, there were also other, external issues with e.g. the display. Furthermore, executives of Pixel have left during 2020.

We think many other smartphone players studied the case of Pixel 4. Due to the lack of hype, possibly related to no clear-cut use case, we think that others were not enticed to join in on integrating radars into phones. Acconeer has consistently downplayed this use case, which is also in line with Infineon that has described it as a wild card, although it actually claims to be working with several other handset vendors aside of Google. Radar can reportedly make it harder to make the important full displays. However, we think there could still be interesting adjacent applications in tiny displays, e.g. in wearables. Infineon especially highlights the following use cases: smart speakers and TVs, air conditioning and smart lightening.

In-ear headphone project with Imagimob & Flexworks

At CES 2020, Acconeer and Imagimob showed a headphones demo, which it says rendered a lot of interest. The interest could partly stem from the rapid growth in the in-ear segment of the headset market. The two firms are now joining forces with Flexworks in a Vinnova backed (SEK 4m) project. Flexworks AB is a contract manufacturer of headphones with 2019 sales of SEK 16m and a big manufacturing plant in China. The project does not include any headphone brand. However, identifying new trends early on and being the first to roll out is important for the brands.

Another robot customer in Japan

In our last update, we wrote about the Japanese social robot, Lovot. Yukai, uses radar in a similar manner for the communication robot BOCCO Emo. Acconeer's radar is used for smart presence detection, i.e. detecting if someone stands in front of the robot or passes by it. Potential future applications include monitoring of vital signs (breathing and heartbeat). The robot connects children and elderly at home with their relatives that are out, by sending and receiving messages to and from a smartphone application. The robot can do voice reminders to e.g., take medication. Acconeer says radar was chosen over a ToF-sensor as it could be integrated behind the plastic without an aperture.

New customer project within level measurement

One new, interesting customer project and customer story is the one of Packwise in Germany. The Acconeer sensor collects data about fluid levels in Intermediate Bulk Container (IBC) tanks. By keeping an eye on inventory levels, Packwise's customers can e.g. optimize refilling. Packwise's solution also offers customers, within especially chemicals, pharmaceuticals and the food industry, a way to decrease the carbon dioxide footprint. Since this area is hot with a lot of investments, Packwise has received a lot of positive German press coverage.

Acconeer has been working closely with Packwise, giving a lot of support in workshops and weekly phone meetings. This might not sound so scalable, but one should note that customer projects are exceptions to Acconeer's indirect sales strategy. In order for a customer project to be added, it needs a large market and/or a new, unique and innovative application. In a dozen such situations Acconeer has decided to take a more active role. The Packwise case fits both criteria as it offers a new way of handling the big IBC market in EU of 43 million plastic IBC tanks in total. As we understand it, these tanks and their equipment would otherwise normally be discarded after only a few years of usage.

Taiwanese radar competitor claims 1 mW power consumption

We continuously scan the market for competition. One recent example is Kaikutek of Taiwan, founded in 2017 and backed by main investor Jmicron that has a market cap of USD 50m. Kaikutek has a 60 GHz, FMCW radar built on CMOS with an integrated AI accelerator. Kaikutek claims a low power of 1 mW. It has only raised USD 10m, which generally is not enough to make a finished product. Consequently, the website says "SDK (future)", suggesting that it is not yet ready to reveal the product. Moreover, Acconeer has general power advantages against FCMW technology. In conclusion, we think Acconeer has the best radar. Our thinking is therefore more around in what applications radars are absolutely necessary.

Financial estimates

While we are impressed by the position in automotive, the long-term auto prospects and the Alps Alpine partnership, the other areas (with significantly faster time-to-market) are progressing slower. We have completely scrapped our lawn mower sales estimates due to lack of traction. We also have an equally hesitant view of smartphones, as Pixel 4 did not bring any hype. The cash flow effect is lower than the sales revisions since we include the SEK 70m payments from Alps Alpine, evenly distributed during 2021-2023. These payments are not included in our earnings calculations in the table below. On average, they will lower the cash burn rate by SEK 6m per quarter from the start in 2021 (expected in Q2).

Forecast adjustments				
(SEKm)		2020E	2021E	2022E
Sales	Old	15	47	112
	New	9	33	75
% change		-36%	-28%	-33%
EBIT	Old	-74	-53	-27
	New	-67	-62	-59
% change		-10%	17%	116%
Profit before tax	Old	-74	-53	-27
	New	-67	-62	-59
% change		-10%	17%	116%
Earnings per share	Old	-3.20	-2.26	-1.13
	New	-2.87	-2.64	-2.44
% change		-10%	17%	116%

Source: Redeye Research, Acconeer

Quarterly figures & estimates

We have lowered our H2'20 estimates (see the table below) as we do not see a short-term support for a significant sales take-off in the EVKs and customer launches. In Q4, we expect sales to be boosted by the new modules, although one should note that modules are merely enablers for selling major sensor volumes.

Quarterly estimates (million SEK)											
SEKm	2018	Q1'19	Q2'19	Q3'19	Q4'19	2019	Q1'20	Q2'20	Q3'20	Q4'20	2020
Net sales	1.0	0.6	1.4	1.7	1.8	5.5	2.2	1.6	2.2	3.3	9.3
Sales growth (%)	2788%	563%	568%	695%	314%	478%	291%	13%	32%	83%	70%
EBIT	-39.0	-16.0	-17.6	-15.5	-19.5	-68.5	-17.7	-16.8	-15.1	-17.2	-66.8
EBITDA	-34.5	-13.1	-14.7	-12.6	-16.6	-57.0	-14.8	-13.9	-12.1	-14.2	-55.0
PTP	-39.1	-16.0	-17.5	-15.5	-19.5	-68.5	-17.7	-16.8	-15.1	-17.2	-66.8
EPS (SEK)	-2.1	-0.8	-0.9	-0.8	-1.0	-3.6	-0.8	-0.8	-0.7	-0.6	-2.9
EBIT margin (%)	-357%	-2844%	-1136%	-890%	-957%	-1164%	-823%	-1040%	-669%	-510%	-711%
EBITDA margin (%)	-316%	-2334%	-950%	-724%	-815%	-968%	-689%	-860%	-539%	-421%	-586%
EPS growth (%)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a

Source: Redeye Research, Acconeer

Investment Case

Strong unique product offering & scalability from unmatched cost

Automotive has the largest potential

Large design wins to drive the share price

Main bear point

Strong unique product offering & scalability from unmatched cost

Acconeer's radar of 5x5x1 mm is the tiniest radar on the market, which means unmatched cost. Other radars are more than three times larger, suggesting that they have at least three times higher cost. The real claim to fame though, and the truly disruptive element in Acconeer's offering, is the power consumption, which is more than 10 times lower than competing radars. Combining these characteristics and its fabless business model with the largest manufacturing partners in the World (Amkor & Global Foundries), Acconeer is poised to scale rapidly with high gross margins as soon as sales kick in. Acconeer is ready to ride the structural growth in large market segments within e.g. IoT, automotive and robotics respectively. We believe automotive will be the company's most important market.

Automotive has the largest potential

Acconeer is working on ten use cases in automotive with its tier-1 partner Alps Alpine. The most exciting area is child presence detection (CPD) since it is being mandated by Euro NCAP from 2022-2023, meaning it will become standard in Europe. Moreover, CPD regulation in US is underway. Thus, most OEMs are procuring or are about to procure CPD. In essence, it is the same type of case as Smart Eye ~2 years ago. We believe Acconeer has a strong competitive advantage in CPD as Acconeer's radar can detect a sleeping baby, behind a blanket, by sensing its pulse or breathing, meaning, in our opinion, that radar will be the go-to technology for CPD. Acconeer has won three CPD design wins for a total contract value of SEK 90-120m. We believe the OEM is a small premium car manufacturer, suggesting that CPD is a multi-billion SEK market for Acconeer. We think larger premium OEMs could yield three times larger initial contracts of SEK 270-360m, and this is just the premium market. The top 8 largest mass market manufacturers are 2-5 times larger than that, meaning incredible potential.

Large design wins to drive the share price

We value Acconeer to SEK 33 per share in our base case while our bear and bull case amount to SEK 18 and 60 respectively. The key differences in our scenarios are related to automotive and smartphones. While news of orders gradually will de-risk the case we assume certain deals are key catalysts. They are more worth than others and have the potential to substantially move the shares; especially more larger deals within automotive. With sales ramping, a big news pipeline, and enough cash until year 2023 in a worst case scenario, we argue that the neglected Acconeer stock provides solid risk/reward.

Main bear point:

Acconeer's minor size is a disadvantage that likely explains why major players like Google want to go with Infineon. Acconeer needs to start building revenue sources in order to become reliable as a long-term supplier for large customers.

Valuation

Bear Case 18.0 SEK

The differences in our bear case assumptions for years 2019-2026 compared to our base scenario are the following: Sales growing by a CAGR of about 100 % to around SEK 750 million based on volumes of 22 million. Break-even in 2023 and hereafter an average EBIT margin of 15 % and a 10 % long-term EBIT margin. The difference from our base case is that we expect that Acconeer fails to penetrate automotive in a meaningful scale. Thus, robotics and level measurement (incl. waste management) account for 21 and 49% respectively, i.e. two thirds of total sales. Other than that, the other segments perform the same as in our base case.

Base Case 33.0 SEK

Our base case assumptions for years 2019-2026 are summarized below. In all our valuation scenarios we are using a required rate of return of 13.0 % based on our Redeye Rating and a terminal sales CAGR of 2 %. Sales growing by a CAGR of 115 % reaching about SEK 1.2bn in 2026 while the 2026 volumes amount to 36 million. Sensor prices dropping from USD 5 by on average 15 % per year (although faster in the first years), somewhat offset by modules and increased sensor penetration in robotics and automotive. Cumulative sales to 12% related to robotics, 59% automotive, 13% level measurement sensors (incl. waste management) and 0% smartphones/wearables. Average gross margin of about 43%; higher during the first years and substantially lower during the second half as gross margin drops to levels around 40 % in 2026. OPEX growing at a CAGR of 16%. Average EBIT margin of 14% and a 15 % long-term EBIT margin

Bull Case 60.0 SEK

The differences in our bull case assumptions for years 2019-2026 compared to our base scenario are the following: Sales growing by a CAGR of about 130% to around SEK 2 billion based on volumes of 52 million. Same gross margins as in our base scenario but costs grow faster (27 % CAGR) although not as fast as the stronger top line growth, meaning higher margins. Average EBIT of 27 % and a long-term EBIT margin of 20 %. The big difference from our base case is that we estimate Acconeer to be able to enter some premium smartphones and therefore also subsequently get a few Chinese players on board. We assume 15 million smartphones and wearables in 2026 – equal to about 1% of today's volumes of 1.5 billion. We also forecast stronger growth in automotive as we expect 50 % larger volumes in automotive over the whole period (in total 30 million sensors).

Catalysts

Larger deals to drive the share price

Today's valuation has discounted a bunch of deals for Acconeer but since lead times are long we assume the deals will start to gradually come. Smaller customers are moving faster. While news of orders gradually will de-risk the case we assume certain larger deals are key catalysts. They are more worth than others and have the potential to substantially move the shares; especially big deals within automotive.

Downside		IMPACT		Upside		Time Frame
Significance	Likelihood	Significance	Likelihood	Significance	Likelihood	
Moderate	Possible	Moderate	Possible			Long

Summary Redeye Rating

The rating consists of three valuation keys, each constituting an overall assessment of several factors that are rated on a scale of 0 to 1 points. The maximum score for a valuation key is 5 points.

People: 3

Acconeer, founded as late as 2011, is in an early stage with sales of its radar technology just getting started, making it hard to rate the management. We see no big screw-ups thus far but there are not much signs of deals yet, suggesting that things are taking a bit longer. Acconeer also has a short history of being a listed company (IPO in Dec. 2017) in terms of communication to shareholders etc. Given the short history we therefore especially evaluate the experience in the Board and Management, which overall is solid with people from previous executive positions at companies like Ericsson and Sony Mobile. The CEO was e.g. the President of Japan at ST Ericsson during 2009-2014. Acconeer has active main owners represented on the Board and in general the Board own lots of shares. We would prefer a bit higher commitment from insiders in Management though. However, we note that the two co-founders own 3 percent each and we like the fact that they are still working in the company as CTO and COO respectively. Aside of insider buying another potential upside to the ownership score is institutional investors eventually discovering Acconeer and buying into the company.

Business: 2

The power efficient sensor has minimal cost and footprint, which together with Acconeer's fabless business model will make Acconeer scale rapidly with high margins when sales kick in. Adding the major, global partners in manufacturing and distribution, Acconeer seems ready to meet the demand and ride the strong, structural trends in e.g. automotive, IoT and robotics, although these trends will of course entice severe competition down the road. The interest for Acconeer's solution is strong with a large group of customers testing the technology. However, the jury is still out in the sense that it is still early stage and there are not much news of won deals yet, which is a risk factor.

Financials: 2

Since Acconeer is not yet profitable our fully retrospective profitability rating can be no more than zero at the moment. The scalability and the low cost base imply a good outlook for profitability in the future. At that point the rating would start to gradually increase. The rather early stage with a limited product portfolio and no stable earnings or revenue weighs on the financial stability score. In addition, it is too soon to understand what the customer base will look like in terms of differentiation etc., which adds uncertainty. However, the company has a large cash position and an MoU deal with financing from its partner Alps Alpine. We think the cash will suffice at least 2.5 years.

INCOME STATEMENT	2018	2019	2020E	2021E	2022E
Net sales	1	6	9	33	75
Total operating costs	-32	-63	-64	-86	-124
EBITDA	-31	-57	-55	-52	-49
Depreciation	-2	-2	-2	-1	-1
Amortization	-2	-9	-9	-8	-8
Impairment charges	0	0	0	0	0
EBIT	-35	-69	-67	-62	-59
Share in profits	0	0	0	0	0
Net financial items	0	0	0	0	0
Exchange rate dif.	0	0	0	0	0
Pre-tax profit	-35	-69	-67	-62	-59
Tax	0	0	0	0	0
Net earnings	-35	-69	-67	-62	-59

BALANCE SHEET	2018	2019	2020E	2021E	2022E
Assets					
<i>Current assets</i>					
Cash in banks	136	78	75	23	0
Receivables	2	5	8	23	36
Inventories	4	6	6	17	22
Other current assets	0	0	0	0	0
Current assets	142	89	89	63	58
<i>Fixed assets</i>					
Tangible assets	6	4	3	2	3
Associated comp.	0	0	0	0	0
Investments	0	0	0	0	0
Goodwill	0	0	0	0	0
Cap. exp. for dev.	0	0	0	0	0
0 intangible rights	45	36	31	31	33
0 non-current assets	1	1	1	1	1
Total fixed assets	52	41	35	34	37
Deferred tax assets	0	0	0	0	0
Total (assets)	195	130	124	97	96
Liabilities					
<i>Current liabilities</i>					
Short-term debt	0	0	0	0	2
Accounts payable	9	10	9	23	36
0 current liabilities	0	0	0	0	0
Current liabilities	9	10	9	23	38
Long-term debt	0	0	0	0	0
0 long-term liabilities	1	0	0	0	0
Convertibles	0	0	0	0	0
Total Liabilities	9	10	9	23	38
Deferred tax liab	0	0	0	0	0
Provisions	0	0	0	0	0
Shareholders' equity	185	120	115	74	58
Minority interest (BS)	0	0	0	0	0
Minority & equity	185	120	115	74	58
Total liab & SE	195	130	124	97	96

FREE CASH FLOW	2018	2019	2020E	2021E	2022E
Net sales	1	6	9	33	75
Total operating costs	-32	-63	-64	-86	-124
Depreciations total	-5	-12	-12	-10	-9
EBIT	-35	-69	-67	-62	-59
Taxes on EBIT	0	0	0	0	0
NOPLAT	-35	-69	-67	-62	-59
Depreciation	5	12	12	10	9
Gross cash flow	-31	-57	-55	-52	-49
Change in WC	-10	-4	-4	-12	-6
Gross CAPEX	-12	-1	-6	-9	-12
Free cash flow	-52	-61	-64	-73	-67

CAPITAL STRUCTURE	2018	2019	2020E	2021E	2022E
Equity ratio	95%	92%	93%	77%	61%
Debt/equity ratio	0%	0%	0%	0%	3%
Net debt	-136	-78	-75	-23	2
Capital employed	49	42	40	51	60
Capital turnover rate	0.0	0.0	0.1	0.3	0.8

GROWTH	2018	2019	2020E	2021E	2022E
Sales growth	2,964%	445%	70%	258%	124%
EPS growth (adj)	51%	94%	-20%	-8%	-8%

DCF VALUATION		CASH FLOW, MSEK	
WACC (%)	13.0 %	NPV FCF (2020-2021)	-136
		NPV FCF (2022-2028)	303
		NPV FCF (2029-)	533
		Non-operating assets	78
		Interest-bearing debt	0
		Fair value estimate MSEK	777
Assumptions 2020-2026 (%)			
Average sales growth	123.7 %	Fair value e. per share, SEK	33.3
EBIT margin	-128.3 %	Share price, SEK	17.5

PROFITABILITY	2018	2019	2020E	2021E	2022E
ROE	-17%	-45%	-57%	-65%	-88%
ROCE	-17%	-45%	-57%	-65%	-87%
ROIC	-109%	-140%	-158%	-155%	-115%
EBITDA margin	-3026%	-1036%	-589%	-156%	-66%
EBIT margin	-3471%	-1245%	-714%	-185%	-78%
Net margin	-3473%	-1244%	-714%	-185%	-78%

DATA PER SHARE	2018	2019	2020E	2021E	2022E
EPS	-1.84	-3.56	-2.87	-2.64	-2.44
EPS adj	-1.84	-3.56	-2.87	-2.64	-2.44
Dividend	0.00	0.00	0.00	0.00	0.00
Net debt	-7.14	-4.05	-3.24	-1.00	0.07
Total shares	19.08	19.24	23.30	23.38	23.98

VALUATION	2018	2019	2020E	2021E	2022E
EV	323.6	328.9	332.4	384.3	409.4
P/E	-13.1	-5.9	-6.1	-6.6	-7.2
P/E diluted	-13.1	-5.9	-6.1	-6.6	-7.2
P/Sales	454.8	73.9	43.6	12.2	5.6
EV/Sales	320.1	59.7	35.6	11.5	5.5
EV/EBITDA	-10.6	-5.8	-6.0	-7.4	-8.3
EV/EBIT	-9.2	-4.8	-5.0	-6.2	-7.0
P/BV	2.5	3.4	3.5	5.5	7.0

SHARE PERFORMANCE	GROWTH/YEAR		18/20E
1 month	6.8 %	Net sales	204.1 %
3 month	-11.4 %	Operating profit adj	38.0 %
12 month	-21.7 %	EPS, just	24.8 %
Since start of the year	-15.9 %	Equity	-21.1 %

SHAREHOLDER STRUCTURE %	CAPITAL	VOTES
Bengt Adolfsson	11.7 %	11.7 %
Winplantan AB	11.6 %	11.6 %
Smbc Nikko Securities Inc.	8.0 %	8.0 %
Avanza Pension	7.2 %	7.2 %
Tord Wingren	3.3 %	3.3 %
Nordnet Pensionsförsäkring	3.3 %	3.3 %
Nord Fondkommission AB	2.9 %	2.9 %
Dreamtech Co Ltd	2.6 %	2.6 %
Uniquet Corporation	2.6 %	2.6 %
Mikael Egard	2.5 %	2.5 %

SHARE INFORMATION	
Reuters code	ACCON.ST
List	First North
Share price	17.5
Total shares, million	23.3
Market Cap, MSEK	407.8

MANAGEMENT & BOARD	
CEO	Lars Lindell
CFO	Henrik Ljung
IR	Lars Lindell
Chairman	Bengt Adolfsson

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Redeye Rating and Background Definitions

Company Quality

Company Quality is based on a set of quality checks across three categories; PEOPLE, BUSINESS, FINANCE. These are the building blocks that enable a company to deliver sustained operational outperformance and attractive long-term earnings growth.

Each category is grouped into multiple sub-categories assessed by five checks. These are based on widely accepted and tested investment criteria and used by demonstrably successful investors and investment firms. Each sub-category may also include a complementary check that provides additional information to assist with investment decision-making.

If a check is successful, it is assigned a score of one point; the total successful checks are added to give a score for each sub-category. The overall score for a category is the average of all sub-category scores, based on a scale that ranges from 0 to 5 rounded up to the nearest whole number. The overall score for each category is then used to generate the size of the bar in the Company Quality graphic.

People

At the end of the day, people drive profits. Not numbers. Understanding the motivations of people behind a business is a significant part of understanding the long-term drive of the company. It all comes down to doing business with people you trust, or at least avoiding dealing with people of questionable character.

The People rating is based on quantitative scores in seven categories:

- Passion, Execution, Capital Allocation, Communication, Compensation, Ownership, and Board.

Business

If you don't understand the competitive environment and don't have a clear sense of how the business will engage customers, create value and consistently deliver that value at a profit, you won't succeed as an investor. Knowing the business model inside out will provide you some level of certainty and reduce the risk when you buy a stock.

The Business rating is based on quantitative scores grouped into five sub-categories:

- Business Scalability, Market Structure, Value Proposition, Economic Moat, and Operational Risks.

Financials

Investing is part art, part science. Financial ratios make up most of the science. Ratios are used to evaluate the financial soundness of a business. Also, these ratios are key factors that will impact a company's financial performance and valuation. However, you only need a few to determine whether a company is financially strong or weak.

The Financial rating is based on quantitative scores that are grouped into five separate categories:

- Earnings Power, Profit Margin, Growth Rate, Financial Health, and Earnings Quality.

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Redeye Rating (2020-07-28)

Rating	People	Business	Financials
5p	15	12	3
3p - 4p	108	84	33
0p - 2p	6	33	93
Company N	129	129	129

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Westman owns shares in the company : Yes

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