



REDEYE

Autotech **Seminar**

September 25, 2019



AGENDA AUTOTECH SEMINAR 2019

09:30	Introduction Redeye , Viktor Westman, Analyst
09:35	Kungliga Tekniska Högskolan , Albin Engholm, Researcher
09:55	Veoneer , Tomas Jönsson, EVP Communications & IR
10:10	Smart Eye , Martin Krantz, CEO
10:25	Acconeer , Lars Lindell, CEO
10:40	Panel discussion: KTH, Veoneer, SmartEye, Acconeer
11:00	Opus Group , Per Rosén, President Europe
11:15	Diadrom , Henrik Fagrell, Chairman of the board
11:30	Zuragon , Joachim Fritzsön, Founder
11:40	Panel discussion: Opus, Diadrom, Zuragon
11:50	Lunch



Erik Kramming
Client Manager & Head Of Technology

Erik has a Master of Science in finance from Stockholm University. His previous work has included a position at Handelsbanken Capital Markets. At Redeye, Erik works with Corporate Broking for the Technology team.



Greger Johansson
Client Manager & Co-head Technology

Greger has a background from the telecom industry, both from large companies as well as from entrepreneurial companies in Sweden (Telia and Ericsson) and USA (Metricom). He also spent 15+ years in investment banking (Nordea and Redeye). Furthermore, at Redeye Greger advise growth companies within the technology sector on financing, equity storytelling and getting the right shareholders/investors (Corporate Broking). Coder for two published C64-games. M.Sc.EE and M.Sc.Econ.



Johan Ekström
Client Manager

Johan has a Master of Science in finance from the Stockholm School of Economics, and has studied e-commerce and marketing at the MBA Haas School of Business, University of California, Berkeley. Johan has worked as an equity portfolio manager at Alfa Bank and Gazprombank in Moscow, as a hedge fund manager at EME Partners, and as an analyst and portfolio manager at Swedbank Robur. At Redeye, Johan works in the Corporate Broking team with fundamental analysis and advisory in the tech sector.



Erik Rolander
Client Manager

Erik has a Master's degree in finance from Linköpings Universitet. He has previously worked as a tech analyst and product manager for Introduce.se which is owned and operated by Remium. At Redeye, Erik works with Corporate Broking for the Technology team.



Håkan Östling
Head of Research & Sales

Håkan holds a Master of Science in Economics and Financial Economics at the Stockholm School of Economics. He has previously worked with equity research, corporate finance and management at Goldman Sachs, Danske Bank and Alfred Berg. At Redeye, Håkan works with management in both analysis and other corporate governance.

THE REDEYE TECHNOLOGY TEAM



Havan Hanna
Analyst

With a university background in both economics and computer technology, Havan has an edge in the work as an analyst in Redeye's technology team. What especially intrigues Havan every day is coming up with new investment ideas that will help him generate above market returns in the long run.



Henrik Alveskog
Analyst

Henrik has an MBA from Stockholm University. He started his career in the industry in the mid-1990s. After working for a couple of investment banks he came to Redeye, where he has celebrated 10 years as an analyst.



Kristoffer Lindström
Analyst

Kristoffer Lindström has both a BSc and an MSc in Finance. He has previously worked as a financial advisor, stockbroker and equity analyst at Swedbank. Kristoffer started to work for Redeye in early 2014, and today works as an equity analyst covering companies in the tech sector with a prime focus on Gaming and iGaming.



Viktor Westman
Analyst

Viktor read a Master's degree in Business and Economics, Finance, at Stockholm University, where he also sat his Master of Laws. Viktor previously worked at the Swedish Financial Supervisory Authority and as a writer at Redeye. He today works with equity research at Redeye and covers companies in IT, telecoms and technology.



Eddie Palmgren
Analyst

Eddie Palmgren holds a BSc in Business and Economics, Finance, from Stockholm University and has also completed an additional year at Master's Level in Taiwan. Eddie joined Redeye in 2014 and is an equity analyst in the Technology team as well as editor for Redeye's Top Picks portfolio.



Tomas Otterbeck
Analyst

Tomas Otterbeck gained a Master's degree in Business and Economics at Stockholm University. He also studied Computing and Systems Science at the KTH Royal Institute of Technology. Tomas was previously responsible for Redeye's website for six years, during which time he developed its blog and community and was editor of its digital stock exchange journal, Trends. Tomas also worked as a Business Intelligence consultant for over two years. Today, Tomas works as an analyst at Redeye and covers software companies.



Dennis Berggren
Analyst

Dennis Berggren is an equity analyst within Redeye's technology team, holding a Master's degree in Economics of Innovation and Growth from KTH Royal Institute of Technology and a Bachelor's degree in Economics from Stockholm University.



Jonas Amnesten
Analyst

Jonas Amnesten is an equity analyst within Redeye's technology team, with focus on the online gambling industry. He holds a Master's degree in Finance from Stockholm University, School of Business. He has more than 6 years' experience from the online gambling industry, working in both Sweden and Malta as Business Controller within the Cherry Group.


































Fredrik Nilsson
Analyst

Fredrik Nilsson is an equity analyst within Redeye's technology team. He has an MSc in Finance from University of Gothenburg and has previously worked as a tech-focused equity analyst at Remium.

A white car is parked on a dirt road in a rural landscape at sunset. The car is the central focus, with its rear and side visible. The background shows a dirt road leading into a field with a fence, and hills in the distance under a warm, orange sky. The overall mood is serene and scenic.

Redeye Technology Transactions

RECENT				
 MAY 2019 Rights Issue SEK 40m		 MAY 2019 Directed Issue +Rights Issue SEK 139m		 MAY 2019 Rights Issue Co-Lead Manager SEK 135m
 APRIL 2019 Dual Listing SEK 10m		 APRIL 2019 Rights Issue SEK 102m		 MARCH 2019 IPO SEK 80m
 JANUARY 2019 IPO Joint Bookrunner NOK 120m	 NOVEMBER 2018 Rights Issue SEK 25m	 OCTOBER 2018 Directed Issue SEK 43m	 OCTOBER 2018 Directed Issue SEK 21m	 OCTOBER 2018 Right Issue SEK 39m
2017-2018				
 JUNE 2018 Private Placement SEK 108m	 JUNE 2018 Rights Issue Join Lead Manager SEK 127m	 JUNE 2018 Private Placement SEK 50m	 MAY 2018 IPO SEK 30m	 APRIL 2018 Private Placement SEK 20m
 FEBRUARI 2018 Private Placement SEK 20m	 NOVEMBER 2017 IPO SEK 60m	 NOVEMBER 2017 IPO SEK 180m	 NOVEMBER 2017 Private Placement EUR 9m	 OCTOBER 2017 IPO SEK 22m
2016-2017				
 APRIL 2017 IPO SEK 60m	 MARCH 2017 Rights Issue SEK 26m	 FEBRUARY 2017 Private Placement EUR 7m	 DECEMBER 2016 Rights Issue SEK 107m	 DECEMBER 2016 Rights Issue SEK 24m
 OCTOBER 2016 Directed Issue SEK 49m	 AUGUST 2016 Private Placement SEK 60m	 JUNE 2015 Directed Issue SEK 11m	 JUNE 2015 Rights Issue SEK 62m	 APRIL 2016 Directed Issue SEK 11m

Autotech Seminar 2019

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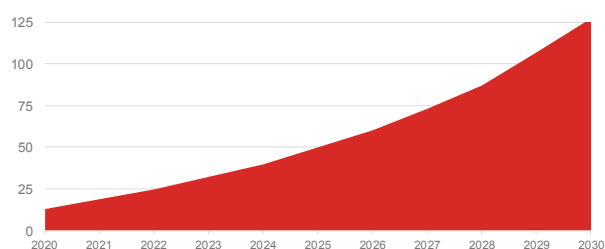
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(Acconeer, Gapwave, Neonode, Opus Group, Smart Eye)	

The automotive market is currently in a tech revolution that has barely started. Most notably, the cars of the future will be electrified, autonomous, connected, smart and shared, as we will elaborate in the different sections below.

Environmentally friendly electric cars

All major car OEMs have an electric vehicle strategy and most of them are looking to go fully electric. The installed base of electric vehicles is expected to exceed 100 million vehicles around 2029, as indicated in the graph below.

Expected installed base of electric vehicles (million vehicles)



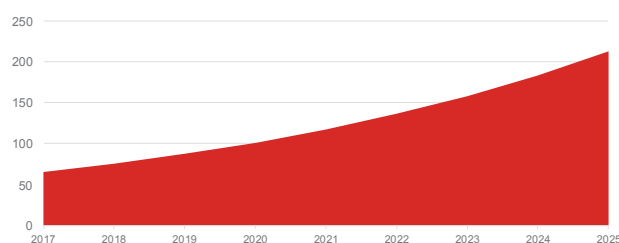
Source: Statista, Business Insider, Redeye Research

Smart connected cars

Cars are becoming connected “computers on wheels” as they get equipped with internet access/W-LAN, allowing cars to communicate and share information with each other. This also opens up endless opportunities for personalization, IoT and driver-car-interaction. One example is controlling household electronics from the car, e.g., closing windows; the fridge can tell the car that it is out of milk and much, much more.

The globally connected car market is expected to be worth over USD 200 bn in 2025, as indicated in the graph below.

Global connected car market (USD bn)

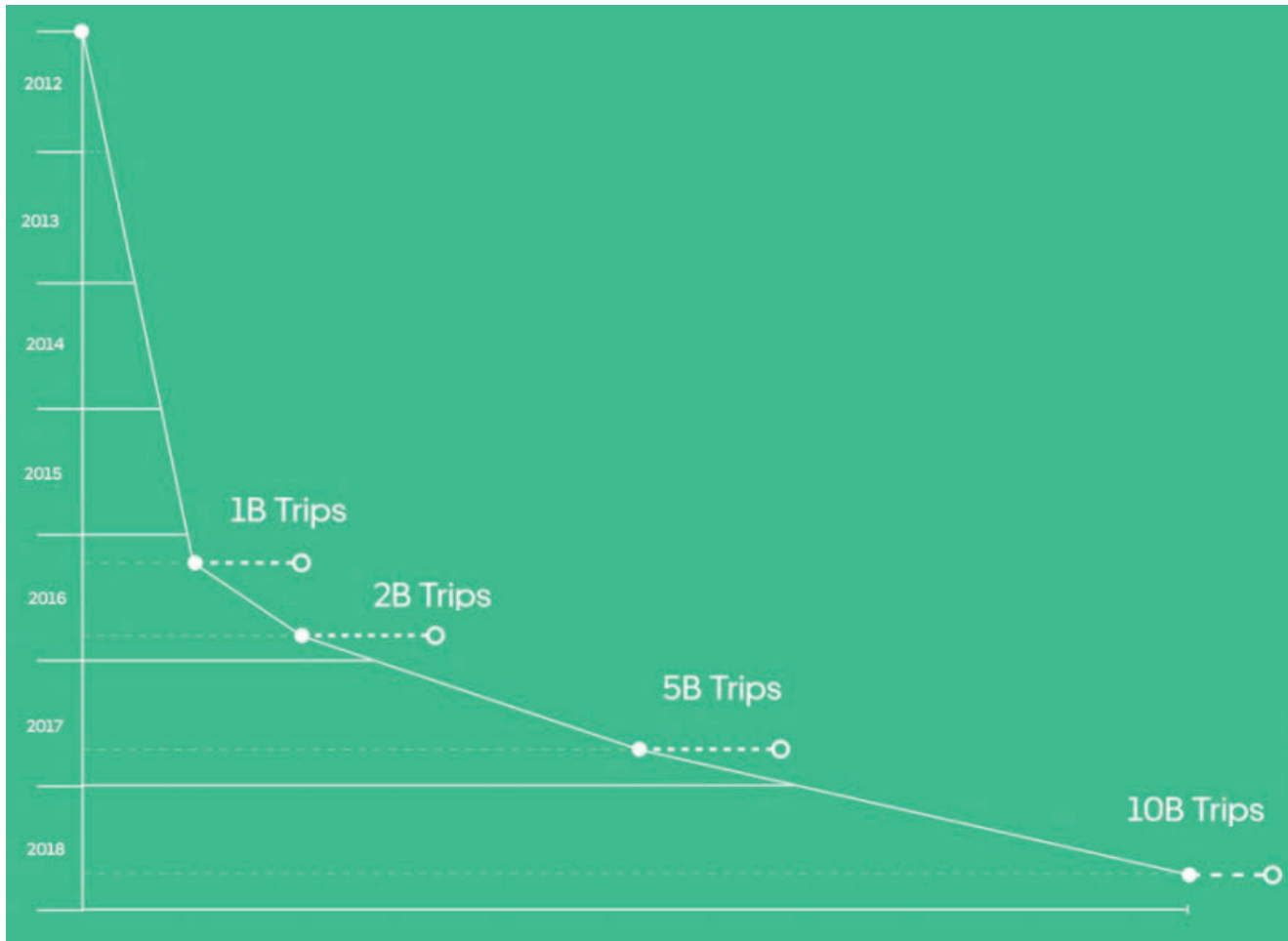


Source: Redeye Research, various industry sources

Sharing economy & ride-sharing

Owning a car will be less common in the future. Instead cars will be shared and rented as a service. The market for so-called ride hailing services (platforms connecting passengers with private drivers) is growing rapidly. One good illustration of this trend is the vertical takeoff in the number of Uber rides, which was mentioned in Uber's IPO prospectus (see image below). Uber reached 10 billion trips one year ago. At the time of its IPO in May 2019, over 17 million Uber rides were made each day.

Uber: Number of trips (billion)



Source: Uber

(Semi)-autonomous cars & driver assistance

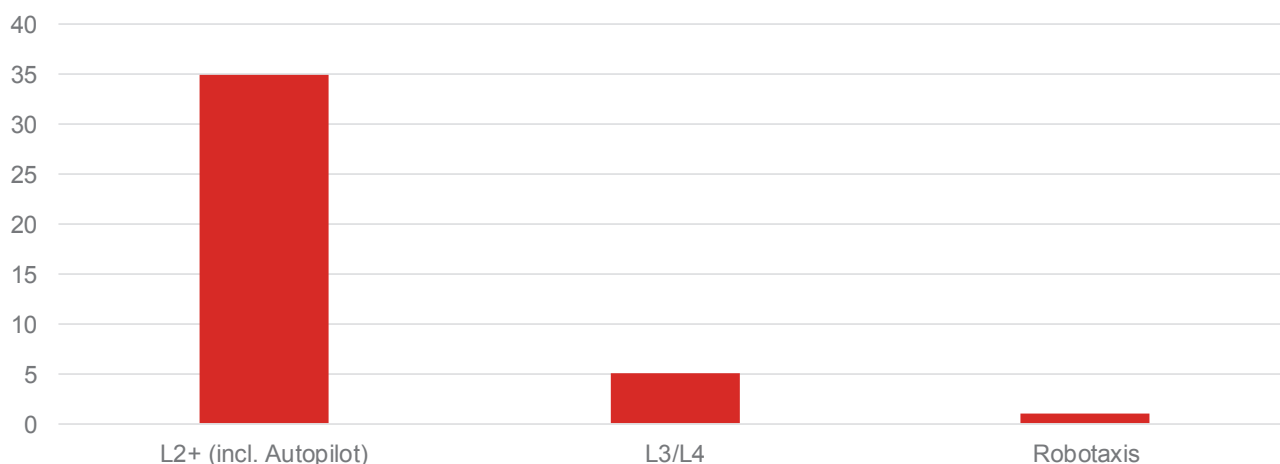
All car OEMs are investing in autonomous car technologies, although the 100% autonomous cars will arrive later than OEMs previously expected. The investments are related to many different areas. Various sensors are needed in order for the car to detect what is going in its surroundings. Artificial Intelligence (AI) then helps the cars to understand this information and make adequate maneuvers.

Some of the OEMs are moving directly to level 4 (high automation) where the car drives by itself almost all of the time. Others believe it is important to first develop semi-autonomous level 2+ or level 3 (conditional automation) cars where the driver is expected to intervene from time to time. Regardless which one of these approaches the car OEMs prefer, the whole car industry has agreed on the long-term importance

of moving towards autonomous cars due to e.g. higher safety and lower transportation costs. As for the safety implications, safety standard organizations worldwide are continuously mandating more technology in order to decrease the 1.2 million road fatalities and 50 million traffic injuries that occur every year. About 94 percent of these car crashes are related to human error, which drives the need for Advanced Driver-Assistance Systems (ADAS), i.e. technology that helps the driver in the driving process. Similar to self-driving cars, ADAS also require an increasing number of sensors and AI.

NVIDIA estimates that there will be an addressable market of 35 million level 2+ cars (incl. autopilot) in 2025 together with 5 million level 3/4 cars, but only 1 million Robotaxis (see the graph below).

Addressable market of semi-autonomous vehicles by 2025 (million vehicles)



Source: NVIDIA

TRANSACTIONS IN THE SECTOR

Transactions in the sector

About 100 M&A transactions were completed in 2018 and the deal flow has continued in 2019, albeit with a bit smaller transactions, on average. The largest acquisitions of 2019 thus far are ZF's purchase of Haldex's competitor Wabco for

USD 7.4 billion and Uber's acquisition of Magnus Olsson's Careem. Careem had 30 million users and 1 million drivers in 14 Middle Eastern countries by the time of the deal.

Major M&A deals 2016-2019

Target	Acquirer	Price (bn USD)	Multiples
Mobileye	Intel	15.3	EV/Sales 39x
Harman	Samsung	8.0	EV/Sales 1x
Wabco	ZF	7.4	EV/Sales 2x
Careem	Uber	3.1	
BCA Marketplace	BBD Bidco	2.4	EV/Sales 1x
Fleetmatics	Verizon	2.4	EV/Sales 6x
Yinlong	Gree	1.9	
SAFT	Total	1.1	EV/Sales 1x
99 Taxis	DiDi	1.0	
NEVS	Evergrande	0.9	EV/Sales 34x
Telogis	Verizon	0.9	EV/Sales 7x
Xevo	Lear	0.3	EV/Sales 1x

Source: Redeye Research, various industry sources

Valuations of the listed autotech companies

In the tables below, we have summarized the valuations of car OEMs, tier-1s and autotech-related tier-2/3 players.

Car OEMs are expected to grow sales on average 1% during 2018-2021 according to Bloomberg consensus, while the forecast for the corresponding period for the tier-1s is 4%, as indicated in the following table. This leads to on average 26% higher P/E ratios and 36% higher EV/S multiples for the tier-1s.

Valuations of Listed Autotech Companies: OEMs & Tier-1s

Company	Mkt cap (SEKbn)	P/E			EV/EBITDA			EV/Sales			CAGR sales	Sales (SEKbn)
		19E	20E	21E	19E	20E	21E	19E	20E	21E	18-21E	2018
OEMs												
GM	529	6	6	6	3	3	3	0.4	0.4	0.4	0%	1279
Ford	358	7	6	6	2	2	2	0.2	0.2	0.2	-3%	1395
FCA	208	5	5	5	1	1	1	0.2	0.2	0.2	2%	1133
Volkswagen	858	6	6	5	3	3	2	0.4	0.4	0.4	3%	2420
BMW	450	8	7	7	8	7	7	1.0	1.0	0.9	1%	1000
Daimler	547	9	7	6	3	2	2	0.2	0.2	0.2	2%	1717
Toyota	2157	10	9	9	11	12	11	1.3	1.3	1.3	2%	2212
Honda	469	7	8	7	8	8	8	0.7	0.7	0.7	1%	1157
Nissan	270	8	18	9	3	4	4	0.2	0.2	0.2	-2%	900
Suzuki	190	10	12	11	4	5	5	0.6	0.6	0.6	1%	283
Hyundai	223	9	8	7	10	9	9	0.8	0.8	0.8	5%	765
Renault	179	6	5	5	3	3	2	0.3	0.3	0.3	1%	589
PSA	232	6	6	6	2	2	2	0.2	0.2	0.2	2%	759
Average	513	7.5	7.9	6.8	4.7	4.8	4.5	0.5	0.5	0.5	1.0%	1201
Median	358	7.1	7.0	6.5	2.9	3.0	3.2	0.4	0.4	0.4	1.5%	1133
Tesla	423	-72	69	27	26	17	12	2.2	1.8	1.5	20%	187
Tier-1s												
Continental	265	11	10	9	5	4	4	0.6	0.6	0.6	2%	456
Magna	162	11	10	9	5	5	5	0.5	0.5	0.5	1%	355
Veoneer	18	-3	-5	-7	-4	-8	-25	0.7	0.6	0.5	5%	19
Hyundai Mobis	190	10	9	8	5	5	4	0.4	0.4	0.4	6%	278
Aptiv	222	17	16	14	12	11	10	1.9	1.8	1.7	5%	126
Denso	343	13	13	12	5	5	5	0.7	0.7	0.6	3%	385
Valeo	78	16	11	8	5	4	4	0.6	0.5	0.5	4%	196
Visteon	21	25	15	10	10	8	7	0.8	0.8	0.7	7%	26
Alps Alpine	41	16	13	11	5	5	5	0.6	0.5	0.5	0%	65
Faurecia	67	9	8	7	4	4	3	0.5	0.5	0.4	5%	180
Aisin Seiki	94	9	12	10	4	4	4	0.4	0.4	0.4	1%	294
Average	136	12.1	10.1	8.3	5.1	4.3	2.4	0.7	0.7	0.6	3.8%	216
Median	94	11.4	10.8	9.2	4.8	4.6	4.3	0.6	0.5	0.5	4.2%	196

Source: Bloomberg, Redeye Research

VALUATION METRICS

In general, upstream seems like a better place to be than downstream in the auto value chain. As indicated in the following table below, the major tier-2/3 players (group 1) have a higher expected growth of about 6% compared to OEMs and tier-1s (albeit it should be noted that these

businesses are more diversified and while automotive is important and strategic for these players they are in general not pure play auto). Looking at the multiples, the tier-2/3 group has over 100% higher P/E ratios and almost 5x higher EV/S multiples compared to the tier-1s.

Valuations of Listed Autotech-related Companies: Tier-2/3

Company	Mkt cap	P/E			EV/EBITDA			EV/Sales			CAGR sales	Sales (SEKbn)
		19E	20E	21E	19E	20E	21E	19E	20E	21E		
Group 1	(SEKbn)											
Xilinx	257	27	26	24	23	23	19	8.0	7.2	6.4	16%	21
Infineon	243	20	19	17	9	8	7	2.5	2.3	2.2	7%	77
NXP	291	14	12	11	12	11	10	4.1	3.9	3.6	2%	82
Renesas	101	50	18	15	12	9	9	2.5	2.3	2.3	3%	60
ST	177	17	14	11	8	7	6	1.8	1.6	1.5	4%	84
Intel	2223	12	12	11	7	7	7	3.5	3.4	3.3	1%	616
Melexis	31	45	31	24	24	19	15	6.0	5.3	4.7	3%	6
Synopsys	199	30	27	24	22	20	16	6.0	5.5	5.1	8%	27
Nvidia	1063	27	33	25	24	30	22	8.7	9.4	7.9	10%	82
Average	510	27.0	21.3	18.0	15.8	14.9	12.5	4.8	4.6	4.1	5.9%	117
Median	243	26.8	18.8	16.7	11.9	10.6	9.7	4.1	3.9	3.6	3.7%	77
Group 2	(SEKbn)											
Seeing Machines	1651	-289	-368	-450	-6	-8	-11	7.8	5.0	3.7	26%	198
Acconeer	423	-6	-6	-8	-5	-5	-8	50.2	17.7	6.0	274%	1
Neonode	209	-5	-7	9	-8	-8	5	2.1	1.8	1.0	26%	74
Opus	1565	14	8	6	5	5	5	1.3	1.2	1.1	6%	2497
Diadrom	97	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	58
Terranet	79	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0
Gapwaves	756	-21	-27	-41	-24	-33	-55	47.8	22.4	10.4	240%	2
Smart Eye	1400	-16	-22	26	-16	-27	15	18.4	9.2	4.0	80%	51
Average	773	-53.8	-70.3	-76.4	-9.0	-12.8	-8.3	21.3	9.6	4.4	108.7%	360
Median	590	-10.9	-14.3	-0.9	-6.8	-8.2	-1.7	13.1	7.1	3.8	53.1%	54

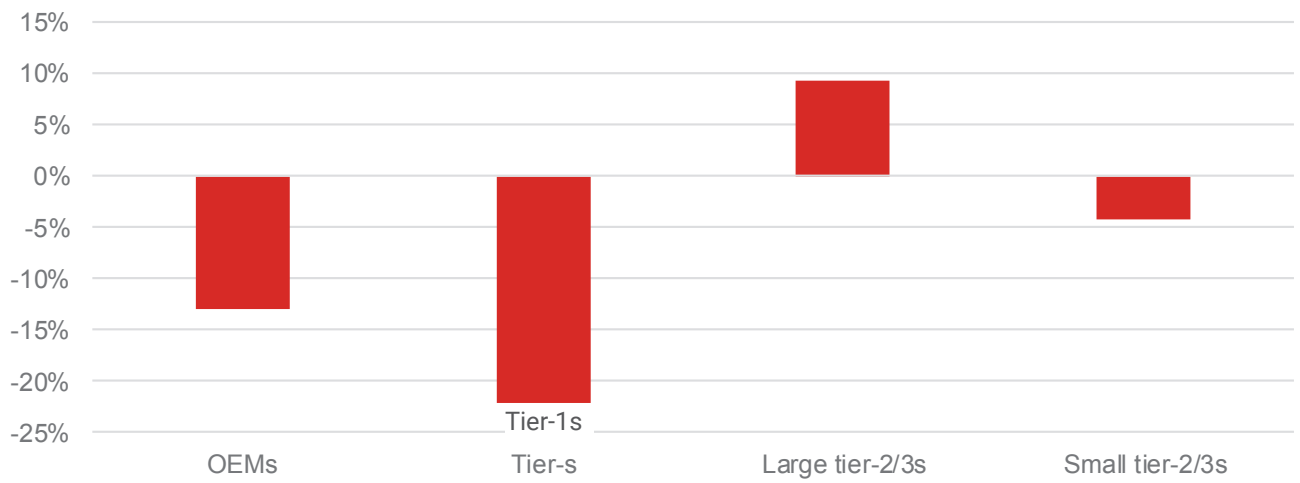
Source: Bloomberg, Redeye Research

In group 2 in the table above, we have included the Swedish, smaller, pure-play companies (and in some cases their competitors). As one would expect, these players have a significantly faster expected sales growth and higher, double

digit EV/sales multiples. However, they are not profitable yet, which we believe is related to the immature autotech market. From 2021 and beyond we expect the autotech winners to begin turning profitable and enjoy high margins.

Looking at the one-year stock performance (see the graph below), tier-2/3 players have performed better than OEMs and tier-1s.

One year share price performance (%)



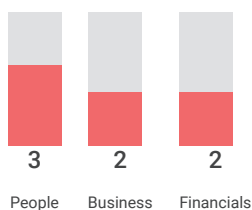
Source: Bloomberg

A white car is shown from a rear three-quarter view, parked on a dirt road. The background features a rural landscape with a fence, trees, and hills under a warm, golden sunset sky. The car's rear light bar and taillight are visible.

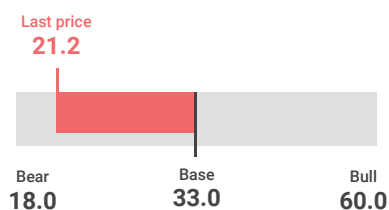
Covered Companies

Redeye Rating

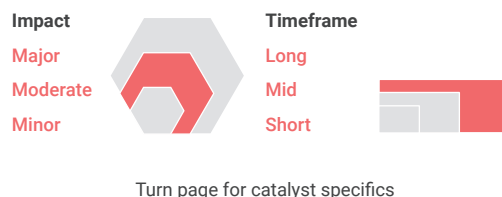
COMPANY QUALITY



FAIR VALUE RANGE

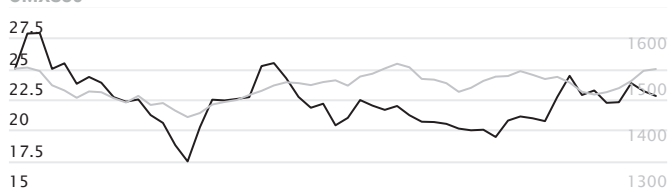


CATALYST POTENTIAL

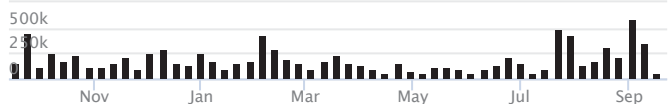


Snapshot

Acconeer OMXS30



Volume



Marketplace	First North Stockholm
CEO	Lars Lindell
Chairman	Bengt Adolfsson
Share information	
Share price (SEK)	21.2
Number of shares (M)	19.2
Market cap (MSEK)	425
Net debt (MSEK)	-71

Analyst



Viktor Westman
viktor.westman@redeye.se

Conflict of interests

Viktor Westman owns shares in Acconeer: **Yes**

Redeye performs/have performed services for the Company and receives/have received compensation from the Company in connection with this.

Financials

	2017	2018	Redeye Estimates		
			2019E	2020E	2021E
Revenue, MSEK	0	1	6	17	50
Growth	>100%	>100%	>100%	>100%	>100%
EBITDA	-21	-31	-55	-56	-38
EBITDA margin	Neg	Neg	Neg	Neg	Neg
EBIT	-23	-35	-67	-68	-51
EBIT margin	Neg	Neg	Neg	Neg	Neg
Pre-tax earnings	-23	-35	-67	-68	-51
Net earnings	-23	-35	-67	-68	-51
Net margin	Neg	Neg	Neg	Neg	Neg
Dividend/Share	0.00	0.00	0.00	0.00	0.00
EPS adj.	-1.22	-1.84	-3.48	-3.55	-2.64
P/E adj.	-24.2	-13.1	-6.4	-6.2	-8.4
EV/S	11,220.3	320.1	60.3	25.8	10.0
EV/EBITDA	-17.6	-10.6	-6.4	-7.9	-13.0

Last updated: 2019-09-20

Owner	Equity	Votes
Bengt Adolfsson	14.1%	14.1%
Winplantan AB	11.6%	11.6%
Avanza Pension	6.0%	6.0%
Uniquet Corporation	3.1%	3.1%
Dreamtech Co Ltd	3.1%	3.1%
Nordnet Pensionsförsäkring	3.1%	3.1%
Mikael Egard	3.0%	3.0%
Mats Ingvar Ärlelid	3.0%	3.0%
Lars-Erik Wernersson AB	2.9%	2.9%
ALMI	2.0%	2.0%

Company description

Acconeer is a semiconductor company in Lund, Sweden, who went public in December 2017. It develops and sells radar sensors, with a fabless business model, to manufacturers of electronics. The manufacturing partners are some of the World's largest (Global Foundries & Amkor). Acconeer has developed a radar with a minimal footprint (5x5x1 mm) that is 10 times smaller and comes at a 10 times lower cost, compared to competing radars. Its real claim to fame though is that the power consumption is 50 times lower than competition. As for competitive disadvantages, radar technology is complex in general and requires a lot of education of the customer but at the same time Acconeer is company of minor size that competes with giants. Acconeer needs to start building revenue sources in order to be seen as a reliable supplier for larger companies. The growth strategy is based on a few important pillars such as selling on Digi-Key, World's largest online distributor (450 000 customers) and via Uniquist, South Korea's largest electronics supplier. Acconeer has other, local, niche distributors across the World as well. The company's current focus areas is robotic lawn mowers/vacuum cleaners, parking sensors, level measurement (incl.waste management) and automotive.

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 (about 70 %) as soon as sales kick in. Acconeer is ready to ride the structural growth in large market segments within especially IoT (increased sensor penetration), automotive and robotics respectively. We believe automotive will be the company's most important market. The other application areas with the best value proposition and largest volume potential in the company's focus markets are, according to us, large volume markets such as robotic lawn mowers/vacuum cleaners and IoT applications like measuring levels in tanks and garbage bins.

Automotive has the largest potential

Acconeer is working on ten use cases in automotive with its tier-1 partner Alps Alpine. It has already received three design wins for an entry system with a kick sensor. The most exciting area, however, is child presence detection (CPD) since it is being mandated by Euro NCAP from 2022, meaning all vehicles sold in Europe must have CPD. We believe Acconeer has a strong competitive advantage in CPD as Acconeer's radar can detect a sleeping baby from its pulse or breathing, meaning, in our opinion, that radar will be the go-to technology for CPD.

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 larger deals within automotive.

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.

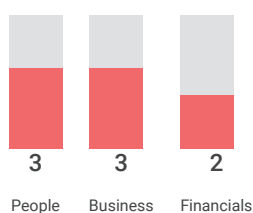
Catalyst types

Larger deals to drive the share price

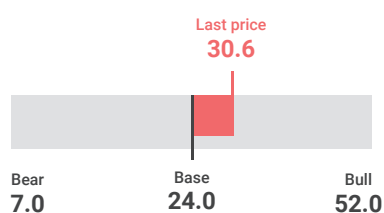
Today's valuation has discounted a bunch of deals for Acconeer but since lead times are long we assume the deals will start to gradually come in H2'19. Smaller customers are moving faster. While news of orders gradually will derisk the case we assume certain larger deals are key catalysts. They are more worth than others and have the potential to substantially move the shares; especially big deals within automotive.

Redeye Rating

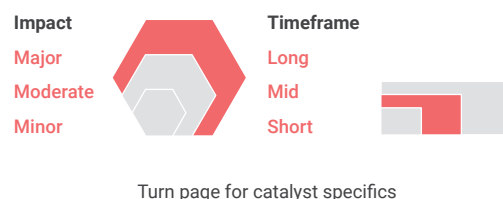
COMPANY QUALITY



FAIR VALUE RANGE

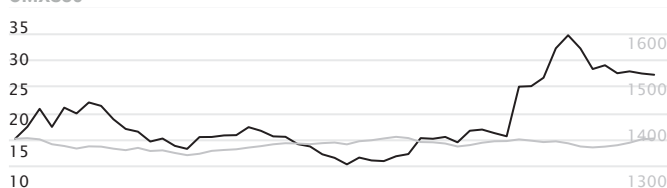


CATALYST POTENTIAL



Snapshot

Gapwaves OMXS30



Volume



Marketplace	First North Stockholm
CEO	Lars-Inge Sjöqvist
Chairman	Jonas Ehinger
Share information	
Share price (SEK)	30.6
Number of shares (M)	24.4
Market cap (MSEK)	745
Net debt (MSEK)	-27

Analyst



Dennis Berggren
dennis.berggren@redeye.se

Conflict of interests

Dennis Berggren owns shares in Gapwaves: **No**
Redeye performs/have performed services for the Company and receives/have received compensation from the Company in connection with this.

Financials

	2017	2018	Redeye Estimates		
			2019E	2020E	2021E
Revenue, MSEK	1	2	15	32	69
Growth	-43.4%	>100%	>100%	>100%	>100%
EBITDA	-24	-35	-30	-22	-13
EBITDA margin	Neg	Neg	Neg	Neg	Neg
EBIT	-27	-44	-35	-28	-18
EBIT margin	Neg	Neg	Neg	Neg	Neg
Pre-tax earnings	-27	-44	-35	-28	-18
Net earnings	-27	-44	-35	-28	-18
Net margin	Neg	Neg	Neg	Neg	Neg
Dividend/Share	0.00	0.00	0.00	0.00	0.00
EPS adj.	-1.53	-1.80	-1.44	-1.15	-0.75
P/E adj.	-26.3	-9.8	-20.5	-25.7	-39.2
EV/S	805.9	159.8	45.7	22.6	10.9
EV/EBITDA	-29.5	-10.3	-23.3	-32.5	-56.9

Last updated: 2019-08-19

Owner	Equity	Votes
Cécile Schilliger	24.6%	56.6%
Avanza Pension	4.5%	1.1%
Lars-Inge Sjöqvist	4.3%	8.7%
Leif Hagne	3.3%	0.8%
Nordnet Pensionsförsäkring	2.7%	0.7%
Jian Yang	2.5%	6.1%
Bright Peter Leo Ebenezer	1.9%	0.5%
BNP Paribas Sec Serv Luxembourg	1.9%	0.5%
Alfred Berg Fonder	1.9%	0.5%
Familjerna Ljungberg & Holmström	1.3%	0.3%

Company description

Gapwaves offers wireless communication solutions based on the GAP waveguide technology, which stems from the research of the late founder Per-Simon Kildal. The company's great potential is found in the millimeter wave antennas that can be applied in expansions of current radio link networks, automotive radars and eventually 5G deployments.

Investment case

- Technology improving power efficiency: Gapwave's potential is found in its waveguide technology that opens up for antennas that are 4-10 times as power efficient as alternative technology.
- 5G brings significant opportunities: We believe that the greatest financial potential arises with upcoming 5G deployments, which will require millions of efficient antennas.
- Technology moves rapidly: the company has to illustrate that there truly is a commercial interest for its solution and show that the company's active antenna solution will solve genuine needs that alternative technologies does not solve.

Technology improving power efficiency. Gapwaves has a first-mover advantage in its antennas that are 4-10x more power efficient in an active setting than other existing technology (depending on configuration and setup). The antenna is expected to incur substantial advantages in communication and automotive radar applications by improving power efficiency and a possibility to produce at a lower cost.

Supportive analysis: The efficiency of the company's solution is shown in a case study where Gapwave's antenna is compared to current state-of-the-art technology. The simulations show that Gapwave's solution incurs higher output power of the transmitter, due to better cooling, and higher antenna directivity (the concentrated radiation in a single direction) while reducing the power losses. These three factors finally result in a higher equivalent isotropic radiated power (EIRP), a measure undertaken to compare the concentrated signal output power, than the state-of-the-art solution. The theoretical implication of this is that the alternative solution must increase power consumption by a factor of 10 to achieve the same EIRP. The practical meaning is that Gapwave's antennas could be used in longer distances, which will be a very important factor in upcoming 5G networks operating on higher frequencies. The antenna has further characteristics that make it possible to produce at a lower cost, which is another critical factor.

Both 5G and automotive bring significant opportunities. There is no lack of opportunities as the company is targeting sizeable markets with a technology shown to be more efficient than alternative solutions. Operators have started to deploy 5G networks, but the greatest infrastructure investments are expected in 2022 and beyond. The communications market is further highly concentrated, implying that an agreement with one key vendor would generate significant revenues for Gapwaves. It is, therefore, of the highest importance to exploit the company's first-mover advantage by becoming the antenna provider in telcos' 5G deployments.

While we believe that the greatest potential arises with the upcoming 5G roll-out, the company has yet not demonstrated a commercial interest from

prospective telco customers. The case, at least in the short-term, has shifted towards the automotive opportunities following the two recent promising contracts with automotive radar suppliers of Tier-1 size. The deals open up for large revenues over long periods. As an example, we believe that the royalty agreement with Veoneer could generate about SEK 10m in revenues beyond 2022 while an agreement with a "tier 1" could generate up towards SEK 200m in product sales p.a.

Fair value of SEK 24 per share in base case. We argue that the two recent contracts signal an increased likelihood for additional deals within the segment, and we expect the company to attract new automotive customers over time. The recent agreements have had a significant positive effect on the share price, which now is up 66% over the last 1.5 months and is now trading between our base and bull cases.

We yet cannot see if there is a demand from the telecom customers. If the company would succeed in delivering an active antenna solution solving genuine needs, we would be convinced that it implies a solid opportunity - reflected by our bull case (**SEK 52 per share**). Until we see a deal with a key vendor, it is difficult to assess whether the product really should be regarded as a 5G enabler.

We remain fully focused on following the progression in turning development projects into volume contracts and the advances in attracting new development projects, which we believe to be the most important share price drivers going forward.

Risks

Targeting markets that are tough to penetrate. The company targets markets that offer enormous opportunities, implying that there will be more than one actor trying to reap from the arising opportunities. Another tough challenge for the company is that potential customers within telecom develop alternative solutions in-house. These actors have established research organizations and the capital needed to pursue R&D activity and could thereby reduce their dependency on external component suppliers.

Uncertainties regarding next-gen networks. There are yet uncertainties regarding specifications of next-gen networks and what equipment that will be used. This may impose that clients are more reluctant to invest in new technology and equipment. The uncertainties are, on the other hand, nothing that hinders clients from testing new equipment.

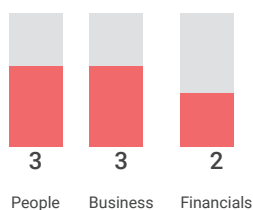
Catalyst types

NRE agreement

An NRE-agreement (where clients' bear one-time costs related to R&D project) signed with a telco would indicate that there truly is a commercial interest for Gapwave's technology for 5G applications.

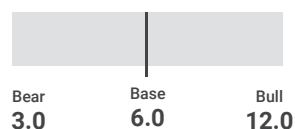
Redeye Rating

COMPANY QUALITY



FAIR VALUE RANGE

No share price data due to company listed in the US.



CATALYST POTENTIAL

Impact

Major
Moderate
Minor



Timeframe

Long
Mid
Short



Turn page for catalyst specifics

Snapshot

Marketplace	N/A
CEO	Håkan Persson
Chairman	Ulf Rosberg
Share information	
Share price (SEK)	2.3
Number of shares (M)	8.8
Market cap (M)	0
Net debt (MSEK)	-4

Analyst



Viktor Westman
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Conflict of interests

Viktor Westman owns shares in Neonode Inc: **Yes**
Redeye performs/have performed services for the Company and receives/have received compensation from the Company in connection with this.

Financials

	Redeye Estimates				
	2017	2018	2019E	2020E	2021E
Revenue, MSUD	10	9	8	9	17
Growth	0.3%	-16.6%	-9.5%	17.7%	86.3%
EBITDA	-5	-3	-2	-2	3
EBITDA margin	Neg	Neg	Neg	Neg	18.8%
EBIT	-5	-4	-4	-3	2
EBIT margin	Neg	Neg	Neg	Neg	14.3%
Pre-tax earnings	-5	-4	-4	-3	2
Net earnings	-6	-4	-4	-3	2
Net margin	Neg	Neg	Neg	Neg	14.3%
Dividend/Share	0.00	0.00	0.00	0.00	0.00
EPS adj.	-0.10	-0.67	-0.50	-0.35	0.28
P/E adj.	-11.5	-2.5	-6.0	-8.4	10.8
EV/S	4.9	0.5	3.1	2.9	1.4
EV/EBITDA	-11.1	-1.5	-9.6	-13.7	7.6

Last updated: 2019-08-14

Owner	Equity	Votes
Ulf Rosberg	18.2%	18.2%
Peter Lindell	17.5%	17.5%
Per Bystedt	3.6%	3.6%
Thomas Eriksson	2.5%	2.5%
Vanguard Group	1.6%	1.6%
Andreas Bunge	1.2%	1.2%
Blackrock Inc	1.1%	1.1%
Håkan Persson	0.4%	0.4%
FMR LLC	0.2%	0.2%
Lars Lindqvist	0.1%	0.1%

Company description

First and foremost, Neonode, in a broader perspective, not only works with technology for touch displays but with human interaction in numerous ways. It is therefore important not to pigeonhole Neonode into solely touch display applications. Neonode pursues a multimodal approach and will integrate different types of sensors on its platform and use its own production technology and distribution network to be the front end. In addition, Neonode is surface independent, meaning it does not even need displays or glass. The new business model for Neonode's touch technology will be manufacturing and selling of hardware modules instead of just licenses. The modules together with the ramp-up of new car and printer models on the won platforms is the key parts of the growth strategy. Besides its many technology competitive advantages Neonode has wide barriers to entry in its automotive focus (see further the investment case section).

Listing: Listed on NASDAQ since 2007 Locations: Headquarter in Stockholm, Sweden but global sales reach

Investment case

- Turnaround case turned credible with new main owners
- Limited downside from underlying values that could be unlocked
- Big autotech option free of charge
- Break-even and large module deals to drive the stock price

Turnaround case turned credible with new main owners

The stock market's confidence in Neonode has completely vanished, for very good reasons in our view, most notably the communication. As fundamentals are basically unchanged, the low valuation is simply a punishment for old sins. However, this means that there are very clear reasons for why the shares are undervalued. Neonode has evolved into a turnaround case with a very promising set of new people. Besides a new CEO, the new owners and board members are very engaged and involved in the company. The COB comes from a long career in private equity where the COB works tight with management. The new owners also have excellent track records in business and investing. The new board immediately took two important steps. First, it decided to focus and closed several far-fetched, non-core projects initiated by the previous management. Second, the failed change in business model was reversed. The company had told the customers they could only buy modules and not licenses going forward. This decision was reversed around year-end 2017 and customers are now free to choose. However, lead times are around 18 months so it is still a bit too early to see the results of the actions. Despite all of Neonode's failures in the past, the company has only lost a few customers, which is remarkable and implies a strong value proposition for the customers. Our conclusion is that the technology and customer benefits are fantastic while execution and communication have been lousy and it is our view that most owners agree. All in all, there are evidence suggesting that Neonode could indeed finally turn.

Limited downside from underlying values that could be unlocked

Neonode's market valuation is close to a bankruptcy valuation, especially in relation to the recurring license revenue base of about USD 8m per year. The burn rate is about USD 1m per quarter, meaning there should be a plan B in unlocking large values tomorrow by cutting costs in half and earn good license revenue with 100 % margin. This opportunity is not new in itself, but the difference, in our own view, is that the new main owners are not sentimental and will not tolerate more years of disappointment, meaning these values will eventually be unlocked if the business does not turn.

Big autotech option free of charge

Smart Eye has the exact same market and drivers etc. as Neonode but the valuation differs by over 5x. In addition, Neonode has higher ASP and even better barriers to entry (hardware vs software) compared to Smart Eye. Thus, we have reason to believe that the perception change could be quite substantial should Neonode be perceived as a hot autotech company. Smart Eye has an expected order value of over SEK 1 bn for its total future license revenue. Neonode has not publicly quantified its order values but they should reasonably be several times larger than today's market cap. If Neonode would only manage to close one single automotive contract it could have a value the size of today's market cap. We still believe that the steering wheel partnership with Autoliv could alone be worth USD 100m, although this lies a couple of years down the road. Euro NCAP is now mandating driver monitoring technology but it still does not have any activities within hands on the steering wheel. According to our industry sources though, it is likely that such activities will start going forward.

Break-even and large module deals to drive the stock price

Our base case of USD 6 per share in relation to our reasonably pessimistic scenario of USD 3 and our bull case of USD 12 indicate a good risk/reward. We argue that financial reports with black figures are needed in order to change the perception of investors and move the stock. In addition, large module contracts similar to the USD 11 million deal in the fall of 2016 are important catalysts for the Neonode shares (but of course the company also need to deliver on those contracts - not only announce them).

Catalyst types

Major module deals

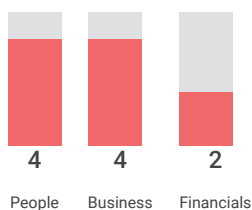
In the fall of 2016 Neonode received a module deal of in total USD 11 million related to door handle modules for one car model. Similar deals would have a major impact on the share price. We especially believe that a design win for the steering wheel together with Autoliv/Veoneer is close due to the long qualification period.

Break-even

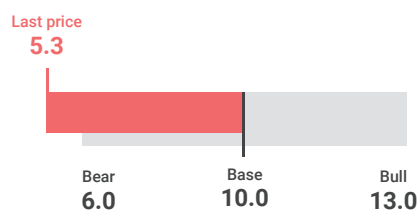
We expect the reaching of break-even in the end of 2021 which would be an important milestone for the stock market to grasp that Neonode has left the losses behind and hit the point of inflection.

Redeye Rating

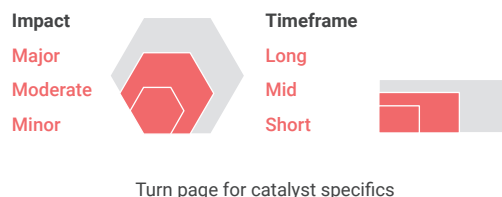
COMPANY QUALITY



FAIR VALUE RANGE

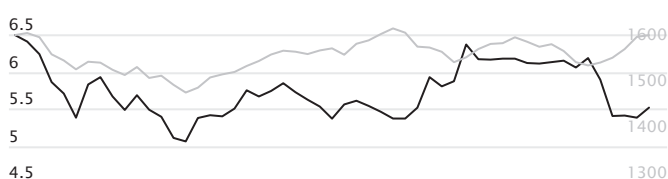


CATALYST POTENTIAL



Snapshot

Opus Group OMXS30



Volume



Marketplace	NASDAQ Stockholm
CEO	Lothar Geilen
Chairman	Katarina Bonde
Share information	
Share price (SEK)	5.3
Number of shares (M)	290.3
Market cap (MSEK)	1,542
Net debt (MSEK)	1,450

Analyst



Henrik Alveskog
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Conflict of interests

Henrik Alveskog owns shares in Opus Group: **Yes**
Redeye performs/have performed services for the Company and receives/have received compensation from the Company in connection with this.

Financials

	2017	2018	2019E	2020E	2021E
Revenue, MSEK	1,860	2,497	2,705	2,839	2,997
Growth	9.5%	34.3%	8.3%	5.0%	5.6%
EBITDA	308	504	641	687	728
EBITDA margin	16.6%	20.2%	23.7%	24.2%	24.3%
EBIT	107	206	255	300	371
EBIT margin	5.7%	8.2%	9.4%	10.6%	12.4%
Pre-tax earnings	3	51	72	192	288
Net earnings	81	26	22	131	196
Net margin	4.4%	1.0%	0.8%	4.6%	6.5%
Dividend/Share	0.05	0.05	0.07	0.10	0.15
EPS adj.	0.28	0.09	0.07	0.45	0.67
P/E adj.	23.9	61.3	79.8	13.2	8.8
EV/S	1.5	1.2	1.1	1.0	0.8
EV/EBITDA	9.3	6.2	4.8	4.1	3.4

Last updated: 2019-08-19

Owner	Equity	Votes
RWC Asset Management	19.9%	19.9%
Magnus Greko och Jörgen Hentschel	14.6%	14.6%
Lothar Geilen	6.8%	6.8%
Andra AP-fonden	6.4%	6.4%
Henrik Wagner Jørgensen	3.5%	3.5%
Dimensional Fund Advisors	3.2%	3.2%
Rickard Andersson	2.9%	2.9%

Company description

Opus was founded in the early 90's in Gothenburg where their head office is still situated. During the first years the strategy was to provide AB Svensk Bilprovning with equipment for emission testing as the catalytic converters were introduced in the market. Step by step Opus extended its offering and customer base and grew internationally. The big change, from an equipment supplier to a service provider, came in 2008 when Opus acquired Systech, a US based vehicle testing company.

Since then revenues from vehicle inspection programs have grown substantially, more than 25 percent annually during 2008-16, excluding the acquisitions of Envirotest and the Swedish operations. These programs make up for approximately 90 percent of revenues whereas the remaining 10 percent comes from equipment sales. Starting in 2018 Opus is reporting two divisions: Vehicle Inspection and Intelligent Vehicle Support. The latter is a newly formed division assisting vehicle technicians with model-specific vehicle systems data.

Opus currently operates a number of vehicle inspection programs in North and South America, Sweden and Pakistan. Sweden is an open market, but in reality it is an oligopoly since the barriers of entry are rather high. In the other markets the authorities give exclusive rights to run testing programs, usually for a period of 8-10 years. In both cases revenues are stable and EBITDA-margins around 20 percent. The company has around 2 600 (2019) employees at their facilities in North- and South America, Sweden, UK and Pakistan. The shares are listed on Nasdaq Stockholms Main market.

Investment case

- A number of new businesses are at this point running with low or negative profits, but will gradually improve as volumes pick up. These are primarily EaaS, the testing programs in Pakistan and South America and the division Intelligent Vehicle Support.
- The risk for Opus losing some of its current programs in the US should not be ignored. The bigger contracts are not due for renewal in several years but these procurements are sometimes difficult to predict.
- Opus seems to have a number of new deals in their pipeline for 2019-20. Both new markets and new clients in current markets. If some of these materialize a revaluation of the company may be triggered.

Over the past seven years, Opus has tenfolded its revenues while considerably boosting its margins. The growth comes both from a number of major acquisitions and several new contracts gained primarily in the US market. The next few years are unlikely to be as dramatic, but there are still plenty of growth opportunities. The company's own target is 5-10 percent annual growth. The fact that Opus has won several contracts suggests it has a competitive offering and is well regarded by its customers. References are extremely important in the vehicle inspection business. Of course there is also a risk of losing existing contracts from time to time, but with its track record there is a greater probability of it instead managing to win new business. This means that, over time, Opus should be able to continue to grow and capitalise on its market-leading position.

The stock market has certainly become aware of the company, but has probably not dared to factor in the journey being able to continue for a good while yet. Vehicle inspection is a typically Western phenomenon, but the problem of substandard vehicles is far greater in developing countries. In the long term there is huge potential for further growth in these countries, and Opus has the products, experience and ambition to participate. The risks in a country like Pakistan are obviously higher than in the US. But with more new establishments the risk becomes diversified while growth prospects improve. According to Opus profitability in emerging markets should be higher to justify the risks that are involved.

In the US and Western Europe, the overall market has been relatively unchanged in size in recent years, but now there are some factors that point to growth in the coming decade. One of these is a new EU directive covering more stringent controls on electronic safety systems. Safety features in modern vehicles are based on multiple systems and sensors that interact to give the desired outcome. This means that tests are becoming more sophisticated and require a higher level of technology at inspection stations. This perfectly suits Opus since it is a technology-oriented company with its own development. Another growth factor was illustrated by the VW scandal. Realistically, authorities will increasingly turn to independent third parties to carry out relevant measurements, rather than relying on laboratory testing by automobile manufacturers. In the US, Environmental Protection Agency (EPA) tightened the standards for ground-level ozone not very long ago. This means that a number of areas in the United States must improve their air quality. Many states and counties have no vehicle inspection at all, which would appear to be the obvious first step, but of course not the only one. Since then the Trump administration has forced EPA to take a different course, which has caused uncertainty and confusion. Fortunately most states seem a lot more interested in doing something about the air quality than the federal government.

Bear points:

- Some of the new countries that Opus has entered, e.g. Pakistan, are unstable in several aspects. The amount of business coming from these markets is not extensive so far, which limits the effect of any potential damage, if things go sour.
- Opus could lose some of its current contracts in the US. If that happens it might be interpreted as if they haven't delivered according to the clients' expectations. Or that prices are under pressure. Even if the size of the contract is modest these signals could be clearly negative.

Catalyst types

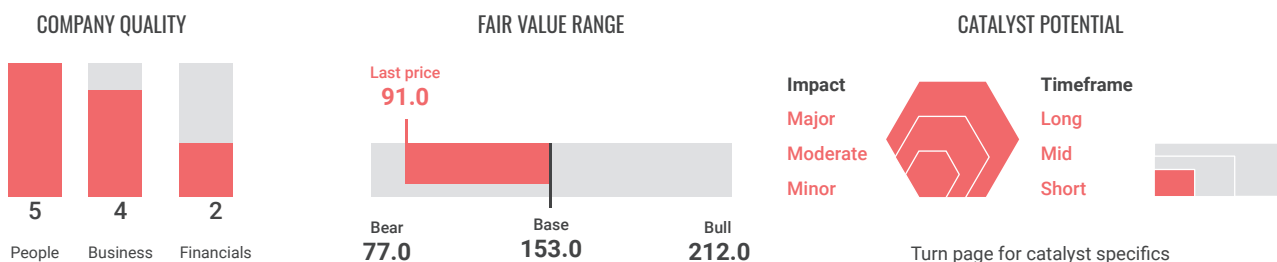
Full impact from current business

Throughout the group there are currently a number of activities paving the way for better profits in the coming years: 1) The rental business in California, Georgia and other upcoming states will gradually feed through. 2) Testing programs in Pakistan and Chile are now stepping up 3) Drew Tech's RAP and Fastlign gaining traction.

Winning new contracts

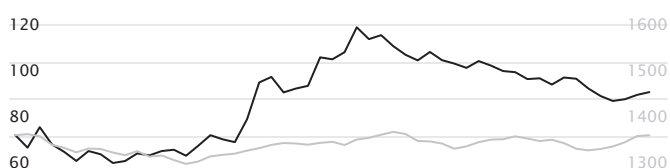
Opus has a proven track record, particularly in the US market, giving them good chances of winning new contracts. Each year some contracts are usually renegotiated and new programs are implemented in some states or counties.

Redeye Rating



Snapshot

Smart Eye OMXS30



Volume



Marketplace First North Stockholm

CEO Martin Krantz

Chairman Anders Jöfelt

Share information

Share price (SEK) 91.0

Number of shares (M) 15.1

Market cap (MSEK) 1,402

Net debt (MSEK) -165

Analyst



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Conflict of interests

Viktor Westman owns shares in Smart Eye: **Yes**

Redeye performs/have performed services for the Company and receives/have received compensation from the Company in connection with this.

Financials

	2017	2018	Redeye Estimates		
			2019E	2020E	2021E
Revenue, MSEK	43	51	64	128	296
Growth	6.0%	17.5%	26.2%	99.1%	>100%
EBITDA	-31	-42	-72	-43	79
EBITDA margin	Neg	Neg	Neg	Neg	26.7%
EBIT	-42	-56	-89	-65	55
EBIT margin	Neg	Neg	Neg	Neg	18.6%
Pre-tax earnings	-42	-56	-89	-65	55
Net earnings	-42	-56	-89	-65	55
Net margin	Neg	Neg	Neg	Neg	18.6%
Dividend/Share	0.00	0.00	0.00	0.00	0.00
EPS adj.	-4.24	-4.80	-5.88	-4.24	3.56
P/E adj.	-11.7	-10.4	-15.4	-21.3	25.4
EV/S	11.3	11.2	18.8	10.1	4.3
EV/EBITDA	-16.0	-13.4	-16.7	-29.8	16.0

Last updated: 2019-08-25

Owner	Equity	Votes
Mats Krantz inklusive närstående	8.9%	8.9%
Ålandsbanken I Ågares Ställe	7.8%	7.8%
Swedbank Robur Fonder	7.4%	7.4%
Första AP-fonden	6.6%	6.6%
Martin Krantz	6.5%	6.5%
Anders Jöfelt	5.7%	5.7%
Linda Jöfelt	5.6%	5.6%
Danica Pension	5.1%	5.1%
Avanza Pension	3.8%	3.8%
Handelsbanken Fonder	3.6%	3.6%

Company description

Smart Eye provides eye tracking software for especially automotive applications but addresses customers in defence, aircraft and academic research as well. In the Research Instruments segment, where Smart Eye has a market share of 4-5 percent, it provides systems consisting of hardware, software and accessories. Our investment case, however, is fully based on the Automotive Solutions segment, which is an OEM business where Smart Eye provides tier 1 automotive suppliers with algorithms and software for embedding eye tracking in products that are later sold to the car OEM manufacturers. When a car model with Smart Eye's technology is launched Smart Eye will receive a royalty based license fee per car. Within Automotive Solutions Smart Eye has won designs from about half of the customers that has procured eye tracking thus far. The automotive market has high barriers to entry as it is costly and time consuming to develop products that meet the customers' high standards and switching costs are high, meaning important competitive advantages for Smart Eye. Listing: Stockholm Stock Exchange (First North) since year 2016. Locations: HQ in Sweden. Offices in Detroit, China and Japan.

Investment case

- In pole position within eye tracking for mandated driver monitoring
- Impatient & short term focused stock market
- Design wins to move the share price

In pole position within eye tracking for mandated driver monitoring

Not only due to the (semi) autonomous cars but more actually because of increased traffic safety focus and Euro NCAP's decision to mandate driver monitoring, the market for driver monitoring systems (DMS) is about to explode with an expected CAGR volume growth of about 200 percent during 2017-2025. This expected growth is a known fact for the stock market but we believe many do not understand Smart Eye's strong positioning. Smart Eye has devoted 18 years of 100 percent focus to and investments in this very niche (whereof 16 years of actual sales). The company is in pole position with an unmatched 45 design wins for 8 customers. As for barriers to entry, the technology needs to cope with e.g. changing light conditions, tunnels, sunshine, darkness, vibrations etc. and at the same time never fail. Competition is therefore basically limited to one other player and the customers' own solutions. However, we believe it is unlikely that the customers in the long run are willing to put up with all investments and maintain the focus necessary for in house sourcing. Smart Eye states that, being platform independent and hardware agnostic, it has a competitive edge as its technology can be locked late in the development process.

Impatient & short term focused stock market

Smart Eye's first design wins with new customers are in general worth a lot more than meets the eye as they in general are platform based. The platforms should usually (although not automatically) yield additional new car models for

every year over the platforms' lives of about 10 years. For Smart Eye this creates a very foreseeable and stable revenue stream for many years to come as the large switching costs provide solid barriers to entry. The stock market however, as always, only sees the coming few quarters, meaning significant potential for patient, long term investors.

Design wins to move the share price

We expect a steady news flow going forward with design wins from already won procurements as well as RFQ's worth SEK 6 billion in progress for 2019, which should drive the share price.

Catalyst types

Design wins in china

We believe there are design wins overdue in China where Smart Eye's tier-1 partner has been selected and only paperwork remains before Smart Eye is officially nominated.

Volvo win

Following the announcement of NVIDIA winning a DMS contract for Volvo we believe that Smart Eye might be able to win Volvo given its strong partnership with NVIDIA.

Design wins in general

The major key catalyst in general is won contracts from the many RFQ's worth in total SEK 6 billion, which should drive the share price.

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Redeye Rating (2019-09-17)

Rating	People	Business	Financials
5p	11	8	1
3p - 4p	65	53	28
0p - 2p	13	28	60
Company N	89	89	89

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