

## Eye-catcher

We initiate coverage of Tobii, a leader in eye tracking technology. We see healthy sales and profit growth for its two mature businesses, Dynavox (assistive technology) and Pro (research equipment), while the nascent mass market venture, Tobii Tech, is starting to see its technology designed into mainstream products. The valuation is highly sensitive to assumptions about the latter. We see a fair value range of SEK 30-50 per share.

### Key Data (2018E)

Price (SEK)	32.14
Reuters	TOBII.ST
Bloomberg	TOBII:SS
Market cap (SEKm)	3,127
Market cap (USDm)	347
Market cap (EURm)	305
Net debt (SEKm)	(89)
Net gearing	(10%)
Net debt/EBITDA (x)	2.4
Shares fully dil. (m)	97.3
Avg daily turnover (m)	0.0
Free float	85%

### Dynavox and Pro are back at revenue and profit growth again

Tobii Dynavox is Tobii's largest business unit (60% of sales), focusing on individuals who are unable to speak without assistive technology. We expect Dynavox's revenues and profits to continue to grow due to increased market penetration and new products. Pro is Tobii's second largest business unit (29% of sales), and is focused on commercial enterprises and research institutions to give insights into human behaviour. We see clear benefits for eye tracking in these segments and Apple's acquisition of SensoMotoric Instruments (SMI) has limited competition and should catalyse increased market penetration, which should benefit Tobii. We thus argue that these two segments have a fair chance to grow revenues and profits beyond what the current share price discounts.

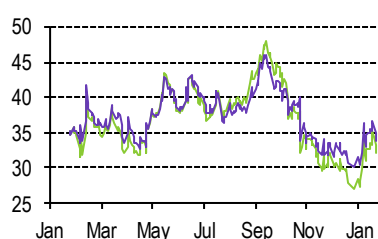
### Tech a longer term trigger

Tech (11% of sales) focuses on the mass market by developing hardware and software to be integrated into devices such as mainstream computers, gaming computers and VR. Tobii has the ambition to reach profitability in 2021. We think the goal is reachable but see a risk that it could take longer than expected.

### Fair value range of SEK 30-50 where Tech is the main swing factor

We look at separate peer comparisons for each of Tobii's three business units from which we derive our sum-of-the-parts fair value. This gives a base case value of SEK 38 per share, a bear case of SEK 30 and a bull case of SEK 50.

### Share Price (12M)



Absolute performance (green) / Relative to Sweden (purple)

### Marketing communication

commissioned by:

Tobii

### Financials (SEK)

Year end: Dec	2016	2017	2018E	2019E	2020E
Revenues (m)	1,053	1,079	1,299	1,622	1,921
Adj. EBIT	(67)	(191)	(202)	(127)	(13)
Pre-tax profit (m)	(48)	(225)	(182)	(131)	(18)
EPS	(0.57)	(1.98)	(1.96)	(1.41)	(0.19)
Adj. EPS	(0.57)	(1.98)	(2.17)	(1.41)	(0.19)
DPS	0.00	0.00	0.00	0.00	0.00
Revenue growth (%)	8.9	2.4	20.4	24.9	18.4
Adj. EBIT growth (%)	n.m.	n.m.	n.m.	n.m.	n.m.
Adj. EPS growth (%)	n.m.	n.m.	n.m.	n.m.	n.m.
Adj. EBIT margin (%)	(6.4)	(17.7)	(15.5)	(7.8)	(0.7)
ROE (%)	(5.2)	(16.9)	(19.8)	(17.2)	(2.6)
ROCE (%)	(5.8)	(14.7)	(17.0)	(11.6)	(1.3)
PER (x)	n.m.	n.m.	n.m.	n.m.	n.m.
Free cash flow yield (%)	(1.1)	(7.4)	(7.9)	(6.3)	(1.7)
Dividend yield (%)	0.0	0.0	0.0	0.0	0.0
P/BV (x)	5.45	3.25	3.61	4.29	4.40
EV/Sales (x)	5.65	2.76	2.34	1.99	1.71
EV/Adj. EBITDA (x)	118.9	(57.1)	(83.4)	74.4	18.2
EV/Adj. EBIT (x)	(88.7)	(15.6)	(15.1)	(25.5)	(246.7)
Operating cash flow/EV (%)	1.2	(2.3)	(1.8)	0.1	4.4
Net debt/Adj. EBITDA (x)	(13.32)	8.92	2.44	2.48	0.89

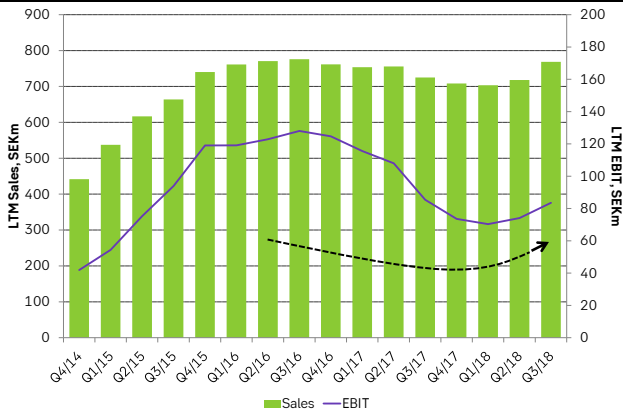
Source for all data on this page: SEB (estimates) and SIX/Thomson Reuters (prices)

# Contents

	Page
<b>Investment case</b> .....	<b>3</b>
<b>What is Tobii?</b> .....	<b>4</b>
A brief introduction to eye tracking .....	4
Tobii – Three companies in one .....	5
<b>Company history</b> .....	<b>7</b>
<b>Product portfolio</b> .....	<b>10</b>
Tobii Dynavox (60% of sales) .....	10
Tobii Pro (29% of sales) .....	13
Tobii Tech (11% of sales) .....	14
<b>Business model fundamentals</b> .....	<b>17</b>
Dynavox .....	17
Pro .....	18
Tech .....	18
<b>Go to market</b> .....	<b>19</b>
Dynavox .....	19
Pro .....	20
Tech .....	21
<b>R&amp;D and staff</b> .....	<b>22</b>
R&D .....	22
Worldwide presence .....	23
<b>Customers</b> .....	<b>24</b>
Dynavox .....	24
Pro .....	24
Tech .....	25
<b>Market analysis</b> .....	<b>26</b>
Dynavox .....	27
Tobii Pro .....	31
Tobii Tech .....	34
<b>Financial overview</b> .....	<b>45</b>
Financial targets .....	45
Financial history .....	46
EBITDA and EBIT margins .....	50
<b>Valuation</b> .....	<b>52</b>
Peer comparison .....	52
DCF valuation .....	56
<b>Interims</b> .....	<b>58</b>
<b>Overview</b> .....	<b>59</b>

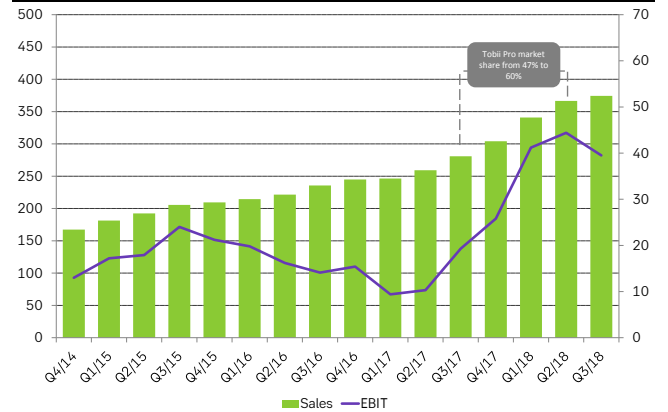
# Investment case

## Tobii Dynavox Revenue and EBIT trends turn positive



Source: SEB, Company data

## Apple acquiring peer SMI – Tobii Pro gaining mkt shares



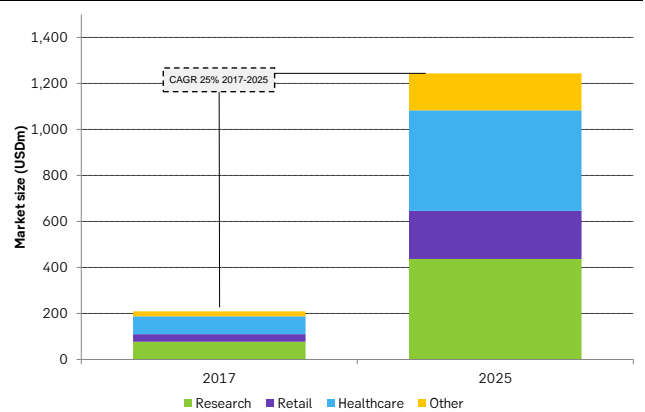
Source: SEB, Company data

## Medicaid enrolments historic gap to Gov spending



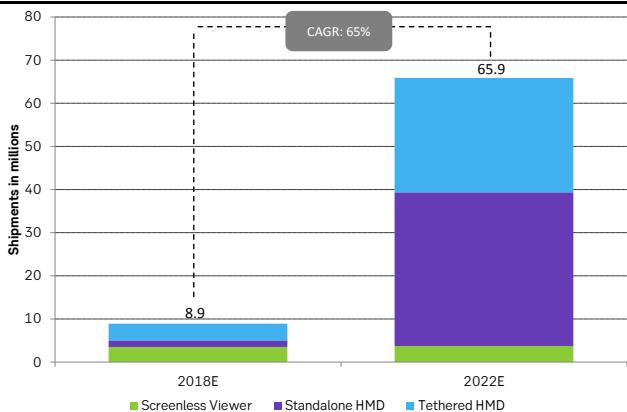
Source: SEB, KFF

## Eye tracking market to grow 25% CAGR until 2025



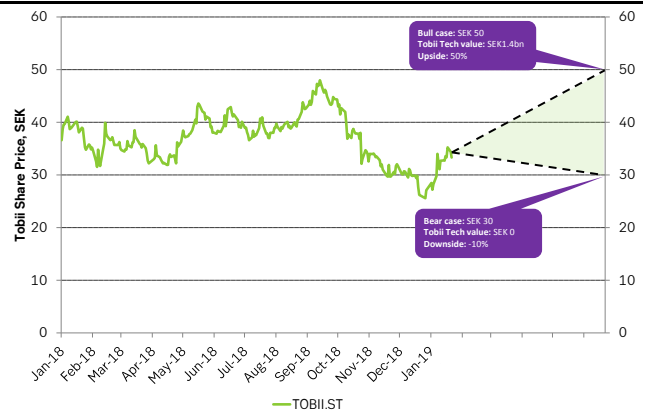
Source: SEB, Grandmarketresearch, Alliedmarketresearch

## Growth in Standalone VR to push eye tracking demand



Source: SEB, IDC

## Bull and Bear case



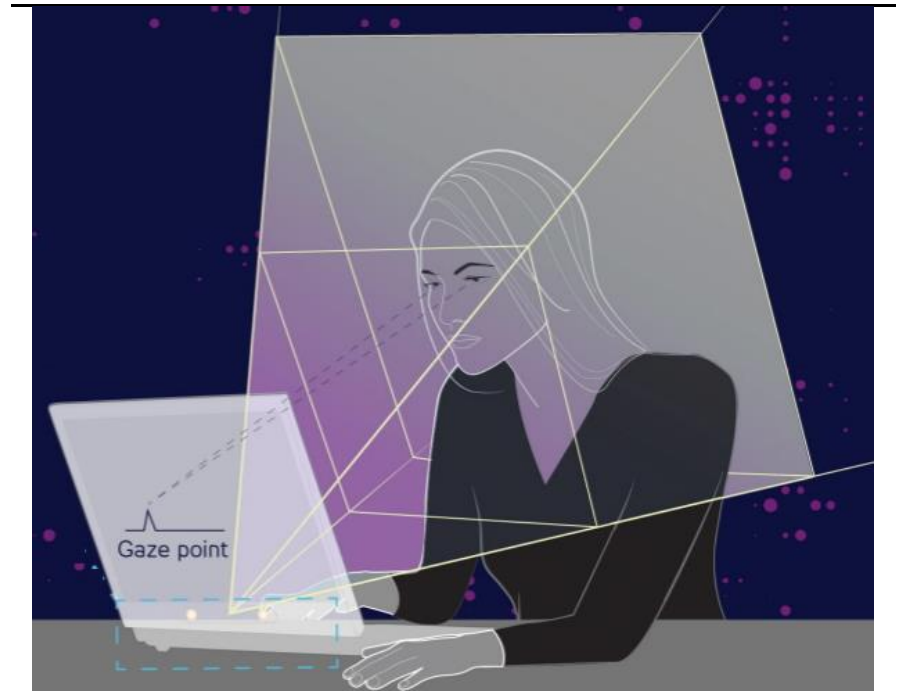
Source: SEB

# What is Tobii?

## A brief introduction to eye tracking

Eye tracking makes it possible for a device to know where the user is looking, and allows users to interact with a computer, for example, by using their eyes. Eye trackers consist of sensors (cameras and projectors) and algorithms illustrated and described below.

### User interaction



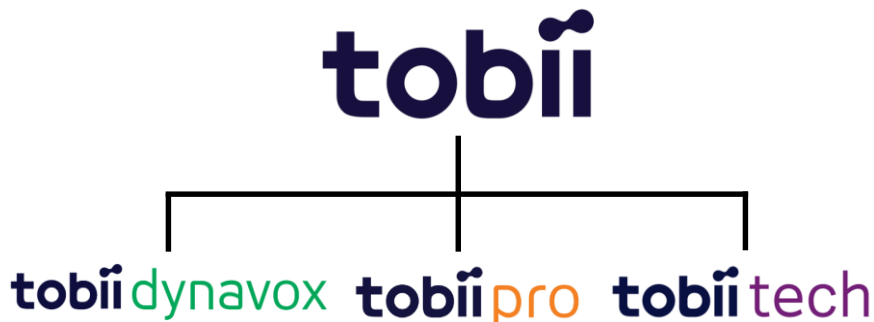
Source: SEB, Company filings

- **Projectors create** a pattern of near-infrared light on the eyes.
- **Sensors take** high-frame-rate images of the user's eyes and the patterns.
- **Image processing algorithms** find specific details in the user's eyes and reflection patterns.
- **Based on these details**, mathematical algorithms calculate the eyes' position and gaze point, for instance on a computer monitor.

By this process, eye tracking allows a device to understand the intentions of the user, which is why it seems to “humanize” technology. In some areas, eye tracking has been in use for several years, such as by market researchers and product developers to understand human behaviour (Tobii Pro) or in assistive technology used by people with disabilities (Tobii Dynavox) to communicate. Eye tracking is now being tested in new markets such as virtual reality and PC gaming (Tobii Tech). As the three business units serve very different markets, they also offer very different product portfolios.

# Tobii – Three companies in one

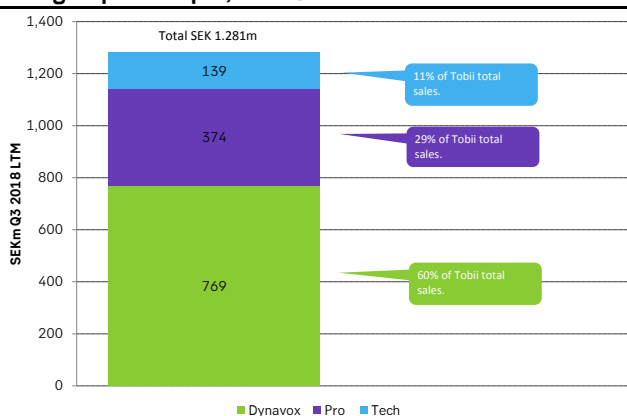
## Company structure



Source: SEB, Tobii

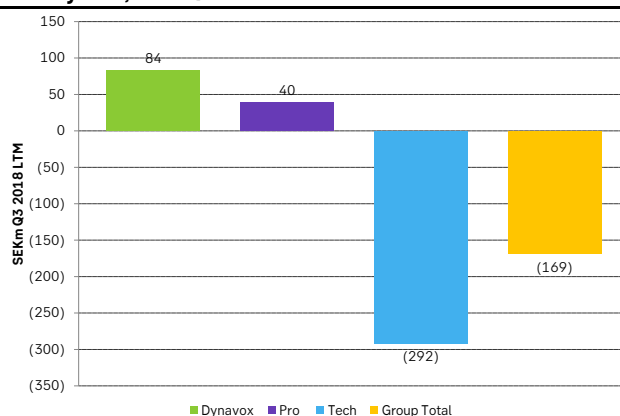
The Tobii Group consists of three divisions, Tobii Dynavox, Tobii Pro and Tobii Tech where Dynavox and Pro are the two cash-generating units which support the highly R&D-intensive and currently loss-making Tobii Tech. About 45% of Tobii Tech’s sales are internal to Dynavox and Pro and 55% are external as of LTM Q3 2018. The split in sales and EBIT in Q3 2018 LTM is shown below.

**Tobii group sales split, LTM Q3 2018**



Source: SEB, Company filings

**EBIT by unit, LTM Q3 2018**



Source: SEB, Company filings

### Tobii Dynavox

Tobii Dynavox is Tobii’s largest business unit, focusing on individuals with special needs who are unable to speak without assistive technology. These individuals are often diagnosed with speech and/or motor diseases such as ALS, spinal cord injury, aphasia, cerebral palsy, Rett syndrome, autism, Parkinson’s or muscular dystrophy. This is where AAC (augmentative and alternative communication) comes in – here, Tobii Dynavox is the world leader. The products can either be controlled by hand (touch devices) and/or by using eye tracking technology, if the individual is unable to use their hands (eye tracking devices). These products are called SGDs (speech generating device) which the US healthcare providers Medicare and Medicaid define as “durable medical equipment that provides an individual who has severe speech impairment with the ability to meet his or her functional speaking needs”.

**Tobii Pro**

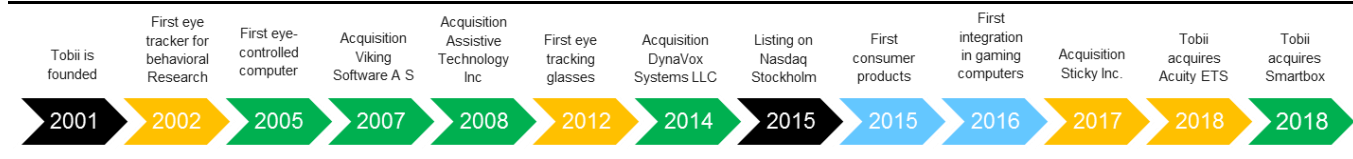
Tobii Pro is Tobii's second largest business unit, and is focused on commercial enterprises and research institutions to give insights into human behaviour. Tobii Pro sells its eye tracking software and hardware to commercial enterprises that want to understand where people are looking to optimize package design, online advertising, print advertising, in-store communication, store layout & shelf optimization, TV advertising, outdoor advertising and website usability. The sales to research institutions are mainly for them to increase their knowledge of behaviour, attention and cognitive processes. The products are sold as screen-based eye trackers (include both built-in and peripheral solutions), glasses to conduct research in real-life environments or VR headsets to do research in controlled environments.

**Tobii Tech**

Tobii Tech is the business unit that focuses on the mass market by developing hardware and software to be integrated into devices such as mainstream computers, gaming computers and VR headsets. 45% of its sales are to Dynavox and Pro and the other 55% is to external companies where the main part over time is sales to PC manufacturers and accessories. Today, Tobii Tech offers its own products as well as selling technology to OEM customers to incorporate into their products. The products that have been launched and sold on the market today are its Eye Tracker 4C which is a USB plug-in eye tracker to be used in gaming (140 PC games support this today) or to make the PC experience more intuitive and efficient. Other products are its IS4 and IS5 platforms which is eye tracking integration technology that has been integrated in five gaming computers manufactured by Acer, MSI and Dell/Alienware and three monitor manufactured by Acer. The largest focus in this business is today to continue investments in gaming (recently by sponsoring e-sport events with eye tracking) and integrate eye tracking into VR headsets. In the industry, there is a strong consensus that eye tracking will become a "must have" component in VR headsets and it is currently being invested into by VR manufacturers.

# Company history

## History time line



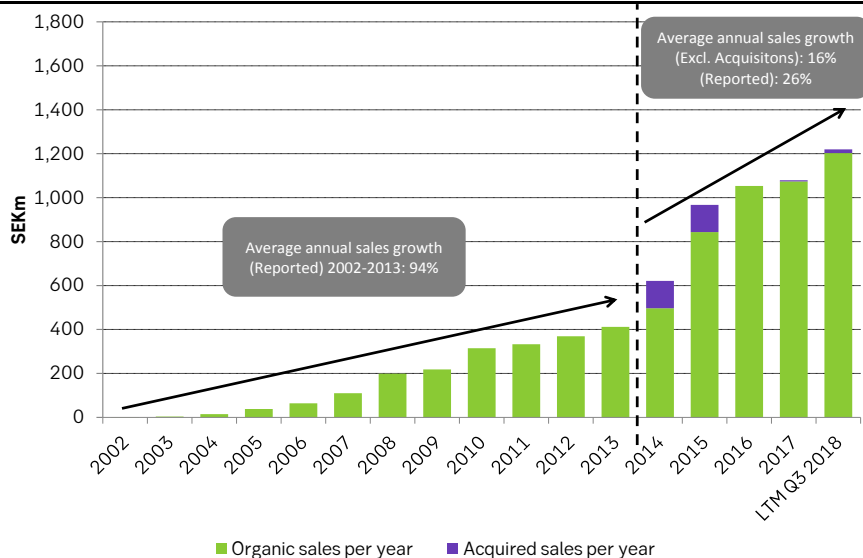
Source: Tobii

### Early background, 2001-2014

Tobii was founded in 2001 by three entrepreneurs – John Elvesjö, Mårten Skogö and Henrik Eskilsson – after they found large potential in the area of eye tracking. In 2002, Tobii ET17 was launched as the first plug-and-play eye tracker – used among researchers to gain a better insight of human behaviour which is seen as the foundation of Tobii Pro. A couple of years later, the fundamentals of Tobii Dynavox were formed by the launch of MyTobii D10 as the first product for assisted communication with eye tracking. The same year, Tobii opened an office in the US.

The eye tracking integration that was first introduced into computers was released in 2005 for the assistive technology market. Between 2007 and 2009, Tobii acquired Viking Software AS and Assistive Technology Inc to strengthen its position in assistive technology (and software offering). Viking software was a software company and Assistive Technology was a sales company in the US. 2010 was the year when the first Tobii Glasses were released, which enabled researchers to conduct behavioural studies in real-world environments. In 2014 Tobii acquired Dynavox Systems LLC, which significantly increased sales of Tobii Dynavox and added several new products to its portfolio.

### Tobii annual sales growth, historical



Source: SEB, Tobii

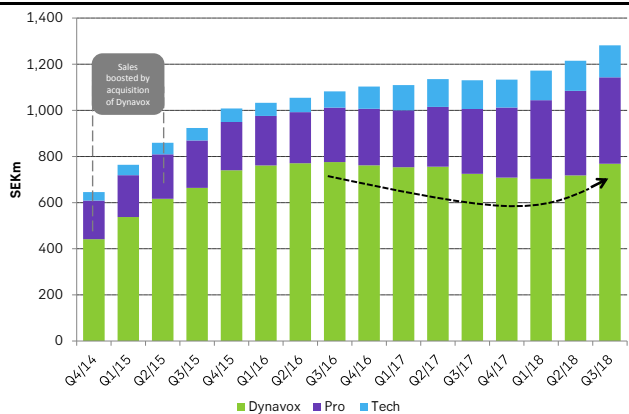
**Important recent milestones, from 2014**

- In 2014, Tobii acquired Dynavox Systems LLC – a leading provider of speech-generating devices to strengthen its assistive technology division. Dynavox's annual sales in 2012/2013 were USD 65m at a USD 8.7m loss and it was acquired by Tobii for USD 18m. Due to the acquisition, synergies and organic growth, Tobii Dynavox increased its annual sales from SEK 234m in 2013 to SEK 740m in 2015 with positive margins.
- In 2015 Tobii Tech introduced its first eye tracking technology in consumer products. The year after, the first integration in gaming computers was launched, followed by a mass market focus by launching eye tracking software and hardware components into VR and gaming computers in collaboration with OEMs.
- In 2017, the start of sales of the first Dell Alienware gaming laptop with Tobii Eye Tracking built-in.
- In 2017 Tobii Pro acquired Sticky, a company that provides a cloud-based product enabling large-scale market research studies with an annual turnover of about USD 1.5m (2016). This was followed by Tobii Pro acquiring Acuity ETS – the largest reseller of Tobii Pro's research solutions and Acuity Intelligence – a neuroscience-based research and consultancy firm. Together, the two acquisitions employ eight people and have SEK 22m in annual turnover (2016/2017). Tobii paid SEK 23.7m for both divisions and strengthened its market-leading position within the area.
- In Q1 2018, Tobii announced a collaboration with Qualcomm technologies to make eye tracking technology available for mobile VR/AR head-mounted displays (HMDs). The partnership concerns the Qualcomm Snapdragon 845 Mobile VR Platform where the full reference design and development kit for the Snapdragon 845 includes Tobii's EyeCore eye tracking algorithms and hardware design.
- In Q3 2018, Tobii Dynavox acquired its competitor Smartbox Assistive Technology to strengthen its sales channels in key geographical markets and strengthen the software portfolio with the Grid product. Smartbox employs about 70 people, has annual turnover of c. SEK 110m and margins in line with Dynavox. Tobii paid c. SEK 130m (EV/Sales 1.2x) in cash and the acquisition was completed on 1 October 2018.
- In Q3 2018, Tobii announced its first large design win with a leading VR headset manufacturer for the development and delivery of eye-tracking technology for integration in an upcoming VR headset. On 8 January 2019, Tobii announced the partnership was with HTC and its new VR headset HTC Vive Pro Eye.
- In Q3 2018, Tobii launched its fifth generation of eye tracking, the IS5 platform. On 8 January 2019, Tobii announced that Dell/Alienware Area-51m will be the first gaming-laptop with the IS5 platform integrated.
- On 10 January 2019, Tobii and Alienware in collaboration officially opened Alienware Academy, a new online Esport academy for competitive game training. By Tobii's eye tracking insights, the site will offer lessons, tutorials and interactive exercises where all levels of gamers can learn from professionals.

**Dynavox’s 2017 product launches are bearing fruit**

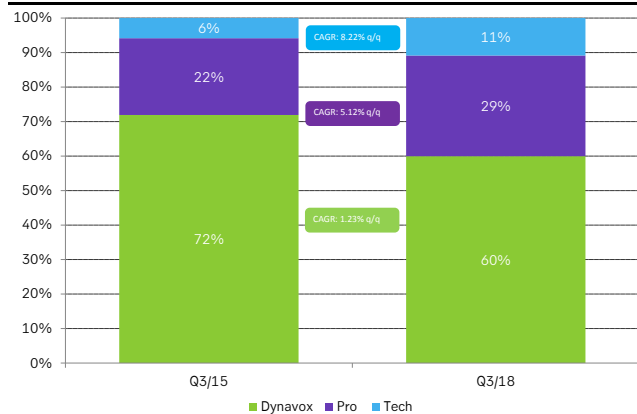
When Tobii acquired Dynavox Systems LLC, the integration boosted sales between Q3 2014 and Q2 2015 in combination with a strengthening dollar (the US accounts for 60-70% of Tobii Dynavox sales) during the period. Following the integration, Dynavox firstly grew due to synergies and cross selling of products, but this reversed from 2017 due mainly to an outdated product portfolio. In 2017, Dynavox updated its product portfolio by launching several new products mainly within the touch segment, leading to a turnaround in sales with positive growth from 2018. The turnover in growth was due to a rapid increase in touch product but also a growth in eye-tracking product sales.

**Sales split Q4 2014 – Q3 2018, LTM**



Source: SEB, Company filings

**Sales split in Q3 2015 and Q3 2018, LTM**



Source: SEB, Company filings

# Product portfolio

## Tobii Group, product portfolio

Tobii Dynavox	Tobii Pro	Tobii Tech
<p><b>High-end products</b> Fully equipped and medical grade solutions controlled by eye tracking or touch. Most often financed by public or private insurances</p> <p><b>Mid-end products</b> Touch tablets or consumer tablets with eye-tracking peripherals, or plug-ins purchased including or excluding softw are. More often privately financed.</p> <p><b>Software and Apps</b> Symbol och text based softw are to be used, in combination with an hardw are to communicate.</p>	<p><b>Eye tracking hardware</b> Sold in monitors, glasses or VR to get insight into human behavior in controlled or real life environments</p> <p><b>Analytics software</b> The analytics softw are tools are used in combination w ith the hardw are to make it easier to execute and analyze the work.</p> <p><b>Services</b> Sold as a consultancy service for companies to get the help using the eye tracking devices and interpret the research results.</p>	<p><b>Platforms</b> Are sold as a full eye tracking solution to be integrated into VR headsets, gaming computers or mainstream computers.</p> <p><b>Components</b> Can be sold seprately for manufacturers w ho only demands some of the components of the platform.</p> <p><b>License and software</b> These are sold as softw are to be installed in PC, VR or smartphones or patent licenses.</p>

Source: SEB, Company filings

## Tobii Dynavox (60% of sales)

Tobii Dynavox's products are for people with special needs

### Tobii Dynavox: product portfolio



Source: SEB, Tobii annual report

The prices listed below for a selection of Dynavox products are the prices listed on Tobii's website, which is why they might differ when sold via other channels. For example the high-end products are not sold via online channels, but directly to funding bodies. Pictures of the products are shown above.

### High-end products (up to USD 10,000)

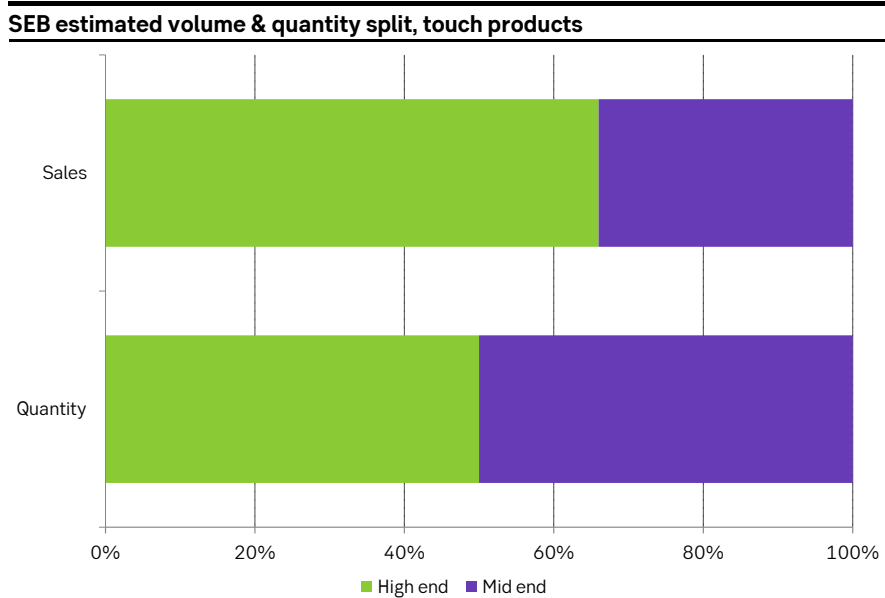
- **I12+ and I-15+ (Medical grade):** Speech generating devices that enable communication mainly via eyegaze. The products are offered to individuals with cerebral palsy, Rett Syndrome, ALS or stroke/aphasia. Sold in English, Chinese, Danish, Dutch, Finnish, German, Italian, Japanese, Norwegian, Spanish or Swedish. Price: not available for sale online.
- **I-110:** A medical grade speech generating device that enables communication via touch or switch control. Comes with Snap + Core First, Communicator 5, Compass, Snap Scene, ALL, and Boardmaker Student Center pre-installed. Sold in English, Spanish and French. Price: USD 5,999 (Price range from much lower in some markets).

- **PCEye Plus:** Enables computer interaction where the user can surf the web, socially connect online, use Skype, manage light or TV and make spreadsheets and documents by using their eyes. Price: USD 1,399-1,699.

**Mid-range products (USD 1,700 and below)**

- **Indi with Snap + Core First:** An all-in-one AAC tablet with integrated extra-loud speakers and preinstalled with Snap + Core First. Price: USD 999.
- **Indi with Communicator 5, Snap + Core First:** Comes with integrated, extra-loud speakers, and pre-installed software. Sold in English, Chinese, Danish, Dutch, Finnish, German, Italian, Japanese, Norwegian, Portuguese, Spanish or Swedish. Price: USD 1,699.
- **PCEye Mini:** Can be used to fully replace the traditional keyboard and mouse by using the Access package including the software Windows Control. If the user wants to get started with eye tracking, the package Track & Learn is the product offered. Price: Access USD 1,199, Track & Learn USD 849.

To show an example of the differences in volume and value split – the right chart below shows our estimated split in value versus quantity in 2018 between high- and mid-end products.



Source: SEB, Company filings

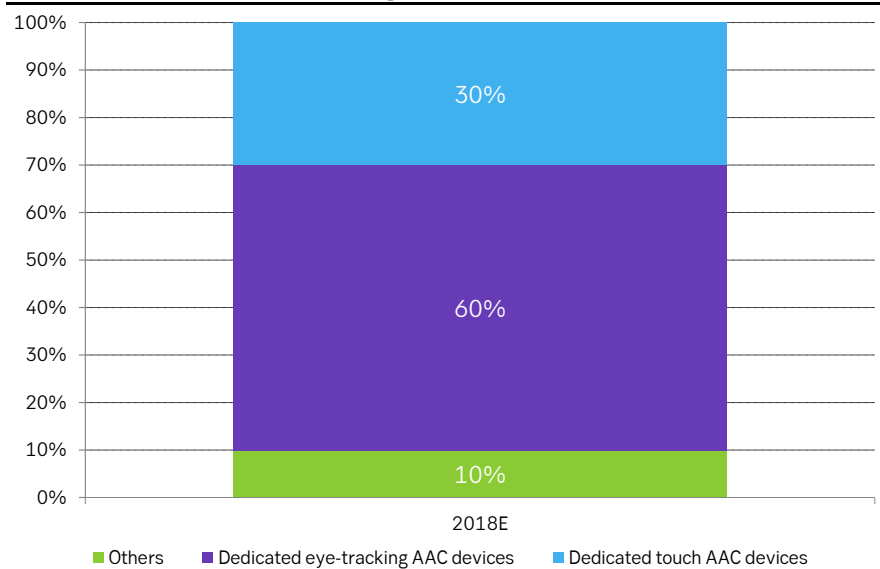
**Communication software & apps**

- **Snap + Core First:** A symbol-based communication app that can also be downloaded to an iPad. Benefits individuals with autism, Down’s syndrome, cerebral palsy and other intellectual disabilities. The software can be paid for on the basis of unlimited access, yearly subscription or monthly subscription. Price: Unlimited access USD 179.99, yearly subscription USD 119.99 and monthly subscription USD 9.99.
- **Communicator 5:** An AAC software platform that converts text and symbols into speech and gives individuals computer access and more. Sold in English, American Spanish, Brazilian Portuguese, Chinese, Danish, Dutch, French, German, Italian, Norwegian and Swedish. Price: USD 699.

- **Snap Scene:** Available for iOS and Windows – an app that enables the user to take photos and tag objects in the scene with spoken sentences, to enable basic speech and encourage language development. Designed for young children who do not speak or may be slower than peers in learning to talk. Price: iOS USD 49, Windows USD 49.99.
- **Windows Control:** Combined with an eye tracker, Windows Control enables full computer access where the user can control the mouse cursor with eye movements. This is a product which enables full computer access to Windows computers, only by eye movements since it replaces the mouse. Price: USD 699.

We expect about two-thirds of Tobii Dynavox sales to come from Eye-tracking AAC devices and one-third from touch and others. Tobii upgraded its product portfolio, especially in the touch segment, in 2017 hence we expect a higher pace of growth in this product segment.

#### Market split by value, 2018 SEB rough estimate

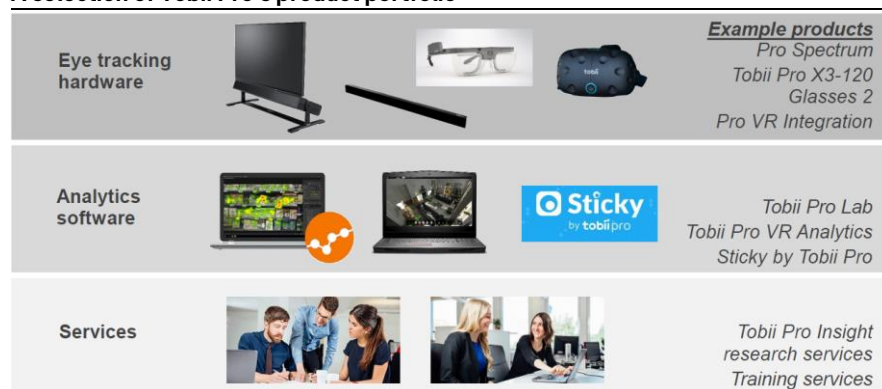


Source: SEB, company data

## Tobii Pro (29% of sales)

The main focus within Tobii Pro is to offer customers within academic research, market research and advertising, eye tracking products to understand human behaviour. Tobii Pro's product portfolio ranges from analytical software to more expensive eye tracking hardware.

### A selection of Tobii Pro's product portfolio



Source: SEB, Company filings

### Selection of Tobii Pro products:

The products are mainly sold by Pro's sales team, which is why prices are not listed on Tobii's website. A selection of Tobii Pro's product offering is listed above.

According to Tobii's annual report 2016 and 2017, Pro has had c. 5,000 customers during the last two years, divided into 3,000 commercial enterprises and 2,000 academic institutions, and hence we estimate an average value per customer of c. SEK 55,000. There is a large spread across products with cheaper products which cost no more than some thousands of dollars to Tobii glasses which we believe come to USD 20,000-30,000.

### Estimated value per customer

Year	2014-15	2017-18
<b>Average Sales (SEK)</b>	<b>188,400,000</b>	<b>274,500,000</b>
<b>Customers</b>		
Academic institutions	1,500	2,000
Commercial enterprises	2,000	3,000
<b>Total customers</b>	<b>3,500</b>	<b>5,000</b>
<b>Value per customer</b>	<b>53,829</b>	<b>54,900</b>

Source: SEB, Company filings

### Eye tracking hardware

- **Pro Spectrum:** Tobii's most advanced eye tracking platform and designed for extensive studies into human behaviour. The system captures data at a high sampling frequency, while still allowing for natural head movements. A product which is used in fields like psychology, developmental studies, neuroscience, reading research, and ophthalmology.
- **Pro Glasses 2:** A product that can provide insight into human behaviour by showing exactly what a person is looking at in real time as they move freely. This is a wearable and mobile eye tracking product that can also be used as a tool for training, skills transfer, and performance enhancement. Studies are usually made with Pro Glasses in a lab, shopping mall, manufacturing facility, home, or sports field.

- **Pro VR integration:** Used for researchers to run eye tracking studies in fully-controlled virtual environments and integrated into an HTC Vive headset. By doing this, researchers can repeat research scenarios and switch stimuli at the same time as keeping track of the participants' gaze. This product is used in fields such as psychology, shopper research, training, and performance assessment.
- **Pro Nano, X3-120 and X2 (screen-based):** Three different products with plug-in solutions (plugged in by an USB) for researchers to use outside a lab. The three different models come in different sizes and with different sampling rate performance from 30-120 Hz.

#### **Analytics software and SaaS solutions**

- **Pro Lab:** Software platforms designed for researchers to make it easier to design execute and analyse the work. These platforms are used in combination with Pro hardware to support the entire research process from test design and recording to analysis. On this software platform, researchers can calculate statistics and create compelling visualizations by obtaining a top-down overview of their data.
- **VR analytics:** Software to facilitate eye tracking analytics in Virtual reality environments.
- **Sprint:** Launched in September 2018, Sprint is a web-based tool used by UX designers and developers. It allows UX designers to view and/or record participants' eye movements when using their services or products. The difference with Sprint to other Pro products is that users can share the objective insights to others on the web-based tool. The product is already used by Swedish companies such as H&M and Avanza.
- **Sticky:** Acquired back by Tobii in May 2017, after being spun off from Tobii in 2009, and integrated into Tobii Pro. Similar to Sprint, Sticky is a cloud-based platform which makes it easy to set up panels around the world and enables large-scale quantitative research via webcam.

#### **Services**

- Tobii's consultancy business is of high significance for the rest of its business to ensure customers get the right help when using, analyzing and interpreting the results. It often makes it cheaper for customers that use eye tracking as a part of their UX analytics or behavioural research to hire Tobii's consultants, instead of developing their own in-house capabilities. Some of Tobii Pro Insight customers today are Toyota, Unilever, Ipsos, Oriflame, P&G and Clear Channel.

## **Tobii Tech (11% of sales)**

Tobii sees opportunities to reach multiple mass markets by integrating eye tracking into devices, including gaming computers, mainstream computers, smartphones, virtual reality, augmented reality (AR) and other niche markets. Tobii Tech has focused on especially three of these markets with a high priority to optimize its product portfolio. Tobii Tech's focus segments are:

- PC (including gaming PCs)
- Virtual reality (VR)
- Niche applications

PC, VR and Niche applications are the areas where Tobii platforms or components are integrated and sold (or soon to be launched). The demand for Tobii products is a direct function of the sales and demand for the products of Tobii integration customers.

**Gaming:** Because the number of games supporting eye tracking has increased from 40 to 130 in the space of only two years, Tobii needs to integrate its hardware in computers to increase the access to this feature. A customer who wants to use eye tracking has two alternatives: either buy a gaming laptop for over USD 1,000 or buy an Eye Tracker 4C to plug into their computer. The gaming laptop manufacturers that have integrated eye tracking hardware in collaboration with Tobii are, so far, Aspire V 17 Nitro (Acer), Predator 21x (Acer), Alienware 17 (Dell), Alienware Area 51-M and GT72 (MSI), and the three different Acer monitor models.

**Virtual Reality:** Tobii eye tracking is not yet integrated into any VR headset available on the consumer market, but Tobii is working in collaboration with several VR headset manufacturers to accomplish this. Tobii says that all of the companies it collaborates with and all of these companies' total VR headsets, account for c. 50% of the total market. One VR headset with integrated eye-tracking that is available for businesses is StarVR One (The StarVR Corporation was founded as a joint venture between Acer and Starbreeze). On 10 October 2018, Tobii announced a deal with a large VR headset manufacturer (which was not mentioned by name) and expects to make its first deliveries by H1 2019. On 8 January, Tobii announced the deal was with VR headset manufacturer HTC.

The Tobii Tech products which are sold to OEMs are divided into three different areas – Platforms, Components and Licences described below.

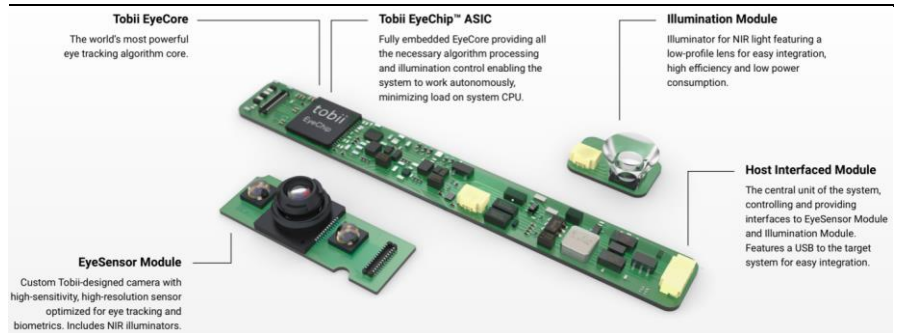


Source: SEB, Company filings

- **Platforms:** Tech offers its embedded products Tobii IS4-B for integration in laptops, IS4-L for integration in monitors and peripherals. Tobii IS5 is an all-in-one platform for integration into a broad range of customer devices. IS5 was launched on 23 October 2018 and is the seventh generation eye tracker – Tobii expects the first products with IS5 integrated to be available to consumers in H1 2019. IS5 is also supported by biometric security functions and face recognition, designed to be 60% smaller, 75% more energy efficient and to have better performance than the IS4. Complete platforms include Tobii's specially designed components on a circuit board and are sold together with algorithms and licences to IP and application software.
- Tech also offers a not-embedded version, which is a plug-in solution for computers – the Eye Tracker 4C. Eye Tracker 4C is plugged in by a USB and is the only PC peripheral which provides simultaneous eye and head tracking as an additional input. This was launched in October 2016 and during this time, 40 PC game titles supported eye tracking (compared with 130 game titles in Q3 2018). The price of an Eye Tracker 4C is USD 169.

- **Licences and components:** In deeper and more complex integrations, Tobii providing eye tracking technology in system licenses. In collaboration with the customer, Tobii develops a optimized system consisting of optical components as eye tracking cameras, illuminator and processing which is deeply integrated into the product. In addition, Tobii providing the eye tracking algorithms. The business model is built on a combination of project and license revenues. In some cases, Tobii provides special designed hardware components which are applied in the customer's system design. One example of these kind of products is the Tobii EyeChip (ASIC which includes Tobii's eye tracking algorithms), Tobii EyeCamera and Tobii EyeSensor. The components of the latest version, Tobii IS5, are described in the picture below. These components are sold separately as well.

#### Tobii IS5

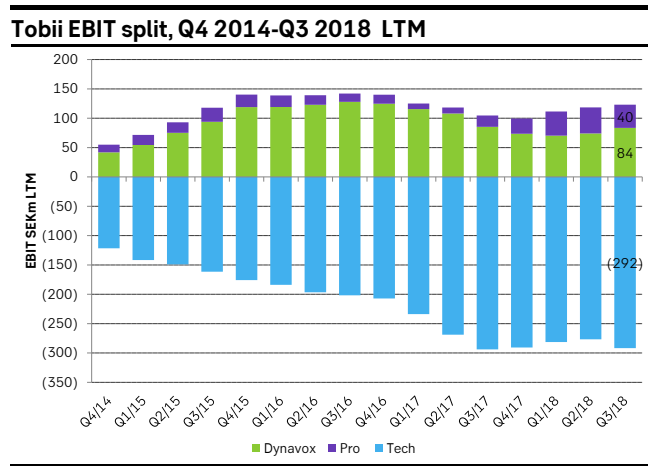
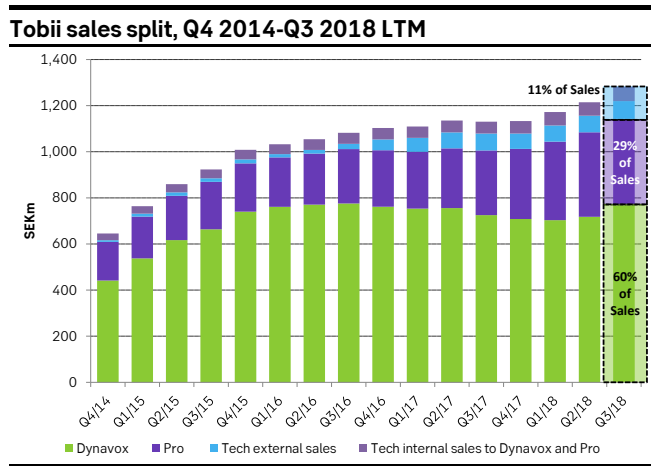


Source: SEB, Company filing

- **Technology and patent licenses:** Tobii offer its customers technology and patent licences for incorporation in their own eye tracking solutions. In the long term, patent licences could generate substantial value for Tobii in terms of revenues. Tobii's patents also protect its own and customers products.

# Business model fundamentals

The three business units of Tobii work independently of one each other with their own management teams, strategies and business models – as well as their own R&D, sales and marketing organizations. The business units share a common technology foundation, brands, patents and other intellectual property on a group level. Tobii Dynavox accounts for 60% of total group total sales, Pro 29% and Tech 11% (LTM Q3 2018). The sales split of Tobii Tech is c. 45% internal sales and 55% external sales in Q3 2018 LTM (compared with 80% internal and 20% external in Q4 2014 LTM).



## Dynavox

With market shares in assistive technology of 40% and in eye control products of 75% (according to Tobii), Dynavox is the market leader in developing and selling technology to people with communication disabilities. The products are often sold by both own sales teams and resellers because the products, especially at the high-end, are expensive and financed fully or partially by public health providers or private insurance systems. Some of the products are paid for by the user such as the mid-end products and software. The product itself is usually paid for with a one-time payment that includes education and several years of support. Some of the products generate recurring revenues by subscription from software licences. Based on company data, we estimate the annual customer churn within Dynavox hardware products is c. 30%. Most of Dynavox’s sales are in North America, but it also supplies Europe and the rest of the world (RoW) where the sales split in 2014 was North America 66%, Europe 31% and RoW 3%.

## Pro

Pro is the market leader within eye-tracking solutions for behavioural studies. According to Tobii it has 60% market share (increased from 47% in 2016 due to Apple acquiring SensoMotoric Instruments, SMI). Pro develops and sells eye tracking solutions to customers to increase knowledge about human behaviour. The products include its own developed hardware and software but also services to help its customers to understand and interpret data and results. The hardware can either be purchased or rented while the software can be purchased by a perpetual or subscription payment. Pro also offers its customers a subscription model where customers make annual payments. For example, the recently launched Pro Sprint is charged by annual prepaid contracts, where the customer can use the services as soon as the payment is processed. The education consultancy service is charged on a daily or hourly basis while the market research consultancy service is charged per project.

Pro products are sold mostly through direct sales representatives but also by resellers, which typically are small companies that focus primarily on selling Tobii Pro's products and services. The primary marketing channels are the Tobii Pro website, trade shows, conferences, webinars, customer case studies, social media, PR and online marketing.

## Tech

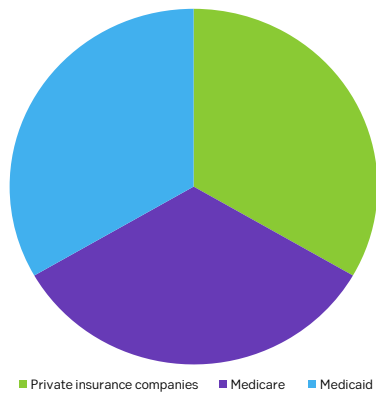
Tech develops and sells eye tracking technology to OEM customers that integrate the hardware and/or software into their own products. Many of the areas where Tobii's eye tracking are integrated are at an early stage commercially but the technology has been launched in a handful of gaming computers. More launches of products with Tobii eye tracking integrated are due in H1 2019 in the VR and gaming spaces. Since c. 140 games already support eye tracking technology, the main focus within this business unit now is to integrate hardware in devices where these games can be played. Tech's customers purchase white-label products with complete hardware (including packaging), eye tracking platforms or the components, together with a licence for reference design for the full system. Customers also receive a licence for the software and intellectual property rights. Since eye tracking is in an early stage of commercial use, the business unit is in several development projects with OEM customers, mainly to customize and modify its technology to fit specific integration needs.

# Go to market

## Dynavox

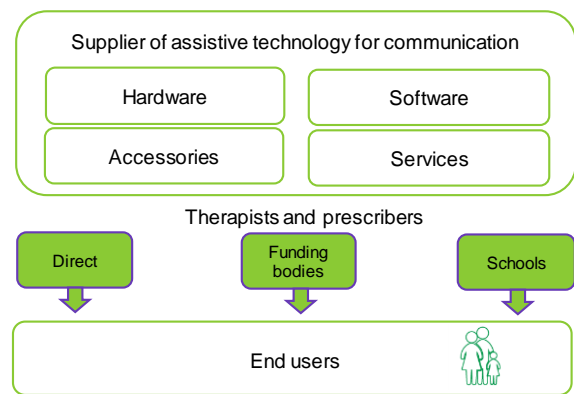
**AAC devices** are mainly financed by reimbursement systems and private insurance because of their high prices (we believe that over 90% of Dynavox revenues in the US come from public or private insurance funding). Even though high-end AAC devices account for most Dynavox revenues, they account for a smaller part in quantities sold. In the US, which is the largest market (more than two-thirds of Dynavox sales), we estimate a similar share in financing sources divided equally between private insurance companies, Medicare and Medicaid. Dynavox high-end products are mainly sold through reimbursement systems, but also to schools that provide assistive technology to their students.

### US financing source split, high-end AAC



Source: SEB

### Dynavox industry structure



Source: SEB, Company filings

When Tobii Acquired Dynavox Systems LCC in 2014, a large sales force came with the purchase. The sales force was, and still is, of high importance in the value chain of reaching end users. The reimbursed systems of European countries and Australia are mainly through public or private insurance.

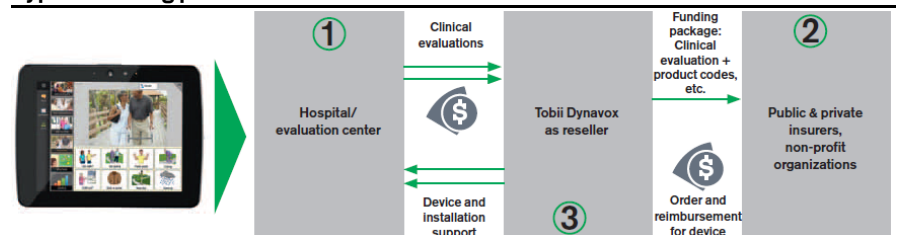
### Funding and reimbursement in different countries

Country	Reimbursement and infrastructure for prescribing AAC
US	Reimbursed under Medicare, Medicaid and many private insurers including Blue Cross/Blue Shield, Kaiser, Tricare, atena and Cigna
Sweden, Denmark, Norway, Germany, Austria, Switzerland, Netherlands, France, Canada, Australia, the UK	Reimbursed under public or private insurance and with reasonable infrastructure for prescribing devices
Other countries	Currently, no, or very limited, reimbursement and infrastructure

Source: SEB, Company filings

Therapists and doctors play a key role in the complex value chain since they evaluate the need of the end user and the available solutions following recommendations regarding assistive technology. There is about one month lead time from the customer ordering a Dynavox product because of the complex three-step financing process (described below).

### Typical funding process for AAC devices



Source: Tobii

- An individual visits a hospital or an evaluation centre to meet an expert (usually a speech language therapist) who determines the need for an AAC device and suggests a solution. If the therapist determines that the individual is in need of an AAC device, the evaluation is sent to the AAC device provider or its reseller who responds with a quotation.
- The funding body (in the US usually Medicare, Medicaid or a private insurer) receives the clinical evaluation together with the quotation, referred to as the “funding package”. The provider of the AAC device and the funding body process the order and, if needed, provide additional documentation.
- If the funding body approves the funding package, the AAC provider delivers the product to the end user and assists with installation, set-up and training. The funding body is later invoiced by the AAC device provider. The payment terms are on average longer in the US than in other countries.

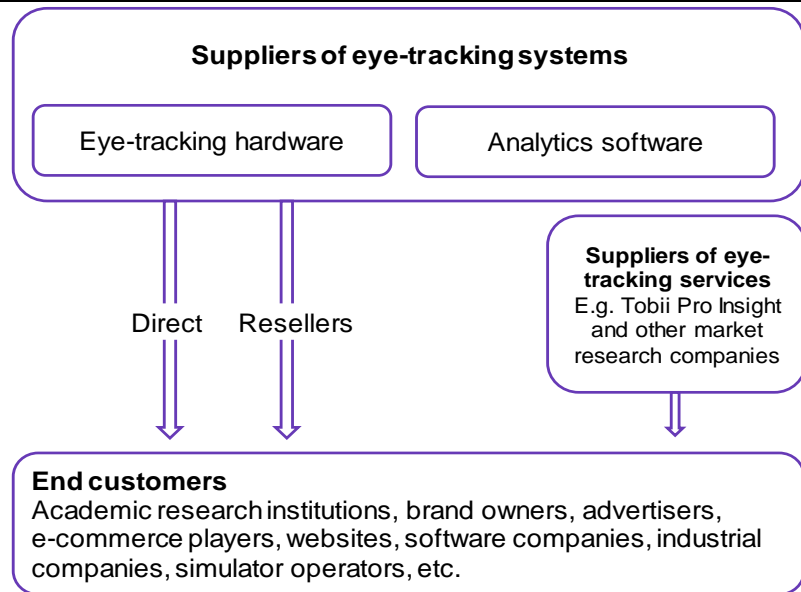
Because of this complex financing process, Tobii spends much time in increasing the awareness of eye tracking and its products amongst speech and language therapists. There is a one to two quarter lag in sales following new product launches due to the time it takes to train experts and make them aware of the new products. This is one reason why the product launches in late 2017 have boosted sales in 2018.

Products in the mid-end segment are sold directly to individuals and schools and also allow expansion to countries with limited funding systems.

**Software & Apps** products are typically sold direct online and bundled with high/mid-end products. The simplest and least expensive products are often sold as apps used on ordinary tablets – which are sold to raise awareness among users and their families. Effective software that is easy to use is a driver for upselling to customers already using Tobii’s products. Since much of the software and many of the apps in Dynavox’s offering consist of a “language system” with pictures or signs, this leads to product “stickiness”. Learning a language system can be compared to learning any other new language, which is why customers using Tobii language software often do not change to a competitor.

## Pro

Most of Pro’s customers are research institutions and commercial enterprises, so it is important for Pro to “push” its products via sales organisations and product awareness. Most of Pro’s sales are direct sales from account managers and their organizations who are located at Tobii’s offices (in Beijing, Shanghai, Stockholm, the UK, Korea Tokyo or Washington DC) or from home offices (in Germany, France, Brazil, and Hungary), but also resellers that are typically small companies primarily focused on selling Pro’s products, which helps to increase geographical coverage. An overview of the process is illustrated below.

**Tobii Pro industry structure**

Source: SEB, company filings

The solutions to collect and analyse data are sold either directly to the end customer, or to research companies that conduct studies for the end customer.

## Tech

The largest focus within Tech is now to push demand, raise awareness and increase the end-user value of eye tracking in gaming and virtual reality. Support for Tobii's eye tracking has been integrated in about 140 games. It has also been integrated into Windows Hello as a solution with which the user can log in to the computer by looking at the screen. By increasing the integrated support of eye tracking in a large proportion of everyday products, Tech aims to sell more hardware to the manufacturers of these devices.

This is done via several ongoing projects with manufacturers of gaming computers, commercial computers and virtual reality headsets in order to customize solutions for these products.

The options for customers who want to use Tobii's eye tracking today are to buy an Eye Tracker 4C for USD 169 or purchase a gaming computer for USD 1,000+. Tobii Tech strives to integrate its eye tracking platform into more mass market products to increase the availability of eye tracking supported software and games. One large step in this process was the launch of the seventh generation eye tracker Tobii IS5 in late October 2018, which is easier to integrate into different devices, offers better performance and is more power efficient, enabling longer battery life in notebooks.

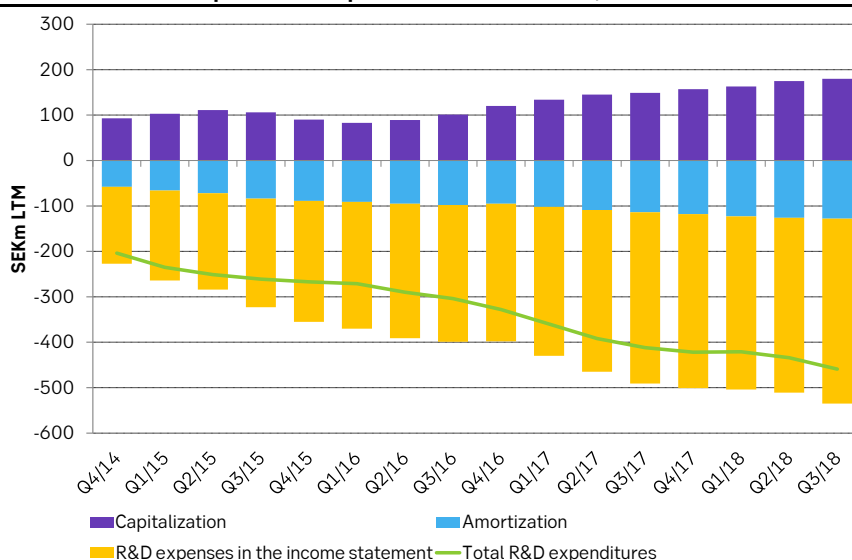
A relatively new way for Tobii to increase the awareness of eye tracking is to offer solutions within the rapidly growing e-sport market. In collaboration with Twitch (the largest e-sport streaming platform), ESL and ELeague, the spectators on offline or online events are able to see where the pro players are watching. This has been launched by Tobii sponsoring the offline events with eye trackers trying to increase spectators' insights into the games.

# R&D and staff

## R&D

To preserve and strengthen Tobii’s market position, all business units invest significant resources in R&D. Nearly 320 of the total number of 900 employees at year-end 2017 worked in R&D. R&D spending in relation to sales has gone from about 27-29% in 2015/2016 to about 35% in full-year 2017. The high level of R&D spending continued during 2018 with the goal to develop eye tracking to meet the demands of future volume markets, maintain Tobii’s market position, develop intuitive user interfaces based on eye tracking and develop Tobii’s eye tracking-related IP portfolio. Together with Tobii’s own staff, Tech also uses partners and suppliers that develop specific components and sub systems that are selected to have the capacity and experience to scale up production to mass-market volumes.

**Research and development cost split Q4 2014 - Q3 2018 , LTM**



Source: SEB, Company filings

The three business units of Tobii have their own R&D teams. A large part of Tobii’s R&D expenditure is capitalized as intangible assets.

## Worldwide presence

Average number of employees		
Parent Company	2016	2017
Sweden	270	329
<b>Subsidiaries</b>		
US	309	329
Norway	14	16
UK	9	10
Germany	10	10
Japan	21	26
China	47	52
Taiwan	2	6
South Korea	2	2
<b>Total average number</b>	<b>684</b>	<b>780</b>

Source: SEB, Tobii annual report

Worldwide offices (2017)		
North America	Europe	Other countries
<b>Pittsburgh, PA., US</b> Sales and development	<b>Stockholm, Sweden</b> Sales and development	<b>Tokyo, Japan</b> Sales
<b>Washington DC, US</b> Sales	<b>Bergen, Norway</b> Sales and development	<b>Souzhou, China</b> Development
<b>Mountain View, CA, US</b> Sales	<b>Frankfurt, Germany</b> Sales	<b>Shanghai, China</b> Sales
	<b>Reading, UK</b> Sales	<b>Seoul, South Korea</b> Sales
	<b>Malvern/Bristol, UK</b> Smartbox	<b>Taipei, Taiwan</b> Sales
	<b>Warwick, UK</b> Sales	
	<b>Kiev, Ukraine</b> Development (External consultants)	

Source: SEB, Tobii annual report

The two tables above show the average number of employees and Tobii's offices worldwide at group level. The largest concentration of employees is in Sweden (the location of the company's headquarters) and the US followed by China where the outsourced manufacturing is located. Most of the offices worldwide are sales offices with a focus to increase awareness and sales of Tobii's products worldwide. The development office in Kiev consists mainly of an R&D activity comprising outsourced development teams.

Tobii is a popular Swedish tech firm to work for and was ranked number four of the most appreciated employers in Sweden (based on employees' own responses), according to an external survey made by Universum in 2018. The sales force is largest in Dynavox with about 120 directly employed sales reps and 130 resellers, followed by Tobii Pro with 50 directly employed sales reps and 20 resellers.

### Employees and reseller by business unit (2017)

	Tobii Dynavox	Tobii Pro	Tobii Tech
Directly employed sales reps	120	50	8
No. of resellers*	130	20	n.a.

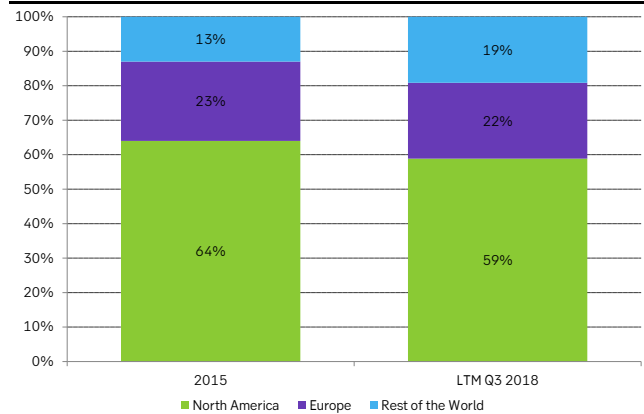
\*refers to the number of reselling businesses

Source: SEB, Tobii annual report

# Customers

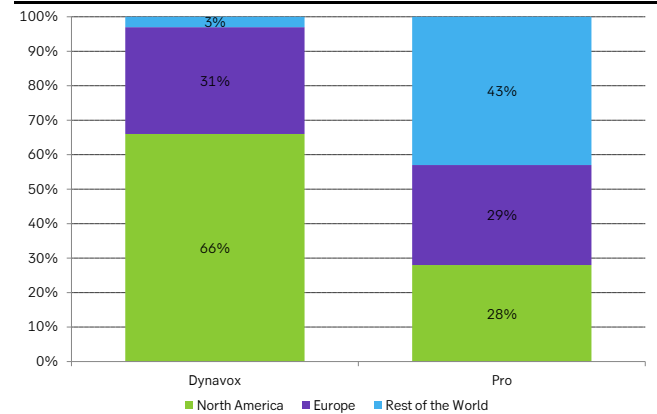
Tobii's customers naturally differ across the product portfolios of its three business units. What is common in all three business units is that most sales are B2B with a small share of B2C in Dynavox and Tech. Most of Tobii's customers are located in the US due to the large proportion of Dynavox sales in the region. The proportion of sales from the US has decreased since 2015. The largest part of Pro's customers is located in the rest of the world, mainly Asia.

**Sales per region, Tobii Group**



Source: SEB, Company filings

**Tobii Dynavox and Pro sales split, 2014**



Source: SEB, Company filings

## Dynavox

Most Dynavox customers are unable to speak without augmentative and alternative communication technology. Some customers need language learning support because they cannot communicate verbally. Common diagnoses for Dynavox customers are ALS, autism, aphasia, cerebral palsy and spinal cord injuries.

Customers using SGDs (speech generating devices) are generally part of one of two groups. Customers with motor functional disabilities as well as speech difficulties and who are unable to use their hands, need SGDs controlled by eye tracking. The other customer group consists of individuals who have adequate or good motor skills and can use Tobii's touchscreen devices.

## Pro

Tobii Pro customers form two groups – commercial customers (of whom there are more than 3,000) and academic customers (about 2,000). The common goal for customers using Pro's solutions is to get insight in human behaviour in different environments.

Commercial customers include several of the world's largest global consumer goods companies. Companies such as Procter & Gamble, Microsoft, Oriflame and leading market research firms such as Ipsos, as well as many Fortune 500 companies, are customers of Tobii Pro. These large enterprises want insights into consumer behaviour to optimize the design and placement of marketing communication with consumers. Commercial customers use eye tracking to conduct tests in areas such as package design, online advertising, print advertising, in-store communication, store layout and shelf optimization, TV advertising, outdoor advertising and website usability.

Academic research customers include several of the world's top universities using Pro's products. These customers are interested in getting a deep understanding of behaviour, attention and cognitive processes. These customers are in several research fields including psychology & cognition, infant research, human computer interaction, ophthalmology, neurology, industrial design, reading, learning, linguistics, media and primates.

## Tech

Tobii Tech has launched platforms, components and software to mass market industries such as computers, gaming and Virtual Reality. The customers who have integrated or are about to integrate Tech products are computer/VR manufacturers such as Acer, Dell, MSI and StarVR corp. The customers of Tobii Tech are mainly large corporations that manufacture mass market products. The demand of Tech's platforms, components and software are therefore a function of the demand of eye tracking in these products. A small proportion of customers sales are B2C by Tobii selling its Eye Tracker 4C directly to the user or via retailers. These customers are individuals who want to use eye tracking in gaming or in monitoring their computer device.

Tech also addresses a number of niche markets. These include robotic surgery, screening and identification of dyslexia and other health disorders, optometry and lie detection – all application areas where the eye tracking technology is a central part of the solution. Both parts of eye tracking are used here: to understand and draw conclusions of cognitive processes by measuring eye movements and to use the gaze as a part in the user interface. These customers usually develop a full solution, including application software themselves and purchase Tobii's integration platform including eye-tracking algorithms.

# Market analysis

Many of Tobii’s markets are still immature and the application areas are not entirely obvious yet, even though many large companies see a market potential in eye tracking. Facebook and Google entered the eye tracking space in 2016 with the respective acquisitions of EyeTribe and Eyefluence. In 2017 Apple followed suit with the acquisition of SensoMotoric Instruments (SMI), a competitor to Tobii. The largest market potential for Tech, according to Tobii, is in mainstream computers and smartphones due to the large volumes sold every year.

## Tobii’s market shares and strategic priority

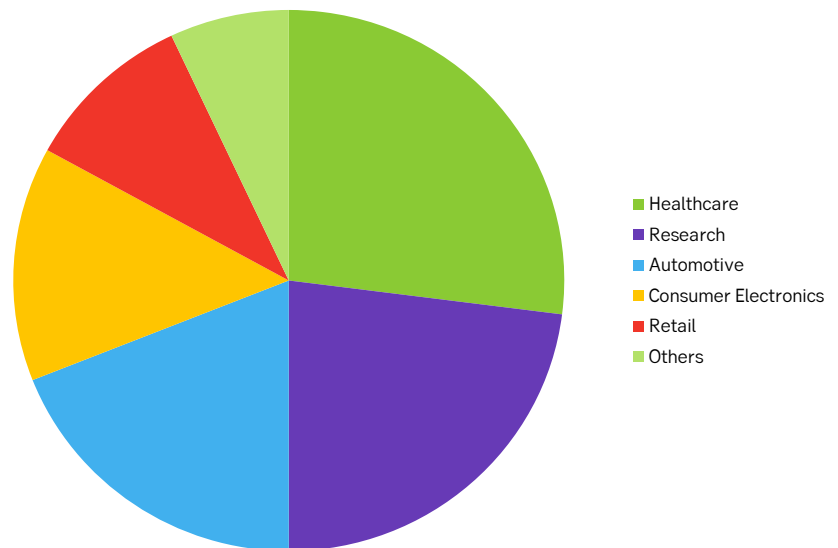
Sub-segments for eye tracking	Tobii Dynavox	Tobii Pro	Tobii Tech						
Segment	Assistive technology for communication	Behavioural research	Computer gaming	Mainstream computers	Virtual Reality	Augmented reality	Smart phones	Automotive	Niche markets
Long term market potential	Large	Large	Large	Very large	Large	Large	Very large	Large	Medium
Market Share (2017)	75%*	60%	100%	n/a	n/a	n/a	n/a	0%	n/a
Market Share (2016)	75%	47%	100%	n/a	n/a	n/a	n/a	0%	n/a
Current strategic priority (2016)	High	High	High	High	High	-	-	Low	Medium

\*Tobii’s total market share in assistive technology for communication is 40%, whereas the market share in eye control products is 75%. New business areas where contracts were signed during 2017: robotic surgery, health testing, casino machines, lie detection.

Source: SEB, Tobii Annual Reports

In 2017, the largest markets in terms of revenue share were healthcare, research and automotive (see chart below).

## Global eye tracking market revenue share, by application, 2017 (%)



Source: SEB, Grandviewresearch

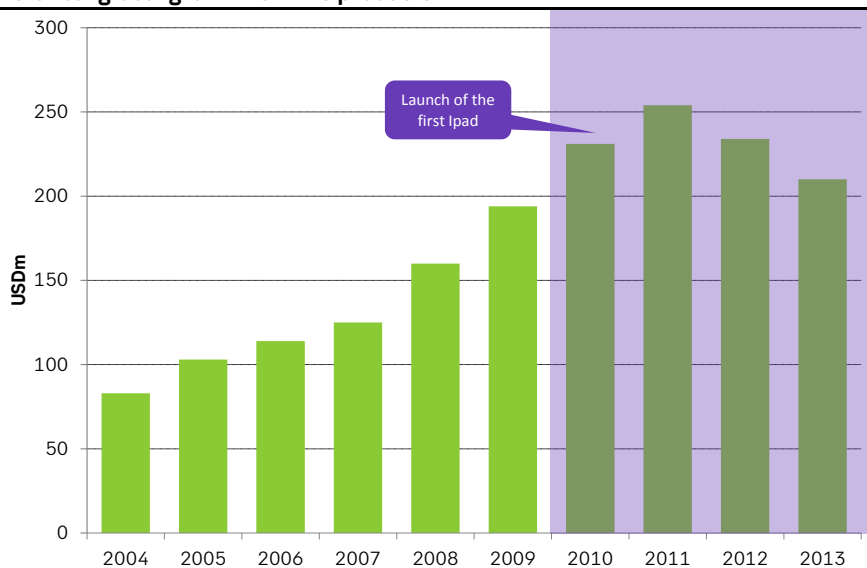
The initial adoption of gaze capturing in healthcare was limited to a computer interface for patients suffering from mobility disabilities, an area where Tobii Dynavox is a market leader. But the technology is increasing in consumer electronics and gaming devices which is a segment expected to expand at a CAGR exceeding 28% until 2025 (according to Grandmarketresearch.com). The fastest growth is expected in the Asia Pacific region, with Japan, China and India (expected CAGR of over 30%) being at the forefront where gaming designers leverage on gaze technology to enhance the user interface design.

# Dynavox

## Market overview and positioning

The market for AAC products grew rapidly in the US from 2000 onwards, until 2010/2011 when the first iPad was launched by Apple. At that time, Dynavox Systems LLC was a market leader in the US AAC market and following the launch of the first iPad, Dynavox Systems LLC sales decreased rapidly from USD 97.3m (2011/2012) to USD 65m (2012/2013). This led to its largest shareholder JEC capital foreclosing on three Dynavox affiliates, placing them in Chapter 11 bankruptcy with a court-supervised public auction for all of its assets, which Tobii won. Tobii acquired Dynavox Systems LLC for USD 18m in 2014 at an EV/sales multiple of 0.28x.

### Historical global growth for AAC products

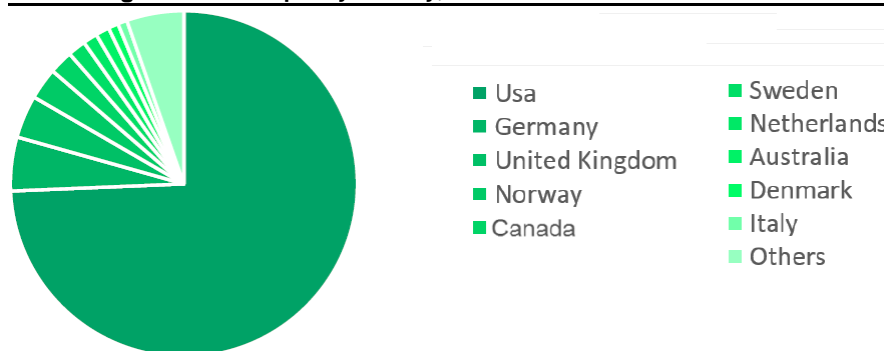


Source: SEB, Tobii prospectus, Arthur D. Little

The acquisition gave Tobii a skilled US sales force, excellent relationships with otherwise hard to reach sales channels (i.e. health insurance companies) and cross-selling synergies. Since then, Tobii Dynavox has revamped its touch pad product portfolio which has led to a strong US market position.

Tobii estimates that almost 75% of Dyanvox’s market is in the US and that 95% of the market is concentrated in the 10 western countries listed below. The penetration level varies by region and across user conditions. Most markets have comparatively very low penetration levels pointing to a long-term growth opportunity.

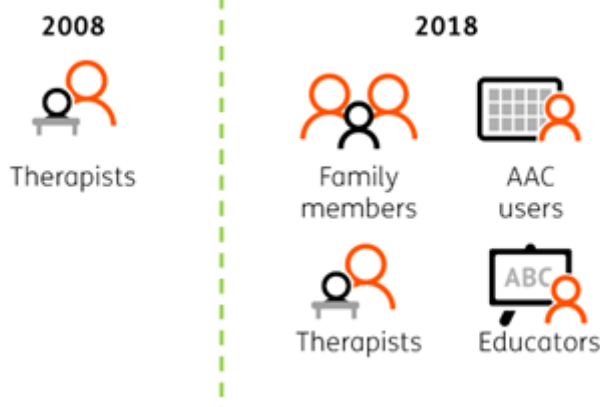
### Estimated global market split by country, 2018



Source: Tobii

The market transformation has decreased the price per unit, which is why the process of deciding who needs an AAC device has moved from mainly therapists to include family members, AAC users and educators.

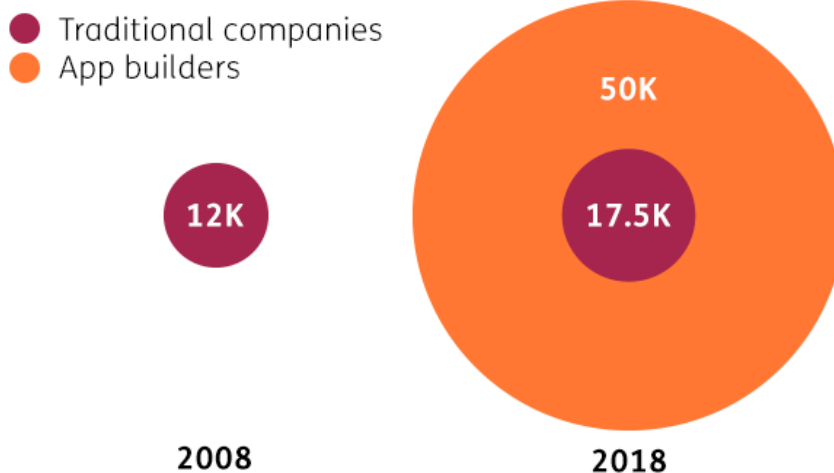
**Who makes the decision?**



Source: SEB, medium.com

Before the App Store and iPad were launched, about 12,000 people accessed dedicated communication devices annually in the US. Today the figure is an estimated 15,000-20,000 people annually and the iOS AAC market provides and 40,000-60,000 people with communication apps each year. Usually, companies selling the hardware are also focused on selling AAC software and Tobii is no exception.

**Estimated annual growth of high-tech AAC users in units sold (US)**

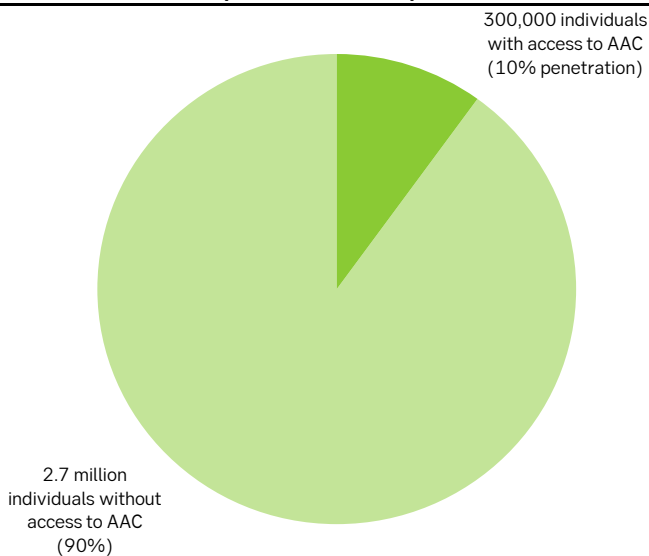


Source: Medium.com

**Addressable market**

Tobii estimates that about 0.5-1% of the world’s population is in need of assistive technology to communicate (c. 50 million people). A study from 2013 stated that about 2.7 million of these people live in countries with established reimbursement systems, only 10% of whom have access to such a device. The 10% market penetration includes both individuals who possess a dedicated higher cost AAC device from a market actor and users of consumer tablets with a low cost AAC app installed.

**The addressable AAC markets (no. of individuals), 2013**



Source: SEB, Arthur D. Little

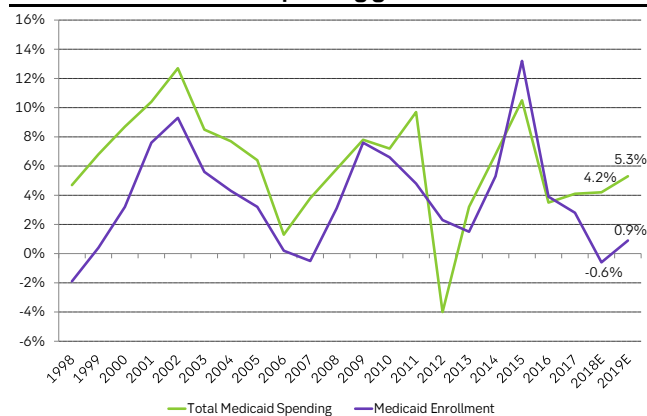
The markets with established reimbursement systems back in 2013 were the US, the UK, Sweden, the Netherlands, Denmark, France, Australia, Norway, Germany, Switzerland, Austria and a prevalence of 0.5%, according to a study by Arthur D. Little.

**US insurance market estimates**

Since the US market accounts for some 75% of Tobii's total sales, the outlook for Dynavox there is obviously crucial. We expect the financing of Tobii Dynavox products to be equally divided between Medicare, Medicaid and private insurance in the US market.

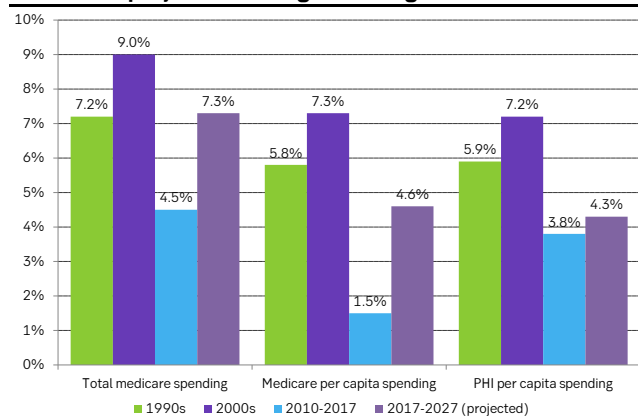
Communication is a basic human need, which is why public and private insurance systems have to provide these devices for people in need of SGDs. According to a study published by Kaiser Family Foundation (KFF) in October 2018 (left chart below), Medicaid spending will outpace Medicaid enrolment in 2018 and 2019. This looks good for Dynavox's AAC sales because it suggests that spending is growing faster than demand. The same study suggests Medicare spending will increase at a CAGR of 7.3% in 2017-2027, or 4.6% and when calculated per capita. Private insurance spending is expected to grow at a CAGR of 4.3% in the same period.

**Medicaid enrolment and spending growth 1998-2019**



Source: SEB, KFF

**Actual and projected average annual growth rates**

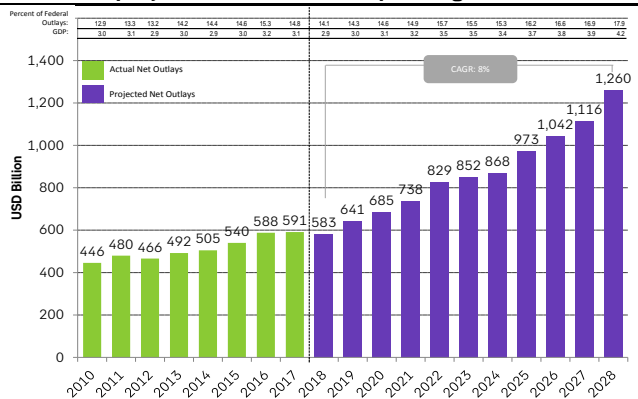


PHI is private health insurance

Source: SEB, KFF

Medicare is a complex system and is divided into four different parts (A, B, C and D), which cover different types of services. Dynavox products are covered by Medicare under Part B within the Durable Medical Equipment (DME) subcategory. DME is prescribed for use in the home and only a doctor (or therapist) can prescribe medical equipment and all people with Part B are covered by Medicare. The net projected Medicare spending (minus premium income and other offsetting receipts) is expected to grow at a CAGR of 8% (2018-2028) while the Medicare category, Part B, spending is expected to grow at a CAGR of 5.4% between 2017 and 2027 (see charts below).

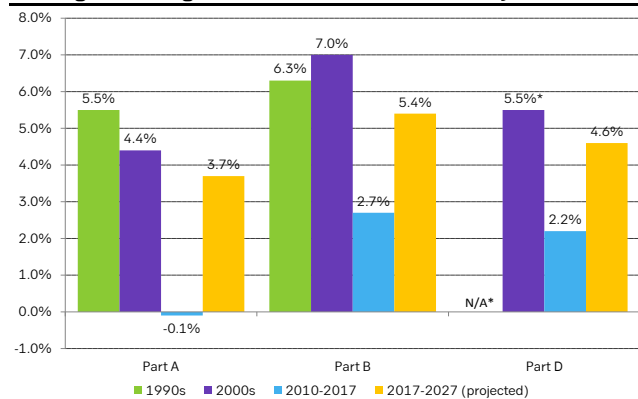
**Actual and projected net Medicare spending**



Note: All amounts are for federal fiscal years; amounts are in billions and consist of mandatory Medicare spending minus income from premiums and other offsetting receipts

Source: SEB, KFF analysis of Medicare spending data from Congressional Budget Office, The Budget and Economic Outlook, 2018 to 2028 (April 2018).

**Average annual growth in Medicare beneficiary costs**



\*Reflects spending from 2006, the first year of Part D, to 2010; data for 1990s and 2000s is not available.

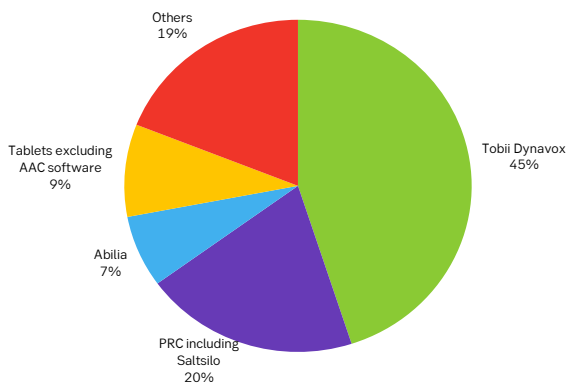
Source: SEB, KFF

About 25% of Dynavox sales are in other markets (mainly Europe) where the market drivers are pretty much the same as in the US. The most important factors to follow are the insurance systems and GDP. As market penetration is very low outside of the US, the number of languages the software is launched in is highly significant. If the software does not support a specific language, it makes it, for natural reasons, impossible to launch and sell hardware in the region.

**Competition and market share**

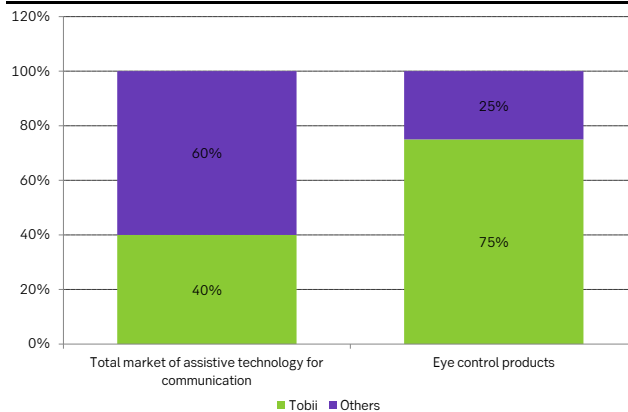
In 2009 when the market was dominated by dedicated hand-held and tablet computer-sized communication devices, the largest players were AAC providers such as Dynavox Systems (Acquired by Tobii in 2014), PRC, Tobii, Toby Churchill, Smartbox (acquired by Tobii in 2018), and Saltillo. When the iPad and similar tablets were launched, the initial response was cannibalisation but since then the market has matured and all the leading players have adopted a broader product portfolio which embraces both high end and low cost AAC. Today, Tobii offer solutions which are sold in combination with iPads as well and has widened its product portfolio to meet a larger group of customers. We believe that sales have increased in high-, low-end and software solutions due to this.

**AAC and computer access market share (2013)**



Source: SEB, Arthur D. Little

**AAC market share 2017**



Source: SEB, Company filings

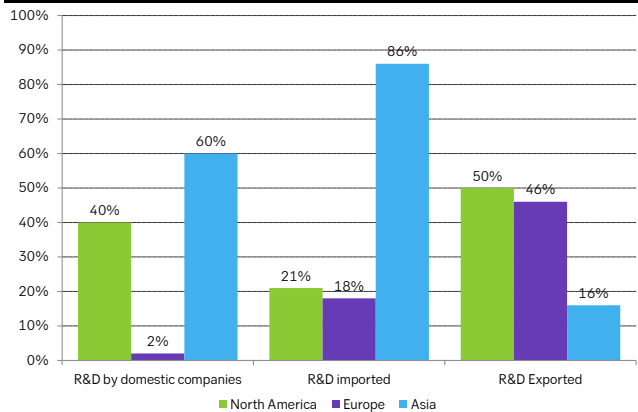
Tobii's total market share in assistive technology for communication is 40% if eye tracking is excluded. The market share of Tobii eye tracking products only is 75%.

## Tobii Pro

### Market overview and positioning

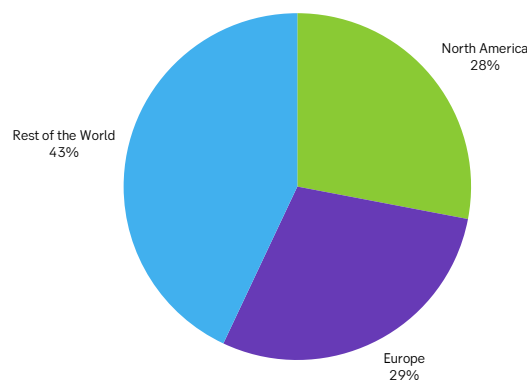
The largest market for Tobii Pro's products is mainly Asia followed by Europe and North America. This is in line with a general market trend of growing R&D spending in Asia (R&D departments being key customers for Tobii Pro's products). The geographical split and R&D increase by region are shown below and a strong underlying trend supporting Pro sales.

**% change in R&D spending by region, 2007-2015**



Source: SEB, CMBA

**Net sales by region, 2014**



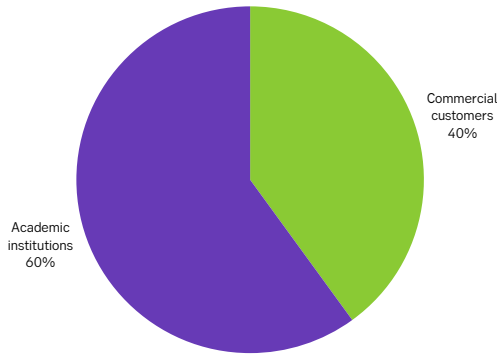
Source: SEB, Arthur D. Little

The reason companies move their R&D to China is mainly because of the proximity to high growth markets, key manufacturing sites, key suppliers and lower development costs. The key driver of the demand for Tobii Pro's products is increased awareness of eye tracking within research and increases in companies' R&D spending.

Tobii Pro's market can be divided into academic institutions and commercial customers. Tobii Pro's sales can further be divided into different product types, shown in the charts above. Demand for these products has similar drivers because the hardware often comes with analytic software and consultancy services to interpret and analyse the data.

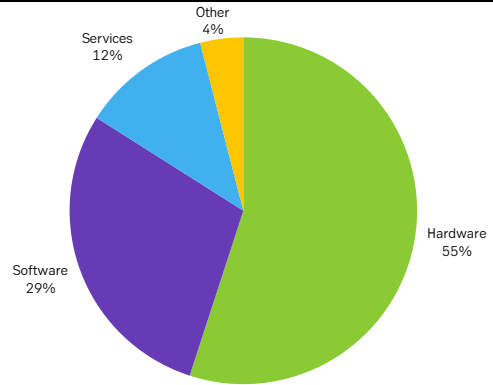
The commercial customers operate in a wide range of industries such as consumer goods, IT and telecom, finance, automotives and general industry. This is a market which is largely concentrated to a few large companies including Nielsen, Ipsos, TNS/Kantar and GfK. These research companies use a variety of methods to seek insight into consumer behaviour of which eye tracking is one.

**Net sales by customer group, 2014**



Source: SEB, Arthur D. Little

**Net sales by product/product type, 2014**



Source: SEB, Arthur D. Little

**Eye tracking real life cases (illustrated in pictures below)**

**Kennesaw State University** used eye tracking in a research study to investigate student’s gaze patterns during physical science lectures. The study was made on eight students who attended a basic physical science course where each subject wore Tobii Glasses for the entire lecture. The research revealed that the students spent less time on focusing on the lecturer and more on the PowerPoint slides or their notes. The biggest distraction, unsurprisingly, was surfing on the Web (typically Facebook).

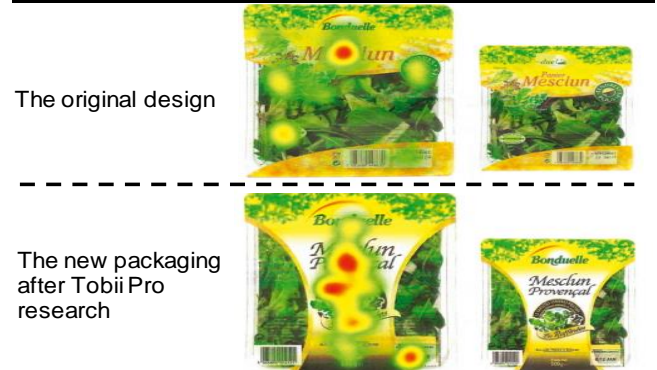
**Strategy, marketing and consumer research.** In this study, a company wanted insight into how consumers (buyers of ready-made salads) “scanned” the package. Head maps generated by Tobii Pro Studio eye tracking software showed that with the original packaging the brand was seen only 28% of the time (see illustration below). When the company changed the packaging to a more homogeneous graphical design, 44% of participants observed the brand. The change in package design generated a sales growth of 15%.

**Eye tracking in academic research**



Source: SEB, company data

**Eye tracking in commercial research**



Source: SEB, company data

As previously mentioned, the main driver of the commercial customer segment is companies’ willingness to spend on R&D. The market for academic institutions is driven largely by university budgets. This explains seasonal effects, where margins tend to increase in Q4 and Q1.

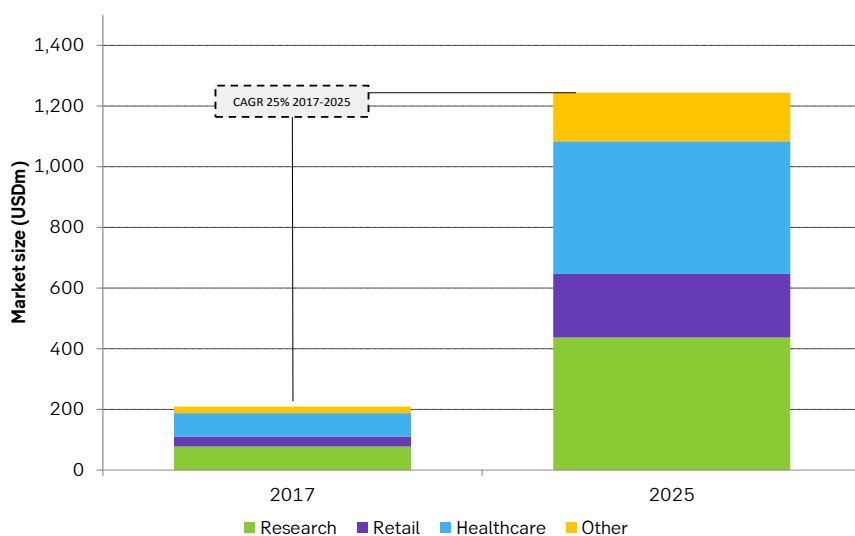
The budget year in Europe and the US ends in December, expanding the Q4 effect. Japan, which is a large market for Pro, ends its budget year in Q1.

**Market trends and drivers**

As mentioned, the penetration level of eye tracking is still relatively low, so the increase in awareness is an important driver for Pro’s sales development.

Traditional market research is primarily conducted through surveys and interviews, where it is hard to secure the validity of the respondent’s answers. By recording actual behaviour in real world environments such as actual purchases or movement through a physical or online store, this provides researchers with valid and reliable data. This implicit research is becoming standard for ad measurement and package design.

**Global eye tracking market value**



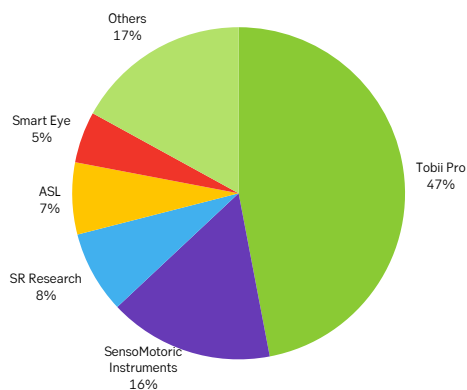
Source: SEB, Grandmarketresearch, Alliedmarketresearch

Since Tobii Pro is selling products to both market research companies and directly to companies across a wide range of industries, we see this expected market trend (in chart above) to drive demand for Tobii Pro’s products. The addressable market for Tobii Pro’s products is expected to grow at a CAGR of 25% until 2025.

**Competition and market share**

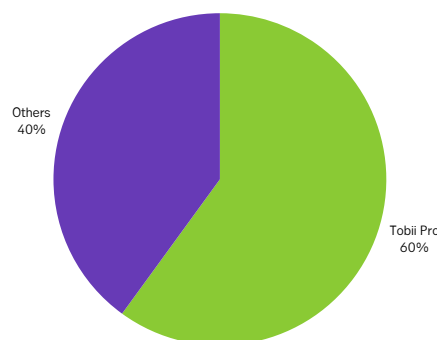
Tobii Pro is the market leader in providing eye tracking solutions to the market research industry and holds a current market share of c. 60%. This has increased from 47% in 2013, mainly because Apple acquired Tobii Pro’s competitor SensoMotoric Instruments (SMI) in 2017. The market shares in 2013 and 2017 are shown in the charts below.

**Market share eye tracking (behavioural research), 2013**



Source: SEB, Arthur D. Little

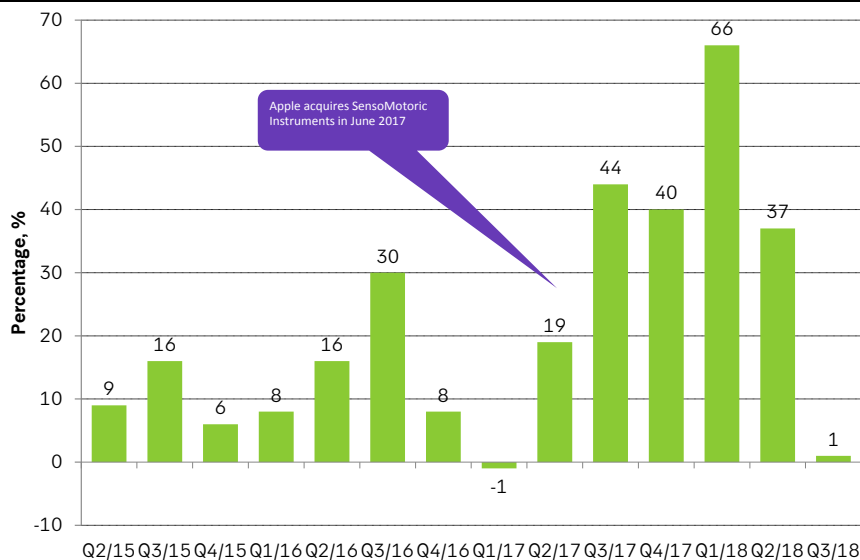
**Market share eye tracking (behavioural research), 2018**



Source: Company filings

When Apple acquired SMI, it stopped selling products for behavioural research because it wanted the technology for other purposes. This benefited Tobii Pro, which increased its market share to 60% and sparked abnormally strong growth between Q2 2017 and Q2 2018. This effect ended in Q3 2018 (see chart below).

**Tobii Pro organic growth y/y**



Source: SEB, Company filings

## Tobii Tech

Tobii Tech is focusing on integrating its eye tracking platforms, components and software to be integrated into mainstream computers, gaming computers and VR headsets and niche devices. The market for eye tracking integrated in consumer electronics is expected to grow at a CAGR of about 28% until 2025, with the fastest growth in the Asia Pacific region (source: Grandmarketresearch).

### Computer market

Tobii Tech's products are today only integrated into eight products that are sold to the mass market – five gaming computers and three monitors. One other product which is sold on the mass market is its Eye Tracker 4C, sold as a peripheral solution to gamers supporting eye tracking.

Tobii is an early-adopter in the computer segment, where it is aiming to contribute to a more immersive experience, realism and intensity in many different types of games. Penetration is still very low in PC gaming, which is why Tobii works in cooperation with manufacturers of gaming computers and game studios to drive the market's development. Today about 140 games support eye tracking. The addressable computer market that Tobii Tech is aiming for is the 400m-plus computers and tablets (see table below) sold each year.

**Computers, addressable market (number of units sold, millions, 2017)**

Computers	262
Tablets	164
Gaming computers	20
Gaming notebooks	6

Source: SEB, Gartner, IDC and Digitimes

About 550m people use their PCs for gaming. About 20m PCs costing more than USD 1,000 are sold each year of which about 6 million are gaming notebooks.

Tobii is building a large ecosystem of games supporting eye tracking to increase demand of the technology and its in-game features (some of the games supporting eye tracking showed in the picture below).

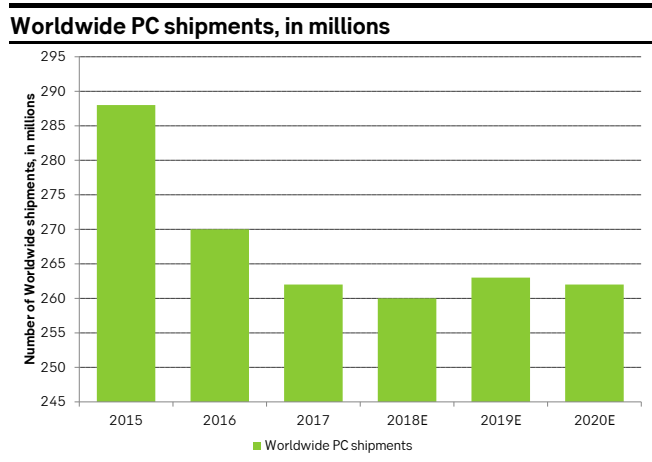


Source: SEB, Company data

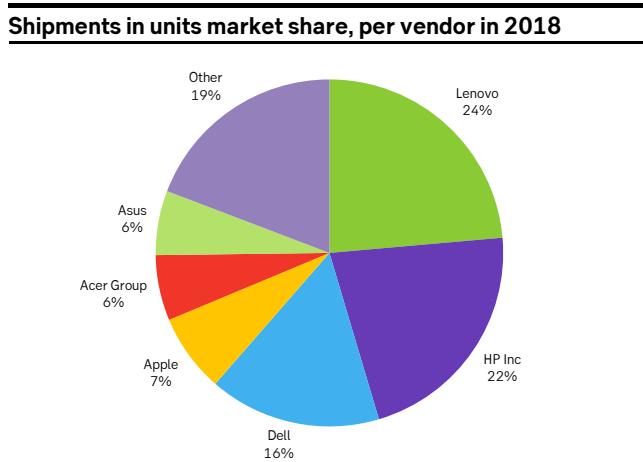


Source: SEB, Company data

As mentioned, Tobii has already integrated its eye tracking technology into a handful gaming computers. This addressable market is, of course, smaller than the mainstream computer market – annual shipments are about 20 million annually, compared to mainstream computers of estimated 260+ million units that will be shipped 2018-20E. The market is dominated by mainly Lenovo, Dell and HP in 2018 accounting for about 60% of the market.



Source: SEB, Company data, Gartner, Statista



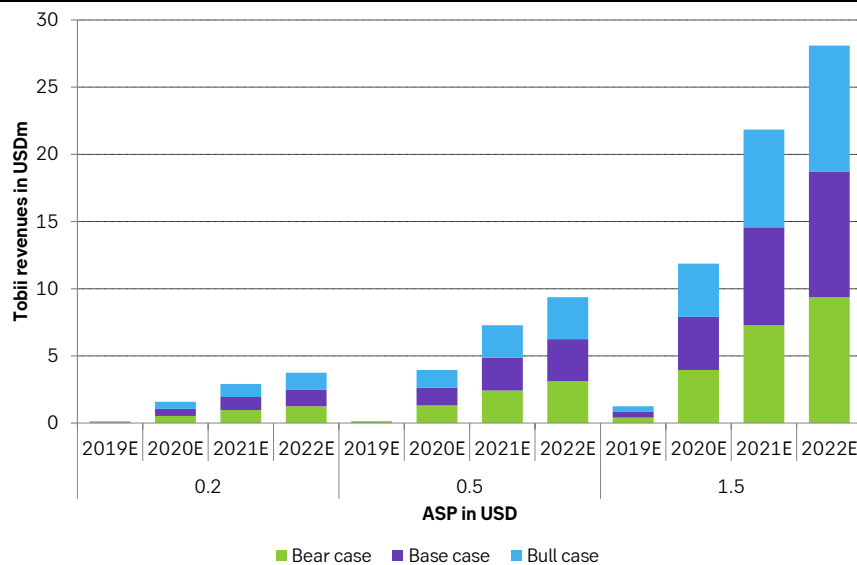
Source: SEB, Gartner, Statista

Since Apple has acquired SMI and Lenovo have been in low scale collaboration with Mirametrix to bring eye tracking into its touchpads, we do not fully account these players as a part of Tobii’s addressable market. Our Bull-, Base- and Bear case scenarios are shown below, where sales are calculated independently of each other in one case of penetration in mainstream computers and one case in gaming computers.

**Mainstream computers:**

At the CES (Consumer Electronics Show) in Las Vegas on 11 January 2019, Lenovo showed a mainstream computer with integrated eye-tracking. This seems to be integrated with eye tracking from Tobii but no announcements has been made from Tobii about this yet. If this is the case, it is the first launch of a mainstream computer with Tobii eye tracking integrated and an important milestone to bring eye-tracking into mainstream computers.

**Bull-, Base- and Bear case in Tech revenues from mainstream computer sales**



Source: SEB

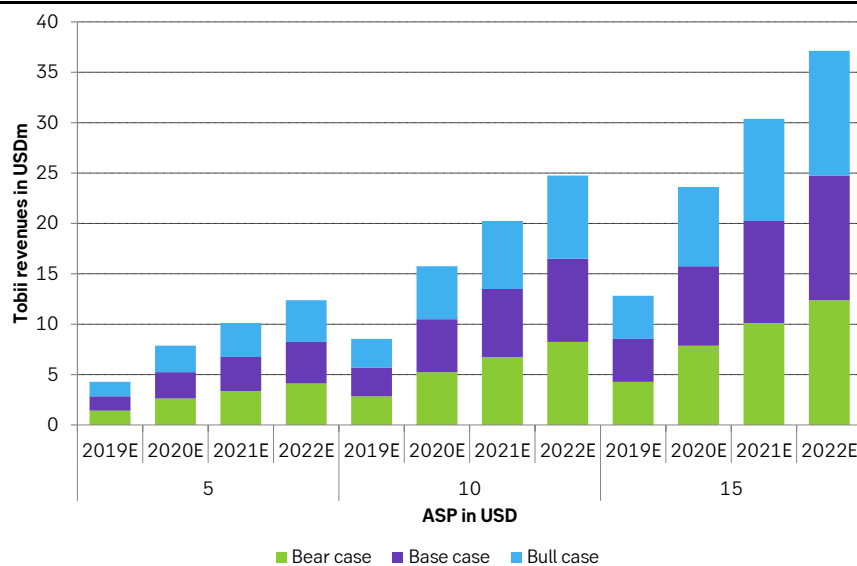
Based on the following assumptions, we expect Tobii Tech to reach about USD 5m in 2021 in mainstream computers sales with an ASP of USD 0.5 per unit sold, according to our base case.

**Assumptions:**

- We see a limited eye tracking penetration in 2019 in commercial computers (but it might start to take-up from Lenovo). From a ramp up in market penetration starting in 2020, we assume the pace to be half that of the historic annual penetration rate increase of fingerprint technology.
- Tobii Tech market share is calculated to be 25% in our Bear case, Base 50% in our Base case and 75% in our Bull case.
- We assume Tobii Tech ASP to be USD 0.2-1.5 since it has to be relatively low for eye tracking to reach the market of mainstream computers.
- We assume the number of unit shipments to be constant after 2020 at about 242 million units per year.

### Gaming computers:

#### Bull-, Base- and Bear case in Tech revenues from gaming computer sales



Source: SEB

Based on the following assumptions, we expect Tobii Tech to reach above USD 10m in sales from gaming computers in 2021, according to our base case and an ASP of USD 10 per unit sold.

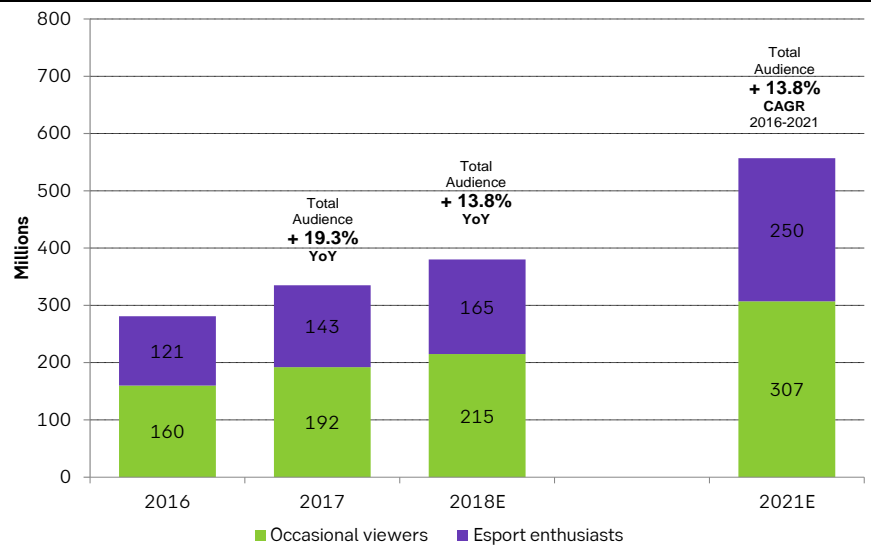
#### Assumptions:

- Since the penetration of eye tracking into gaming computers have already started, we assume it to ramp up at a slower pace than fingerprint penetrated smartphones.
- We assume the number of gaming computers being sold to be constant at 20 million units annually in our estimates.
- We assume ASPs in our Bear, Base and Bull cases of USD 5, USD 10 and USD 15 respectively, which is higher than our assumption in mainstream computers due to higher ASP per computer sold in the gaming computer niche.
- We assume a market share in our Bear case of 20%, Base case of 40% and Bull case of 60%. The higher market share expectations are due to Tobii being the only player with integrated eye tracking into gaming computers on the market today. This, in combination with some 140 games supporting Tobii eye tracking and its E-sport sponsorships has given Tobii a market advantage in the gaming computer niche.

#### E-sport market

Another potential driver in demand for eye tracking technology is e-sport. This is due to the usage of eye tracking in training and spectating to analyse players' eye movements. The e-sport market is forecast (see chart) to grow at an annual CAGR of 14% between 2017 and 2021 where about 400m people watch e-sport today. Tobii is aiming to make gains on this large number by selling its solutions to gamers who want to use eye tracking to see where the professionals are looking at the screen while playing a game. This is to give spectators at large events insights as to how the professional thinks or to analyze their gaming technique.

### E-sport audience size worldwide (2016-2021E), by type of viewers



Source: SEB, Newzoo

During Q3 2018, eye tracking was used in some of the world's largest e-sport tournaments arranged by ELEAGUE and ESL. Tobii sponsors these tournaments in order to increase awareness of eye tracking. Its newly-launched Tobii Ghost software can be used by anyone who has an eye tracking integrated gaming computer from Alienware, Predator, Acer or MSI, or Tobii EyeTracker 4C. The software is downloaded by the broadcaster, which can show its viewers where a player is looking, as illustrated by the blue circle in the picture below. This is done while broadcasting to Twitch, YouTube, Facebook or Mixer.

### Illustration of Tobii Ghost



Source: SEB, YouTube

Because e-sport audiences are similar to gaming audiences, they can be seen as pretty much one large market where eye tracking can be used in:

- **Streaming** by e-sport broadcasters to give the spectators insight into the players' eye movements.
- **Gaming**, by monitoring weapons or other features within a game.
- **Analysing**: for e-sport teams or individuals who want to analyse their performances by tracking their eye movements.

There are approximately 550m active gamers today, a cohort that forms the addressable market for Tobii Tech Gaming. Tech's products can be sold either by the Eye Tracker 4C or eye tracking integrated computer.

### The virtual reality (VR) and augmentative reality (AR) markets

Virtual reality uses computer simulation to replicate a real world environment or to create a fantasy one, most commonly by using VR headsets. The difference with AR headsets is that AR takes current reality and adds something to it. For example, Pokémon Go – where players use their smart phones to “catch” Pokémon appearing in their real life environment – was launched in 2016 and achieved 800m downloads as quickly as 2018.

However, VR and AR have not taken off in quite the way many industry observers seem to have imagined, probably because the technology has not yet matched the hype. In this context, a technology like eye tracking that can push the boundaries of the VR and AR experience is bound to excite innovators. In 2016, Facebook acquired the eye tracking company Eye Tribe, Google acquired Eyefluence and in 2017 Apple acquired SMI with CEO Tim Cook telling Bloomberg: “I think it is profound. I am so excited about it, I just want to yell out and scream”.

There are a number of reasons for eye tracking to be a game changer for VR and AR:

- **Foveated rendering** is a graphics rendering technique that uses an eye tracker to reduce the rendering workload by reducing the image quality in the eye’s peripheral vision (the part of the retina outside the fovea, where the eye’s vision is sharpest). This reduces the computational power required for displaying demanding VR scenes. By doing this, it can drastically cut down the complexity of the scene in the peripheral vision, where the detail cannot be resolved anyway, and focus most of the processing power where it contributes most to detail. One example of how this can look is showed in the picture below.

---

#### Illustration of foveated rendering

---



Source: SEB, Techcrunch.com

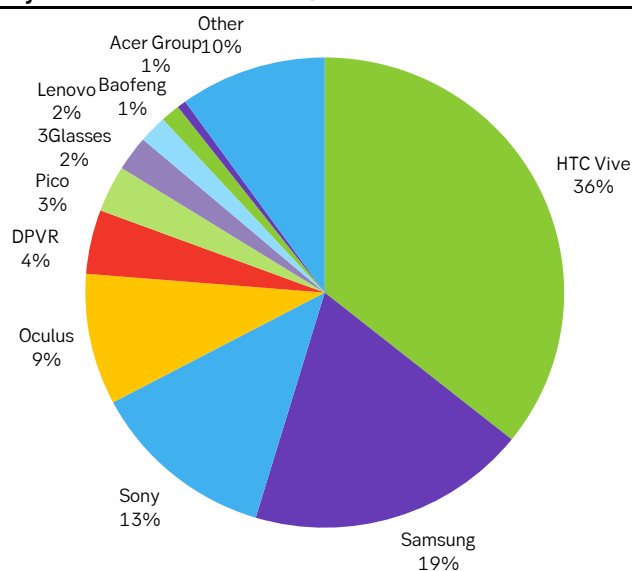
- Used as a **biometric identifier** eye tracking technology allows one headset to have multiple user profiles. When a user puts on the headset, it can instantly identify the person as a unique user and call up their environment, content library, game progress and settings.
- It can also be used as a precisely measured IPD (inter-pupillary distance) which is important in VR because it is required to move the lenses and displays an optimal position for comfort and visual quality.
- Interactive eye contact, meaning that the user can accurately track another user’s gaze in real time, enabling a fundamental dimension of human interaction.

In March 2018, Tobii announced that it had collaborated with Qualcomm to bring eye tracking to standalone (no wires) VR headsets by its Qualcomm Snapdragon 845 Mobile VR Platform. This includes Tobii's EyeCore eye tracking algorithms and hardware design.

A few months later, Tobii announced a partnership with StarVR One which has integrated Tobii's eye tracking in its headsets. This includes foveated rendering and automatic interpapillary distance measurement. The delivery to StarVR One includes Tobii EyeChip and licences for Tobii's system design, IP and software. Tobii has also announced a deal with HTC to bring eye tracking into its HTC Vive Pro Eye, which was announced at the beginning of 2019.

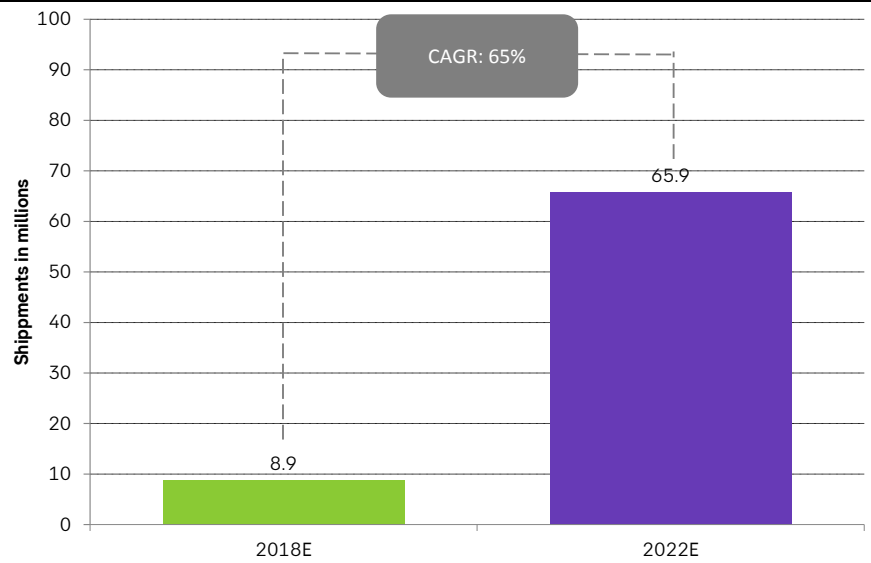
Today, the market is dominated by HTC Vive which accounts for about 36% of the total VR market, followed by Samsung (19%) and Sony (13%) – see chart below.

**Virtual Reality - Revenue market share Q1 2018**



Source: SEB, IDC Q1 2018

Apart from the announced collaborations with VR manufacturers, Qualcomm and StarVR – Tobii announced a large agreement with a leading VR headset manufacturer for the development and delivery of eye tracking technology and integration in an upcoming VR headset. The manufacturer is not identified, but Tobii has said that all of the VR companies it collaborates with (and all of these companies' total VR headsets) account for about 50% of the total VR market.

**Shipments in millions, total AR/VR**

Source: SEB, IDC

The total market of VR shipments are expected to grow at a CAGR of 65%, from about nine million VR/AR headset shipments in 2018 to about 66 million in 2022. This number has been revised down from forecasting firm IDC, which in 2016 forecast an expected 100 million headsets sold.

Tobii as an independent player might also be a good fit for HTC, Samsung and Sony.

**AR/VR headset market share by form factor**

Technology	Form Factor	2018*	2022*
Augmented Reality	Screenless Viewer	5.0%	1.0%
	Standalone HMD	2.2%	21.1%
	Tethered HMD	1.0%	18.4%
Virtual Reality	Screenless Viewer	34.5%	4.6%
	Standalone HMD	14.8%	33.0%
	Tethered HMD	42.5%	21.8%
<b>Total</b>		<b>100.0%</b>	<b>100.0%</b>

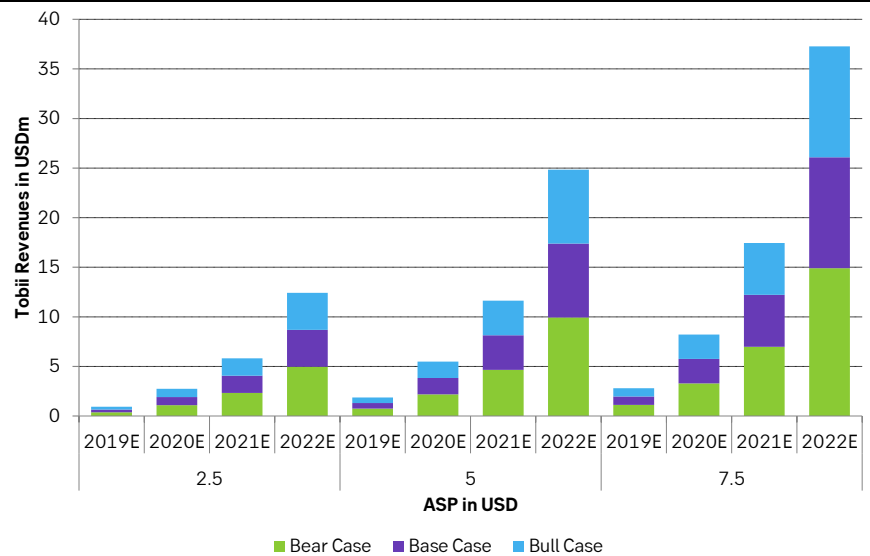
Source: SEB, IDC

An expected trend shown in the table above is that standalone VR and AR headsets are expected rapidly to increase their share of the market. Standalone headsets work wirelessly, which is why eye tracking is an even more significant component. Due to features such as foveated rendering that eye tracking brings into a VR headset, this leads to lower demand in processing power and energy. Therefore, a trend towards standalone headsets favours eye tracking companies in the industry.

**VR addressable market**

Today, about 8 million VR and AR headsets are shipped worldwide per year divided into Screenless- (need a smartphone device connected), Tethered- (Wires) and Standalone (wireless) headsets (see left chart below). The addressable market for Tobii eye tracking is mainly Tethered- and Standalone headsets where Tobii is in projects to integrate its eye tracking products.

### Bull-, Base- and Bear case in Tobii VR & AR Revenues



Source: SEB, IDC, Statista and Trendforce

The VR/AR revenues of Tobii are illustrated in the right chart above based on a Bull-, Base- and Bear case scenario where Tobii's market share in the Bull case is assumed to be 50%, Base case 35% and Bear case 20%.

#### Assumptions:

- The penetration level of eye tracking into VR and AR headsets will develop at the same pace as the fingerprint penetration.
- Tobii will only sell its eye tracking products to developers of Tethered- and Standalone headset manufacturers.
- Tobii will have the same market share within the VR as AR market.

Based on these assumptions, Tobii will reach annual revenues in 2022 of about USD 35m in our Bull case, about USD 25m in our Base case and USD 15m in our Bear case.

The key driver will be the shift in today VR/AR headsets sold from mainly Tethered and Screenless dominating the market towards Standalone headsets. This is due to the fact that Standalone is much need the technology foveated rendering (described above) to reduce the CPU (Central Processing Unit) of the headset.

#### Competitive positioning

The competition faced by Tobii Tech is very fragmented and difficult to determine since many eye-tracking companies have been acquired by large players such as Facebook, Apple and Google. According to Tobii's annual report, it has 100% of the computer gaming market, integrating eye tracking into gaming computers and computer games.

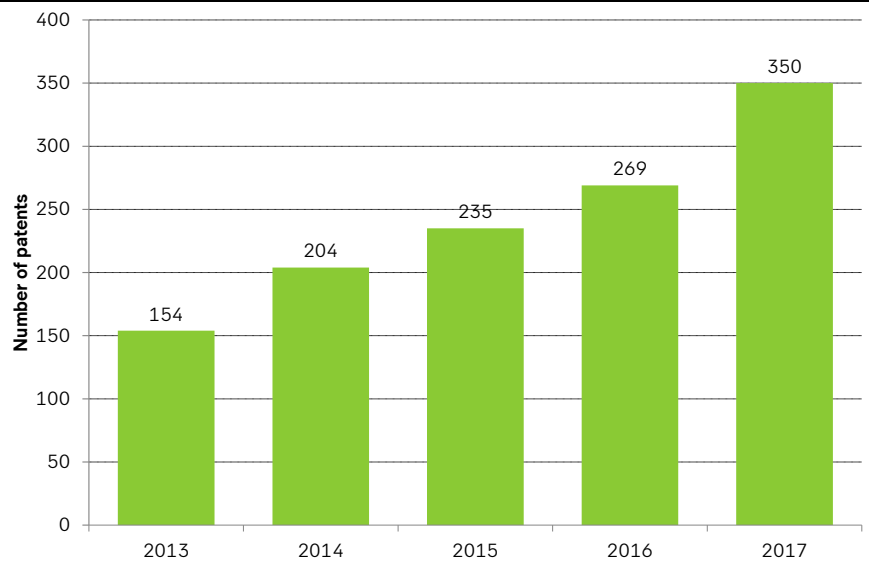
**Tobii Tech market shares and strategic priorities**

Segment	Tobii Tech						
	Computer gaming	Mainstream computers	Virtual Reality	Augmented reality	Smart phones	Automotive	Niche markets
Long term market potential	Large	Very large	Large	Large	Very large	Large	medium
Market Share (2017)	100%	n/a	n/a	n/a	n/a	0%	n/a
Market Share (2016)	100%	n/a	n/a	n/a	n/a	0%	n/a
Current strategic priority (2016)	High	High	High	-	-	Low	Medium

Source: SEB, Tobii Annual Reports

The number of eye tracking related patents and patent applications has increased rapidly with Tobii having 350 patents (2016), according to an analysis by Clearview (December 2016), but we expect this to be higher in 2018. This has more than doubled from about 150 in 2014 (see chart below).

**Number of patents and patent applications, Tobii**

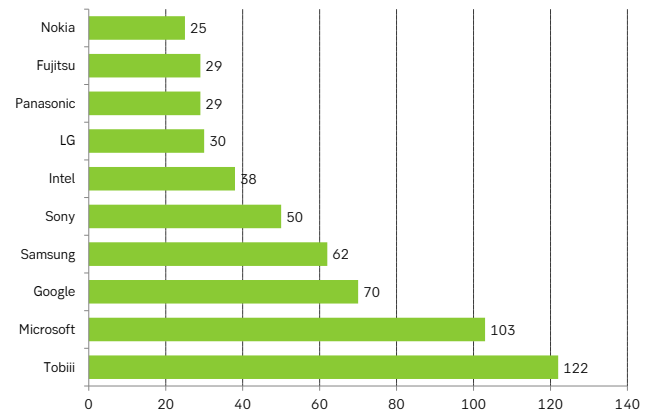


Source: SEB, Tobii annual report 2017

The websites of the US Patent and Trademark Office and the European Patent Office show that Tobii had 122 patent applications and patents granted in November 2016 (according to Tobii it had 350 patents in 2017, but this figure includes those in other regions, especially Asia, and patents not visible on the official websites). The second largest holder of such patents is Microsoft followed by Google, with 103 and 70 patents respectively.

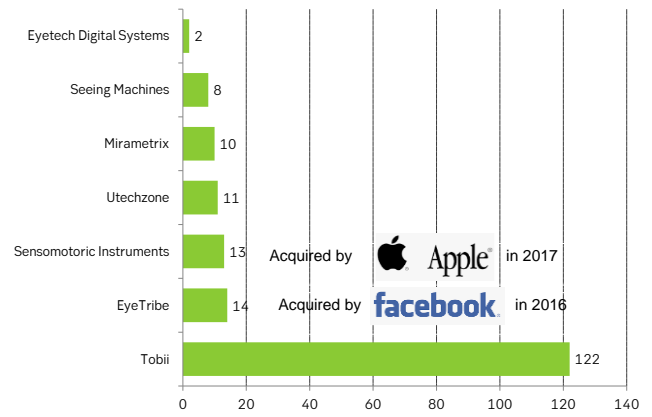
By comparing this to eye tracking focused competitors, Eyetribe and Sensomotoric instruments (SMI) were the largest competitors, measured by number of eye tracking patents. These were acquired by Apple and Facebook respectively, making Utechzone the second largest independent eye-tracking focused competitor.

**Portfolio of eye tracking-related patents, all players**



Source: SEB, Tobii annual report 2017

**Eye tracking-related patents of eye-tracking vendors**



Source: SEB, Tobii annual report 2017

**Niche markets**

Tobii’s eye tracking products are also used in smaller markets where Tobii is working on projects close to its customers to customize eye tracking solutions. Usually, these customers purchase Tobii’s integration platform, including eye tracking algorithms, and develop turnkey solutions including the application software.

These customers are found in areas such as robotic surgery, casino machines, screening and identification of dyslexia and various health conditions (add more).

# Financial overview

## Financial targets

### Summary of targets

Tobii has outlined the following medium-term targets:

- **Group:** To achieve profitability in 2020.
- **Dynavox:** Increase revenue on average by 10% a year with an EBIT margin of 15-20%.
- **Pro:** Increase revenues on average by 15-20% a year, and to reach an EBIT margin of 15% by 2020.
- **Tech:** To reach profitability in 2021.

### Tobii's financial targets

	Dynavox	Pro	Tech
Sales target (Increase on average per year)	10%	15-20%	N/A
EBIT margin target	15-20%	15% in 2020	Profitability in 2021
Group target is to reach profitability in 2020			

Source: Tobii's medium-term targets

# Financial history

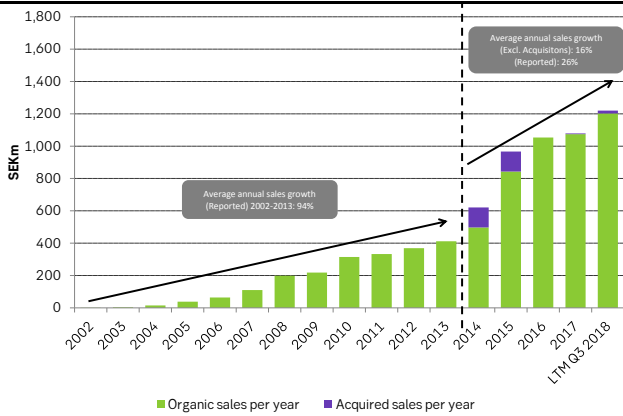
## Sales

Tobii has a history of strong revenue growth of about 94% on average from 2002 to 2013. Since 2014, Tobii has grown at an average pace of 16% year-on-year excluding acquisitions and 26% including acquisitions until LTM Q3 2018.

## EBIT and EBIT margins

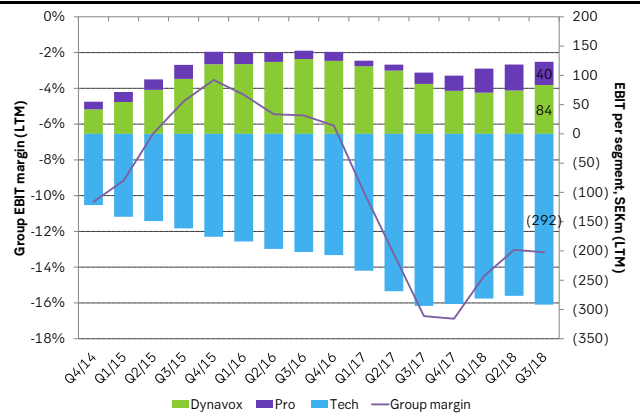
The EBIT margin has been negative for the group, at about -4% to -17% between 2015 and 2017. In that period, Dynavox had positive margins of 10-16%, Pro 6-10% and Tech negative margins of -215 to -300%.

**Tobii's historical revenues and revenue CAGR**



Source: Tobii annual report and company filings

**Tobii's historical EBIT and EBIT margin**

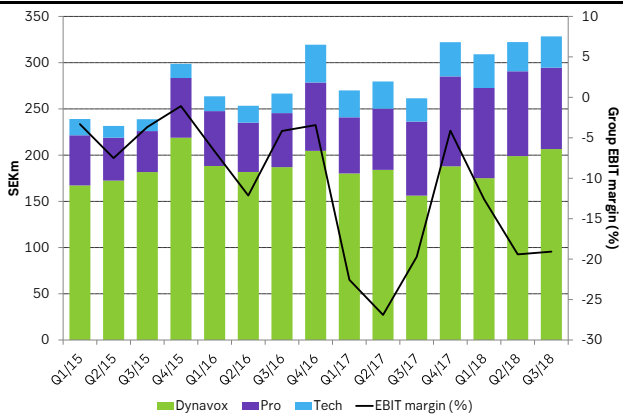


Source: Tobii annual report and company filings

## Quarterly seasonality

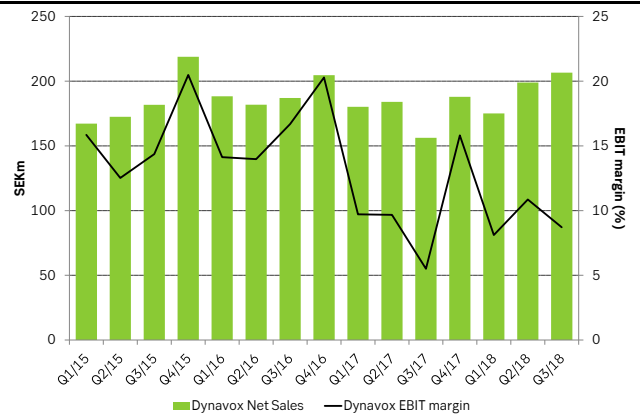
Tobii has high quarterly seasonality. Q4 shows strong sales and strong margins due to seasonal effects in Dynavox and Pro. Pro's products are often sold in Q4 due to a budget impact in the public sector. When money is left in the budget during the last quarter, they are more willing to spend it on Pro's products. This can also be seen in Q1, due to Pro's sales in Japan which finish their budget year in Q1 (see charts below). The same quarterly effect can be seen in Dynavox which also shows slightly stronger sales and margins in Q4.

**Group net sales and EBIT margin (quarterly)**



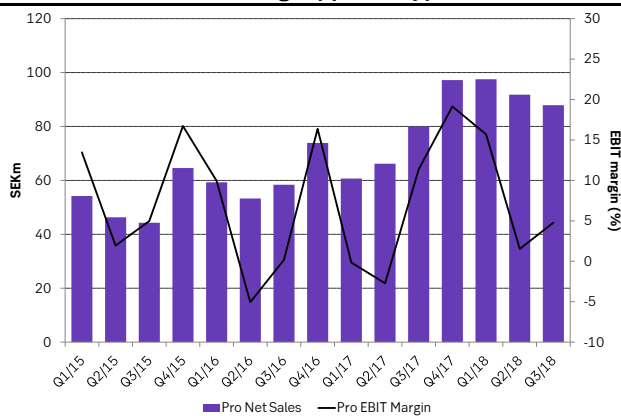
Source: SEB, company data

**Dynavox net sales and EBIT margin (quarterly)**



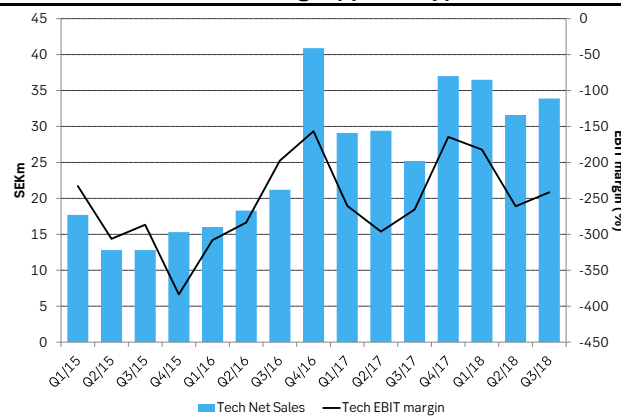
Source: SEB, company data

**Pro net sales and EBIT margin (quarterly)**



Source: SEB, company data

**Tech net sales and EBIT margin (quarterly)**



Source: SEB, company data

**SEB versus Tobii's targets**

**SEB estimates versus Tobii's targets**

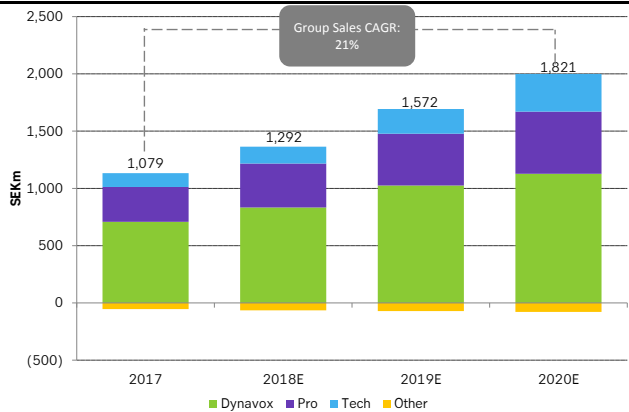
	Dynavox	Pro	Tech
Sales target (Increase on average per year)	10%	15-20%	N/A
EBIT margin target	15-20%	15% in 2020	Profitability in 2021
Group target is to reach profitability in 2020			
Sales growth	CAGR 16% 2018-2020E (incl. M&A)	CAGR 19% 2018-2020E (organic)	CAGR 50% 2018-2020E (organic)
EBIT margin estimates	Average 12% margin	Average 10% margin	Profitability beyond forecast period
Group profitability beyond forecast period			

----- Dotted line is SEB estimates

Source: SEB, Tobii medium-term targets

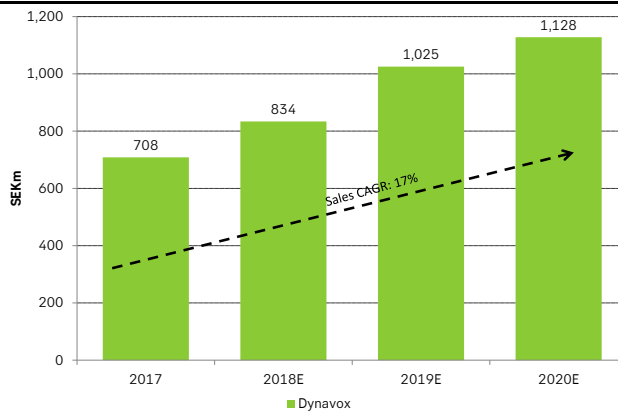
We estimate group revenue CAGR of 22% in 2018-2020. Within that, we forecast Dynavox sales to grow at a CAGR of 16% (boosted by SEK 90m in sales for 2019 by the acquisition of Smartbox), Pro to report organic growth of 19% and Tech organic growth of 50%.

**Group sales estimates**



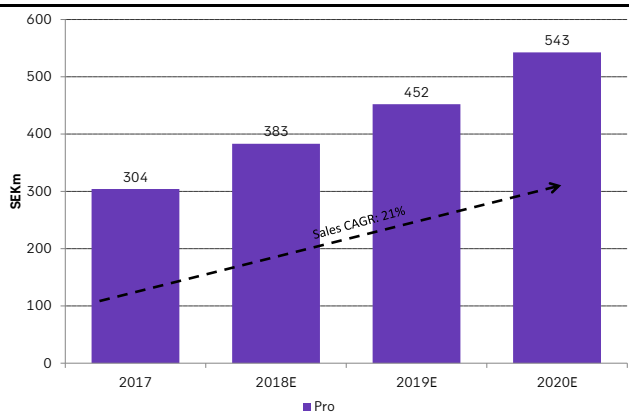
Source: SEB

**Dynavox sales estimates**



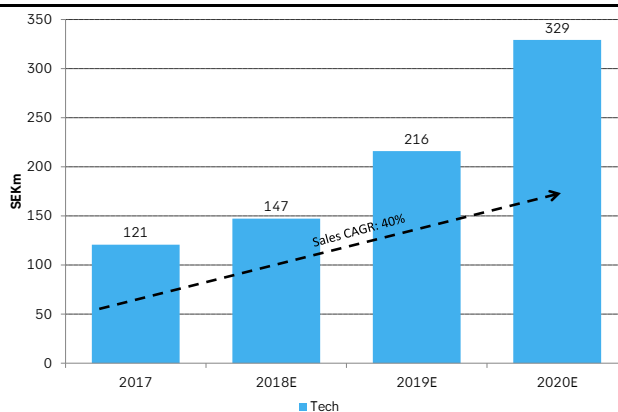
Source: SEB

**Pro sales estimates**



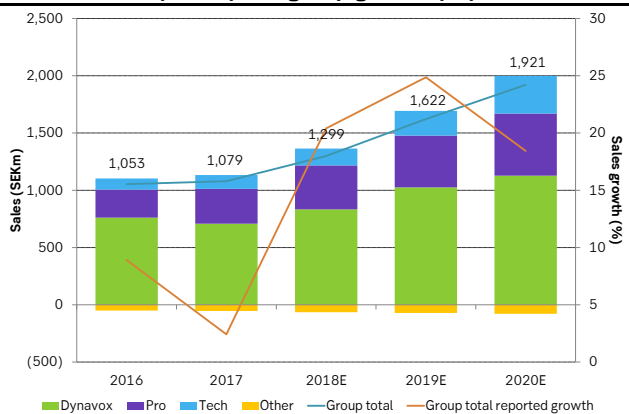
Source: SEB

**Tech sales estimates**



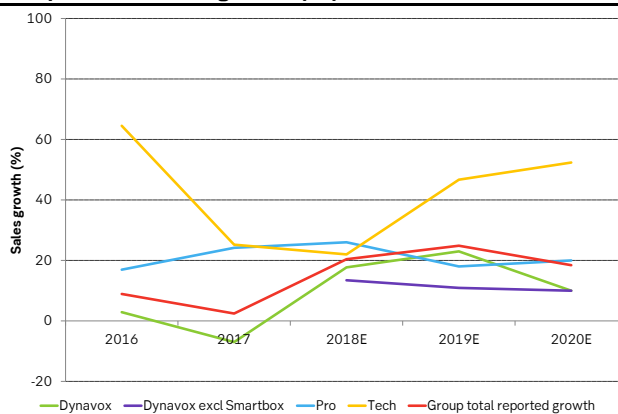
Source: SEB

**Tobii revenues (SEKm) and group growth (%)**



Source: SEB, Tobii

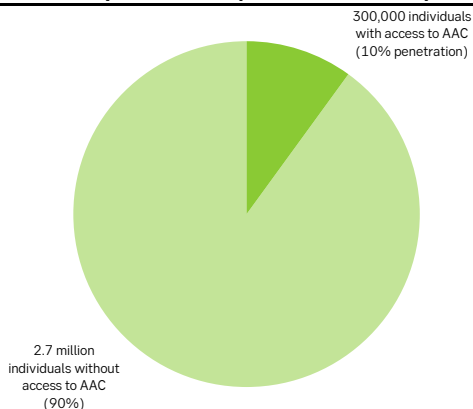
**Group and divisional growth (%)**



Source: SEB, Tobii

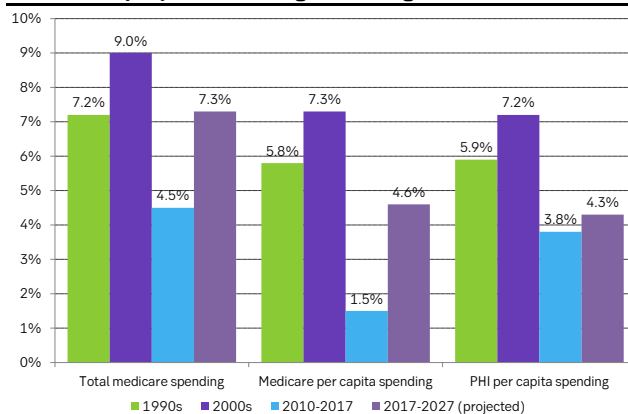
- Dynavox:** We expect 16% sales CAGR (2018-2020E) due to strong spending in the US by Medicare, Medicaid and private health insurance combined with low US market penetration rates. By Dynavox upgrading its market portfolio, it is well positioned to gain upon this underlying market trend and continue to penetrate the US market. This is also including the acquisition of Smartbox which adds some SEK 30m in sales 2018 and above SEK 90m in 2019.

**US AAC markets penetration (no. of individuals), 2013**



Source: SEB, Arthur D. Little.

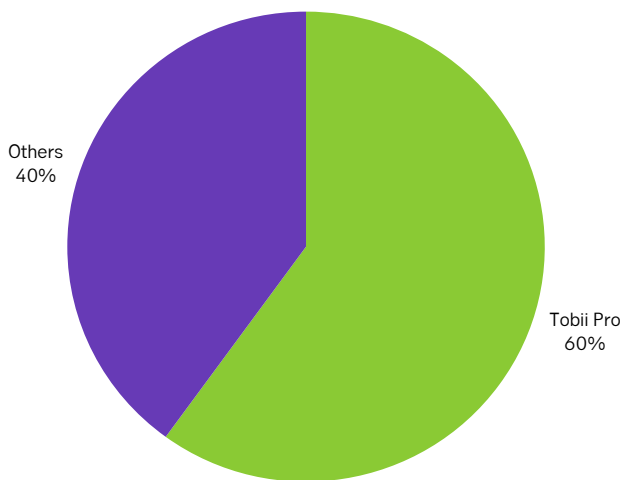
**Actual and projected average annual growth rates**



Source: SEB, KFF  
PHI is Private health insurance

- Tobii Pro's** market share increased from 47% in 2016 to 60% in 2017 because of Apple's acquisition of SMI. This proves the strong demand for eye tracking products within the market-research market since customers go straight to Tobii Pro when a competitor is leaving the market. We also see the growing eye tracking market to continuing drive demand for Tobii Pro's products (growing at a CAGR of 25% until 2025) according to GranViewResearch and Alliedmarketresearch.

**Tobii Pro market share (2017)**



Source: SEB, Tobii annual report 2017

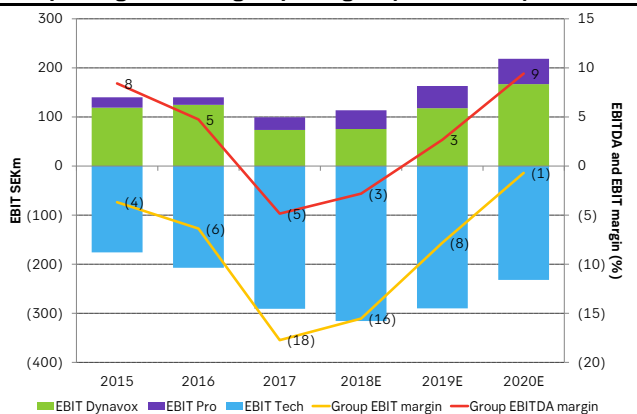
- Tobii Tech** has spent heavily on R&D to prepare its product offering for the mass market in gaming and VR/AR. Tobii expects sales of these products to increase during the first half of 2019. We identify three potential triggers that could rapidly boost Tobii Tech's sales:
  - Increased integration into gaming computers and strong market demand for eye tracking leading to higher demand from computer manufacturers.
  - Eye tracking, as a feature in gaming, boosting demand for the Eye Tracker 4C for people who cannot afford expensive eye tracking integrated gaming computers.

- VR/AR headsets being launched with features such as foveated rendering that enhance the user experience leading to more manufacturers demanding Tobii's eye tracking platforms.

## EBITDA and EBIT margins

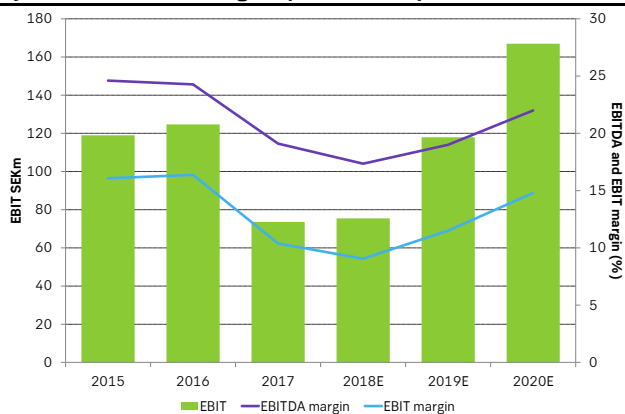
We expect the adjusted EBITDA margin to turn positive at 3% in 2019. Given our estimates for depreciation, this translates into adjusted EBIT margin estimates in 2018-2020 between -18% and -1%.

**EBIT per segment and group margins (2015-2020)**



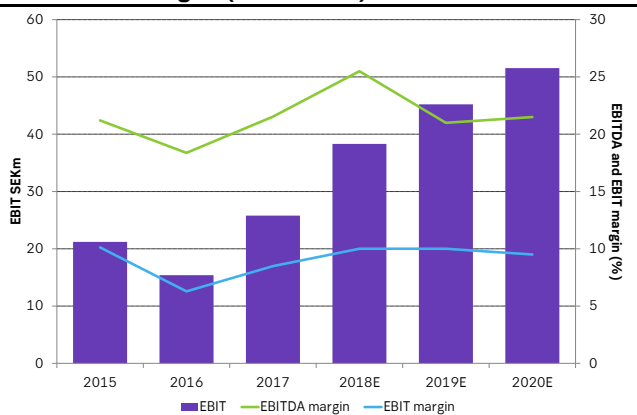
Source: SEB, company data

**Dynavox EBIT and margins (2015-2020)**



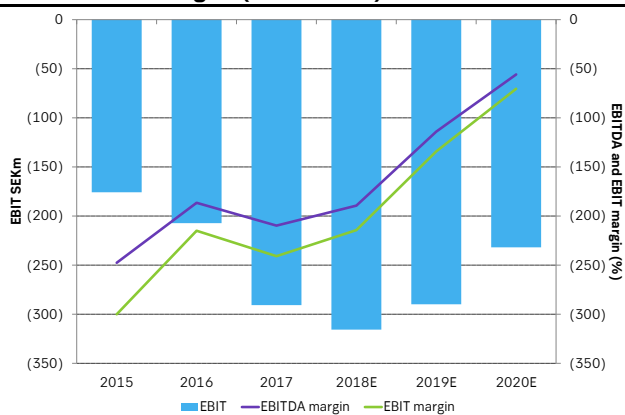
Source: SEB, company data

**Pro EBIT and margins (2015-2020)**



Source: SEB, company data

**Tech EBIT and margins (2015-2020)**

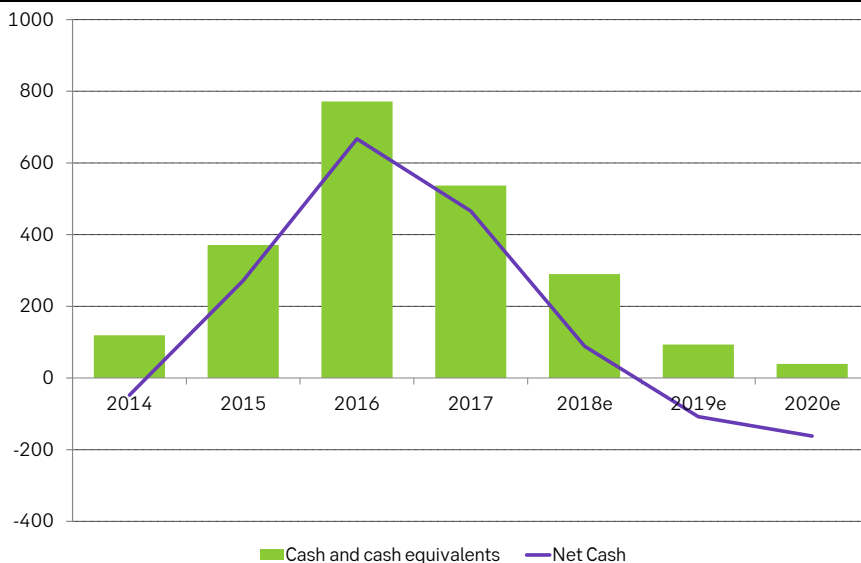


Source: SEB, company data

### Cash situation

We expect Tobii to have a cash position of about SEK 300m in 2018 and based on our revenue and profit forecasts we believe that it has sufficient cash to continue as a going concern. If Tobii Tech does not take off at the pace we expect, Tobii Group could be in need of cash in late 2019/2020.

**Cash position**

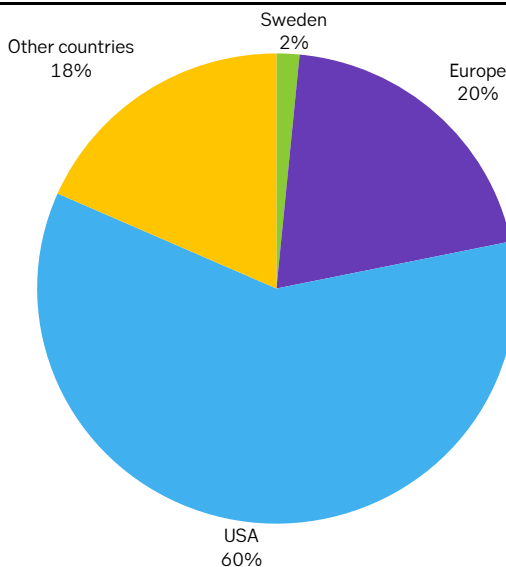


Source: SEB, company data

**Currency exposure**

About 60% of Tobii Group’s net sales are generated in the US which is why the largest currency exposure is in US dollars. Euros represent 20% of sales, other currencies 18% and Swedish kronor 2%. We believe the split in Tobii Dynavox is c. 70% USD and the rest in EUR and GBP. In Tobii Pro, we expect revenues to be divided equally one-third between USD, EUR and JPY and we assume Tobii Tech sales being paid in USD. At the group level, we assume most COGS to be paid in USD which is the currency in which most revenues are generated. We consider the company to be relatively net hedged.

**Currency exposure, net sales 2017**



Source: SEB, company data

# Valuation

Our valuation approach for Tobii uses a separate peer comparison for each of its three business units that we have built into a sum-of-the parts structure. This gives a base case value of SEK 38 per share, a bear case of SEK 30 and a bull case of SEK 50. We have also applied a DCF to the business as a whole which gives a value of SEK 44. As we point out in the financials section, we see a risk that Tobii will run out of cash after our forecast period unless Tobii Tech takes off.

## Peer comparison

Tobii's three businesses have different valuation dynamics. Dynavox and Pro have positive margins, whereas Tech is loss making currently. Also, the entry barriers and position in the value chain vary between the three segments. This leads us to choose three different peer groups to derive an SOTP.

- **Tobii Dynavox:** As most of Dynavox's sales are derived from revenues that are dependent on insurance funding, the demands on certification and regulation create barriers to entry. The gross margin is high in this segment which suggests long-term higher cash flow margins. These two factors justify a high multiple but the volatile historical organic growth profile is a concerning, counterbalancing factor. We group appropriate peers for Dynavox under the banner "assistive medical equipment". Given the capitalisation of R&D in Tobii Dynavox we believe it makes sense not only to look at EV/EBIT (which would be default for a company such as Tobii) but also EV/(EBITDA-capex) as it captures capitalisation. We use the average of these two multiples in our SOTP.
- **Tobii Pro:** This is also a high tech unit but it is less of a regulated product than Dynavox, so we compare this to other fast-growing Nordic tech companies, grouped in the table below as "Nordic high growth tech peers". Given the capitalisation of R&D in Tobii Pro we believe it makes sense not only to look at EV/EBIT (which would be default for a company such as Tobii) but also EV/(EBITDA capex) as it captures capitalisation. We use the average of these two multiples in our SOTP.
- **Tobii Tech:** This is a unit that might prove to be a great value driver in Tobii but also risks never taking off – this is what we base our sensitivity on to derive the fair value range. In our view Tobii Tech is targeting several very interesting verticals and we see a good chance of the company being successful at some point, but timing is very difficult to assess, in terms of both average selling prices and margins. We have taken a stab at these factors in our sensitivity analysis to derive the fair value range. We group appropriate peers for Tech under the banner "mass-market components".

As a reality check for Tobii Tech's peer group we also look at the EV/S multiples for "Nordic high growth tech" and adjust the multiples in this peer group with the gross margin difference in this peer group (on average 80% and median 90%) and Tobii Tech (around 50% longer term) and by doing this we believe that our approach makes sense.

## Peer group comparison

	Ccy	Price	Mkt cap. SP performance (%)			PER			EV/EBITDA			EV/(EBITDA-Capex)			EV/EBIT			EV/Sales			
			SEKbn	1M	3M	12M	2018E	2019E	2020E	2018E	2019E	2020E	2018	2019	2020	2018E	2019E	2020E	2018E	2019E	2020E
<b>Dynavox peers: Assistive Medical Equipment</b>																					
Amplifon SpA	EUR	16	4	20	-3	13	32	26	22	17	14	12	34	22	19	24	19	17	3	2	2
GN Store Nord A/S	DKK	291	42	19	4	44	30	25	21	21	18	17	23	20	18	25	22	20	4	4	4
Handicare Group AB	SEK	31	2	-9	-25	-37	10	9	9	10	8	7	15	11	9	15	11	10	1	1	1
MedCap AB (publ)	SEK	84	1	4	0	57	61	19	15	15	11	9	23	14	11	25	16	13	2	2	2
Sonova Holding AG	CHF	181	12	15	15	21	28	25	22	20	18	16	21	19	17	25	22	20	5	4	4
William Demant Holding A/S	DKK	208	53	13	-3	13	26	22	20	19	17	16	23	19	17	22	19	18	4	4	4
<b>Peer group average</b>			19	10	-2	19	31	21	18	17	14	13	23	17	15	23	18	16	3	3	3
<b>Peer group median</b>			8	14	-2	17	29	24	21	18	15	14	23	19	17	24	19	17	4	3	3
<b>Pro peers: Commercial Research</b>																					
NanoFocus AG	EUR	2	0	-7	7	-26	-	158	26	26	10	8	-	-	-	-7	29	15	1	1	1
Smart Eye AB (publ)	SEK	70	1	3	3	42	-	-	30	-21	-33	16	-12	-14	98	-16	-18	27	16	10	4
Seeing Machines Ltd	GBP	4	0	13	-38	-38	-	-	-	-4	-3	-8	-7	-4	-9	-3	-3	-9	4	4	2
Utechzone Co Ltd	TWD	63	4	-11	21	28	11	9	-	-	-	-	9	6	-	1	1	-	1	1	-
<b>Peer group average</b>			2	2	-5	11	11	9	30	-12	-18	4	-9	-9	45	-3	-5	9	7	5	3
<b>Peer group median</b>			1	3	3	28	11	9	30	-12	-18	4	-9	-9	45	-3	-3	9	4	4	3
<b>Pro peers: Nordic High Growth Tech Peers</b>																					
CLX Communications AB (publ)	SEK	105	6	30	2	53	38	24	18	17	13	11	17	12	10	33	19	15	2	1	1
Doro AB	SEK	38	1	12	-5	-10	10	9	9	4	4	4	6	5	4	7	6	6	0	0	0
Edgewise AB (publ)	SEK	13	0	6	-1	-37	-	24	16	-116	7	5	-35	8	5	-14	12	8	1	1	1
Enea AB	SEK	114	2	12	12	20	18	17	13	13	10	9	11	10	8	15	13	10	3	3	2
HMS Networks AB	SEK	120	6	-1	-15	-6	36	26	21	21	17	14	25	19	16	25	19	16	4	4	3
IAR Systems Group AB	SEK	246	3	1	0	19	38	33	27	24	20	16	24	20	16	29	24	19	8	7	6
Invisio Communications AB	SEK	56	2	-6	-7	-33	55	29	19	38	20	13	41	21	14	41	22	14	7	5	4
Micro Systemation AB (publ)	SEK	58	1	7	-22	-34	28	19	13	19	12	9	22	14	9	20	12	9	3	3	2
Mycronic AB (publ)	SEK	116	11	6	7	34	15	14	18	10	10	13	10	9	10	11	11	14	3	3	3
RaySearch Laboratories AB (publ)	SEK	102	3	13	-17	-31	32	23	16	11	8	6	16	12	9	19	14	9	4	3	3
SECTRA AB	SEK	212	8	10	-2	13	48	43	39	25	24	21	-	-	-	30	30	27	6	5	5
<b>Peer group average</b>			4	5	-5	-6	34	25	20	5	14	12	14	14	11	20	17	14	4	4	3
<b>Peer group median</b>			3	6	-2	-6	34	24	18	19	12	13	19	13	10	20	14	14	4	3	3
<b>Tech peers: Massmarket Components</b>																					
Egis Technology Inc	TWD	182	13	-18	89	-19	14	9	9	9	5	5	9	5	4	11	7	6	2	2	1
Fingerprint Cards AB	SEK	19	6	86	107	15	-	2894	95	-8	43	30	-6	197	52	-9	109	69	3	4	4
HMS Networks AB	SEK	120	6	-1	-15	-6	36	26	21	21	17	14	25	19	16	25	19	16	4	4	3
Paragon IdSA	EUR	20	0	45	-15	-51	7	5	5	6	6	5	9	-	-	9	7	6	1	1	1
Precise Biometrics AB	SEK	1	1	31	-2	-18	-	48	24	-	-	-	-	-	-	-138	30	15	6	5	4
Synaptics Inc	USD	37	1	4	1	-18	9	8	8	8	6	6	12	6	5	9	8	8	1	1	1
<b>Peer group average</b>			3	33	15	-16	18	596	30	7	18	14	10	74	25	-21	35	23	3	3	3
<b>Peer group median</b>			1	31	-2	-18	9	26	21	7	11	10	11	19	16	9	19	15	3	4	3
<b>Tobii Dynavox peer median</b>				14	-2	17	29	24	21	18	15	14	23	19	17	24	19	17	4	3	3
<b>Tobii Pro peer median</b>				6	-2	-6	34	24	18	19	12	13	19	13	10	20	14	14	4	3	3
<b>Tobii Tech peer median</b>				31	-2	-18	9	26	21	7	11	10	11	19	16	9	19	15	3	4	3
<b>Total Peer group average</b>			7	13	1	2	23	163	25	4	7	11	10	24	24	5	16	16	4	4	3
<b>Total group median</b>			2	10	-2	6	20	24	21	13	12	11	15	16	17	14	16	14	4	3	3

Source: SEB, Thomson Reuters

## Peer group comparison

	ND/EBITDA			Gross margin (%)			EBIT Margin (%)			Gross Profit CAGR 17-20E	EBIT CAGR 17-20E	Sales CAGR 17-20E
	2018E	2019E	2020E	2018E	2019E	2020E	2018E	2019E	2020E			
<b>Dynavox peers: Assistive Medical Equipment</b>												
Amplifon SpA	2	2	2	78	80	79	12	12	13	29%	15%	10%
GN Store Nord A/S	1	1	1	63	63	64	17	18	18	10%	13%	6%
Handicare Group AB	3	2	2	43	43	43	6	8	9	-4%	2%	3%
MedCap AB (publ)	-	-	-	na	na	na	7	11	12	na	102%	6%
Sonova Holding AG	0	0	1	71	71	72	18	20	20	8%	10%	3%
William Demant Holding A/S	2	1	1	77	77	78	19	20	20	8%	12%	5%
<b>Peer group average</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>66</b>	<b>67</b>	<b>67</b>	<b>13</b>	<b>15</b>	<b>15</b>	<b>10%</b>	<b>26%</b>	<b>6%</b>
<b>Peer group median</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>71</b>	<b>71</b>	<b>72</b>	<b>15</b>	<b>15</b>	<b>16</b>	<b>8%</b>	<b>13%</b>	<b>5%</b>
<b>Pro peers: Commercial Research</b>												
NanoFocus AG	-	-	-	-	-	-	-14	3	5	-	-	5%
Smart Eye AB (publ)	2	1	0	-	-	-	-102	-52	15	-	-190%	57%
Seeing Machines Ltd	1	0	0	39	35	63	-114	-121	-25	273%	-21%	22%
Utechzone Co Ltd	-	-	-	41	42	-	13	16	-	-	-	-
<b>Peer group average</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>40</b>	<b>38</b>	<b>63</b>	<b>-68</b>	<b>-52</b>	<b>-5</b>	<b>273%</b>	<b>-105%</b>	<b>40%</b>
<b>Peer group median</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>40</b>	<b>38</b>	<b>63</b>	<b>-102</b>	<b>-52</b>	<b>-5</b>	<b>273%</b>	<b>-105%</b>	<b>40%</b>
<b>Pro peers: Nordic High Growth Tech Peers</b>												
CLX Communications AB (publ)	1	1	0	25	25	25	5	7	8	32%	34%	10%
Doro AB	1	0	0	na	na	na	6	7	7	na	17%	3%
Edgewise AB (publ)	90	-6	-5	69	72	72	-7	8	10	5%	35%	8%
Enea AB	2	2	1	na	na	na	21	21	24	na	35%	9%
HMS Networks AB	1	1	-	61	61	62	17	19	20	16%	21%	11%
IAR Systems Group AB	-1	-1	-1	98	95	90	29	31	34	17%	17%	10%
Invisio Communications AB	-2	-1	-1	-	-	-	16	24	29	-	28%	18%
Micro Systemation AB (publ)	-3	-2	-2	88	90	90	15	21	25	24%	17%	12%
Mycronic AB (publ)	-1	-1	-2	56	56	54	28	26	22	5%	-1%	1%
RaySearch Laboratories AB (publ)	0	0	0	93	94	95	22	25	30	18%	21%	14%
SECTRA AB	-1	-1	-1	87	89	89	20	18	19	17%	11%	6%
<b>Peer group average</b>	<b>10</b>	<b>-1</b>	<b>-1</b>	<b>81</b>	<b>81</b>	<b>80</b>	<b>18</b>	<b>21</b>	<b>24</b>	<b>15%</b>	<b>20%</b>	<b>10%</b>
<b>Peer group median</b>	<b>-1</b>	<b>-1</b>	<b>-1</b>	<b>88</b>	<b>90</b>	<b>90</b>	<b>20</b>	<b>21</b>	<b>24</b>	<b>17%</b>	<b>21%</b>	<b>10%</b>
<b>Tech peers: Massmarket Components</b>												
Egis Technology Inc	-	-	-	-	-	-	-	-	-	-	-	-
Fingerprint Cards AB	1	-5	-4	4	24	31	-37	3	5	-24%	-21%	-2%
HMS Networks AB	1	1	-	61	61	62	17	19	20	16%	21%	11%
Paragon Id SA	3	2	2	52	-	-	8	9	9	-	-	4%
Precise Biometrics AB	-	-	-	-	-	-	-4	17	28	-	-247%	11%
Synaptics Inc	1	0	-1	35	37	37	10	12	12	6%	-1%	1%
<b>Peer group average</b>	<b>1</b>	<b>-1</b>	<b>-1</b>	<b>38</b>	<b>41</b>	<b>43</b>	<b>-1</b>	<b>12</b>	<b>15</b>	<b>0%</b>	<b>-62%</b>	<b>5%</b>
<b>Peer group median</b>	<b>1</b>	<b>0</b>	<b>-1</b>	<b>43</b>	<b>37</b>	<b>37</b>	<b>8</b>	<b>12</b>	<b>12</b>	<b>6%</b>	<b>-11%</b>	<b>4%</b>
<b>Tobii Dynavox peer median</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>71</b>	<b>71</b>	<b>72</b>	<b>15</b>	<b>15</b>	<b>16</b>	<b>8%</b>	<b>13%</b>	<b>5%</b>
<b>Tobii Pro peer median</b>	<b>-1</b>	<b>-1</b>	<b>-1</b>	<b>88</b>	<b>90</b>	<b>90</b>	<b>20</b>	<b>21</b>	<b>24</b>	<b>17%</b>	<b>21%</b>	<b>10%</b>
<b>Tobii Tech peer median</b>	<b>1</b>	<b>0</b>	<b>-1</b>	<b>43</b>	<b>37</b>	<b>37</b>	<b>8</b>	<b>12</b>	<b>12</b>	<b>6%</b>	<b>-11%</b>	<b>4%</b>
<b>Total Peer group average</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>56</b>	<b>57</b>	<b>63</b>	<b>-9</b>	<b>-1</b>	<b>12</b>	<b>75%</b>	<b>-30%</b>	<b>15%</b>
<b>Total group median</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>57</b>	<b>55</b>	<b>67</b>	<b>11</b>	<b>13</b>	<b>14</b>	<b>12%</b>	<b>1%</b>	<b>7%</b>

Source: SEB, Thomson Reuters

## Sum-of-the-parts

Our bull case assumes that Tobii Tech will reach about SEK 500m in sales by 2020 which has a positive effect on the EV but also a positive impact on net cash (as Tech will not be a drag on cash flow) and hence an even more significant impact on market cap. Our bear case is that cash burn is such that new equity is needed (for obvious reasons we have not attempted to suggest the actual effect of a rights issue on our bear case value of SEK 30).

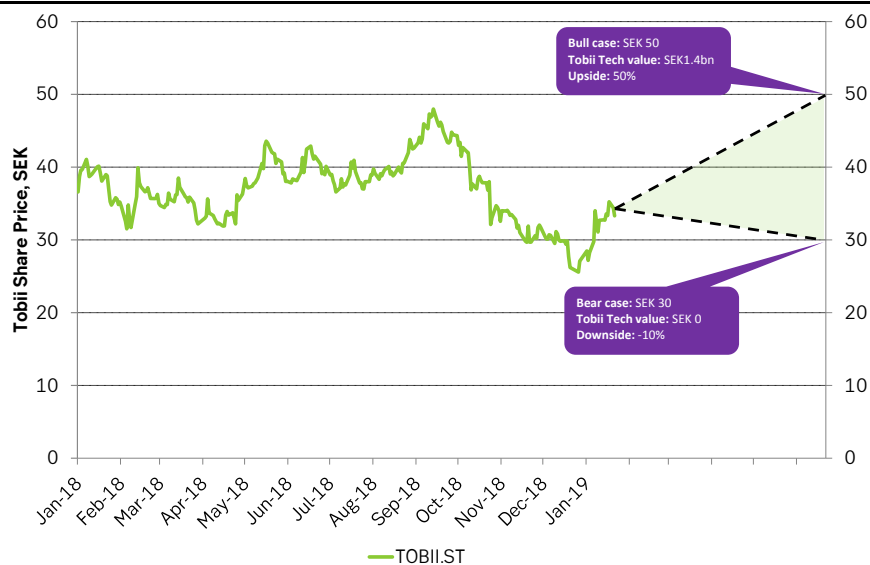
**Sum of the parts**

SOTP	EV (SEKm)	Multiples 2019E
<b>Dynavox</b>		
EV/EBIT 2019E	2,291	19
EV/EBITDA-capex 2019E	2,412	19
<b>Average</b>	<b>2,352</b>	
<b>Pro</b>		
EV/EBIT 2019E	614	14
EV/EBITDA-capex 2019E	444	13
<b>Average</b>	<b>529</b>	
<b>Tech</b>		
<b>Bull case: Tech reaching close to SEK 500m in Sales 2020</b>	<b>1,398</b>	<b>3</b>
EV/S 2020E	850	3
EV/S 2019E	526	4
<b>Base case: Average of 2019 and 2020</b>	<b>688</b>	
<b>Bear case: No value</b>	<b>0</b>	

Enterprise value (SEKm)	Enterprise value (per share)
Bull case	4,279 / 44
Base case	3,569 / 37
Bear case	2,881 / 30
Net debt - bull case	-538 / -6
Net debt - base case	-163 / -2
Net debt - bear	0 / 0
Market cap (SEKm)	Market cap (per share)
Bull case	4,817 / 50
Base case	3,732 / 38
Bear case	2,881 / 30

Source: SEB, Thomson Reuters

**Sum of the parts**



Source: SEB

## DCF valuation

Our DCF-based valuation uses our base case forecasts. We have not accounted for any additional M&A in our base case or any need for new capital but use a fairly high WACC of 9%, compared with our IT/tech universe of 6-7% as we argue the risk is high. We have used a cost of equity of 9% and a steady state EBIT margin of 12%. We derive our base case at SEK 44. A +/-2% change in margins would imply a range from SEK 34-53 and a +/-2% change in sales growth would imply a range from SEK 34-56.

We assume a risk-free interest rate of 2.5%, and a risk premium of 6.5%, which gives us a weighted average cost of capital of 9.0%.

<b>DCF analysis</b>			
<b>DCF valuation (SEKm)</b>		<b>Weighted average cost of capital (%)</b>	
NPV of FCF in explicit forecast period	2,022	Risk free interest rate	2.5
NPV of continuing value	2,127	Risk premium	6.5
<b>Value of operation</b>	<b>4,150</b>	<b>Cost of equity</b>	<b>9.0</b>
Net debt	(89)	<b>After tax cost of debt</b>	<b>1.9</b>
Share issue/buy-back in forecast period	-	<b>WACC</b>	<b>9.0</b>
Value of associated companies	-	<b>Assumptions</b>	
Value of minority shareholders' equity	-	Number of forecast years	20
Value of marketable assets	-	EBIT margin - steady state (%)	12.0
<b>DCF value of equity</b>	<b>4,238</b>	EBIT multiple - steady state (x)	8.7
<b>DCF value per share (SEK)</b>	<b>44</b>	Continuing value (% of NPV)	51.3
Current share price (SEK)	33.30		
DCF performance potential (%)	31		

Source: SEB

### Sensitivity analysis

		<b>Cost of equity (%)</b>				
		8.0	8.5	9.0	9.5	10.0
<b>Equity capital weight (%)</b>	80	78	71	65	59	54
	90	65	58	53	48	44
	<b>100</b>	54	49	<b>44</b>	40	36
	100	54	49	44	40	36
	100	54	49	44	40	36
		<b>Absolute change in EBITDA margin - all years</b>				
		-2%	-1%	0	+1%	+2%
<b>Abs. change in sales growth - all years</b>	-2%	27	31	34	38	42
	-1%	30	35	39	43	47
	<b>0</b>	34	39	<b>44</b>	49	53
	+1%	39	44	50	55	60
	+2%	44	50	56	62	68

Source: SEB

### Assumptions details

(SEKm)	2018E	2019E	2020E	2021E	2022E	Average year 6-10	Average year 11-15	Average year 16-20
Sales growth (%)	20.4	24.9	18.4	17.1	17.0	11.9	8.0	8.0
EBITDA margin (%)	(2.8)	2.7	9.4	9.4	11.0	16.6	18.0	18.0
EBIT margin (%)	(15.5)	(7.8)	(0.7)	(1.0)	1.5	8.7	11.3	12.0
Gross capital expenditures as % of sales	24.9	12.3	10.4	10.4	10.4	8.2	6.7	6.0
Working capital as % of sales	12.6	11.9	11.6	11.6	11.6	11.6	11.6	11.6
Sales	1,299	1,622	1,921	2,250	2,633	3,830	5,846	8,589
Depreciation	(165)	(170)	(194)	(235)	(251)	(300)	(388)	(515)
Intangibles amortisation	0	0	0	0	0	0	0	0
EBIT	(202)	(127)	(13)	(23)	39	344	664	1,031
Taxes on EBIT	46	29	3	5	(9)	(79)	(153)	(237)
Increase in deferred taxes	0	0	0	0	0	0	0	0
<b>NOPLAT</b>	<b>(155)</b>	<b>(98)</b>	<b>(10)</b>	<b>(17)</b>	<b>30</b>	<b>265</b>	<b>511</b>	<b>794</b>
Gross capital expenditure	(323)	(200)	(200)	(234)	(274)	(309)	(388)	(515)
Increase in working capital	(8)	(29)	(30)	(38)	(45)	(46)	(50)	(74)
<b>Free cash flow</b>	<b>(321)</b>	<b>(157)</b>	<b>(46)</b>	<b>(55)</b>	<b>(38)</b>	<b>210</b>	<b>461</b>	<b>720</b>
ROIC (%)	(13.4)	(9.6)	(1.0)	(1.7)	2.7	20.2	33.4	43.0
ROIC-WACC (%)	(22.4)	(18.6)	(10.0)	(10.7)	(6.3)	11.2	24.4	34.0
Share of total net present value (%)	0.0	(3.6)	(1.0)	(1.1)	(0.7)	13.8	20.5	20.9

Source: SEB

# Interims

Interim estimates												
Financial statement (SEKm)	Q1/17	Q2/17	Q3/17	Q4/17	Q1/18	Q2/18	Q3/18	Q4/18E	2017	2018E	2019E	2020E
<b>Revenues</b>	<b>259</b>	<b>264</b>	<b>250</b>	<b>306</b>	<b>294</b>	<b>307</b>	<b>313</b>	<b>386</b>	<b>1,079</b>	<b>1,299</b>	<b>1,622</b>	<b>1,921</b>
Cost of goods sold	(76)	(77)	(67)	(95)	(87)	(91)	(90)	(124)	(316)	(392)	(492)	(565)
<b>Gross profit</b>	<b>183</b>	<b>187</b>	<b>183</b>	<b>211</b>	<b>207</b>	<b>215</b>	<b>223</b>	<b>262</b>	<b>763</b>	<b>907</b>	<b>1,130</b>	<b>1,356</b>
Total operating expenses	(241)	(258)	(232)	(224)	(245)	(275)	(283)	(307)	(955)	(1,110)	(1,257)	(1,370)
<b>EBIT</b>	<b>(58)</b>	<b>(71)</b>	<b>(49)</b>	<b>(13)</b>	<b>(37)</b>	<b>(60)</b>	<b>(60)</b>	<b>(46)</b>	<b>(191)</b>	<b>(202)</b>	<b>(127)</b>	<b>(13)</b>
NRI	0	0	0	0	0	0	0	0	0	0	0	0
<b>Adj EBIT</b>	<b>(58)</b>	<b>(71)</b>	<b>(49)</b>	<b>(13)</b>	<b>(37)</b>	<b>(60)</b>	<b>(60)</b>	<b>(46)</b>	<b>(191)</b>	<b>(202)</b>	<b>(127)</b>	<b>(13)</b>
Financial net	(7)	(19)	(14)	5	6	19	(4)	(1)	(34)	20	(4)	(4)
<b>Reported pre-tax profit</b>	<b>(65)</b>	<b>(90)</b>	<b>(63)</b>	<b>(7)</b>	<b>(30)</b>	<b>(41)</b>	<b>(64)</b>	<b>(47)</b>	<b>(225)</b>	<b>(182)</b>	<b>(131)</b>	<b>(18)</b>
Total taxes	8	17	10	(1)	(1)	0	(5)	(3)	33	(9)	(7)	(1)
<b>Net profit</b>	<b>(57)</b>	<b>(73)</b>	<b>(54)</b>	<b>(8)</b>	<b>(32)</b>	<b>(41)</b>	<b>(68)</b>	<b>(50)</b>	<b>(192)</b>	<b>(191)</b>	<b>(138)</b>	<b>(19)</b>
<b>EBITDA</b>	<b>(26)</b>	<b>(36)</b>	<b>(13)</b>	<b>23</b>	<b>12</b>	<b>(20)</b>	<b>(22)</b>	<b>(7)</b>	<b>(52)</b>	<b>(36)</b>	<b>43</b>	<b>181</b>
D&A	(32)	(35)	(36)	(35)	(49)	(40)	(38)	(39)	(139)	(165)	(170)	(194)
Gross margin (%)	70.5	70.7	73.3	68.9	70.3	70.2	71.4	67.9	70.7	69.8	69.6	70.6
<b>EBITDA margin (%)</b>	<b>(10.2)</b>	<b>(13.5)</b>	<b>(5.2)</b>	<b>7.4</b>	<b>4.2</b>	<b>(6.5)</b>	<b>(7.0)</b>	<b>(1.8)</b>	<b>(4.8)</b>	<b>(2.8)</b>	<b>2.7</b>	<b>9.4</b>
EBITDA margin (%)	(10.2)	(13.5)	(5.2)	7.4	4.2	(6.5)	(7.0)	(1.8)	(4.8)	(2.8)	2.7	9.4
SG&A as share of sales (%)	(54.9)	(56.7)	(54.6)	(44.9)	(55.6)	(55.8)	(55.0)	(47.7)	(52.4)	(53.2)	(46.9)	(43.2)
R&D as share of sales (%)	(37.1)	(39.3)	(35.7)	(30.5)	(32.7)	(36.0)	(35.2)	(29.8)	(35.4)	(33.2)	(29.3)	(28.0)
EBIT margin (%)	(22.6)	(26.9)	(19.7)	(4.1)	(12.6)	(19.4)	(19.1)	(11.9)	(17.7)	(15.5)	(7.8)	(0.7)
Pre-tax margin (%)	(25.1)	(33.9)	(25.3)	(2.4)	(10.3)	(13.3)	(20.3)	(12.2)	(20.9)	(14.0)	(8.1)	(0.9)
<b>Revenue growth (%)</b>	<b>2.7</b>	<b>9.8</b>	<b>(1.9)</b>	<b>0.0</b>	<b>13.5</b>	<b>16.0</b>	<b>25.4</b>	<b>26.0</b>	<b>2.4</b>	<b>20.4</b>	<b>24.9</b>	<b>18.4</b>
Currency effect on revenues (SEKm)												
<b>Revenue growth excl Currency effect (%)</b>												
Pre-tax profit growth (%)												
Tax rate (%)	(11.9)	(18.6)	(15.1)	9.5	3.9	(0.5)	7.2	7.4	(14.8)	5.0	5.0	5.0
Gross profit growth (%)	(0.9)	6.8	(1.3)	(3.0)	13.1	15.1	22.2	24.1	0.2	18.8	24.6	20.1

Source: SEB

Divisional breakdown												
Net sales by market unit (SEKm)	Q1/17	Q2/17	Q3/17	Q4/17	Q1/18	Q2/18	Q3/18	Q4/18E	2017	2018E	2019E	2020E
Dynavox	180	184	156	188	175	199	207	253	708	834	1,025	1,128
Pro	61	66	80	97	98	92	88	106	304	383	452	543
Tech	29	29	25	37	37	32	34	45	121	147	216	329
Other	(11)	(15)	(12)	(16)	(15)	(16)	(15)	(19)	(54)	(65)	(71)	(79)
Group total	259	264	250	306	294	307	313	386	1,079	1,299	1,622	1,921
<b>Reported growth (%)</b>												
Dynavox	(4)	1	(16)	(8)	(3)	8	32	35	(7)	18	23	10
Pro	2	24	37	32	61	39	10	9	24	26	18	20
Tech	82	61	19	(10)	25	7	35	22	25	22	47	52
Other	(3)	20	(2)	19	37	3	31	16	9	20	10	10
Group total reported growth	3	10	(2)	0	14	16	25	26	2	20	25	18
<b>EBITDA</b>												
Dynavox	32	34	24	45	31	39	35	40	135	145	195	248
Pro	8	8	20	29	39	14	16	29	66	98	95	117
Tech	(66)	(78)	(57)	(52)	(57)	(73)	(73)	(76)	(253)	(279)	(246)	(184)
Other	-	-	-	-	-	-	-	-	-	-	-	-
Group total	(26)	(36)	(13)	23	12	(20)	(22)	(7)	(52)	(36)	43	181
<b>EBITDA margin (%)</b>												
Dynavox	18	18	16	24	18	20	17	16	19	17	19	22
Pro	13	12	25	30	40	16	18	27	22	26	21	22
Tech	(228)	(264)	(228)	(139)	(157)	(231)	(214)	(168)	(210)	(189)	(114)	(56)
Other	-	-	-	-	-	-	-	-	-	-	-	-
Group total	(10)	(14)	(5)	7	4	(6)	(7)	(2)	(5)	(3)	3	9

Source: SEB

# Overview

## Investment case

Dynavox should continue to grow revenues and profits ahead due to increased market penetration and new products. For Tobii Pro, we see a clear benefit with eye tracking in its focused customer segments and Apple's acquisition of SensoMotoric Instruments (SMI) has limited competition and should catalyse increased market penetration. Tech's focus on bringing eye-tracking into mainstream and gaming computers and VR will ramp up in 2019 and we see the goal of reaching profitability in 2021 as reachable.

## Company profile

The Tobii Group is an eye-tracking company and consists of three divisions: Tobii Dynavox, Tobii Pro and Tobii Tech. Tobii Dynavox is Tobii's largest business unit, focusing on individuals with special needs who are unable to speak without assistive technology. Tobii Pro is the second largest business unit and sells its eye tracking software and hardware products to commercial enterprises and research institutions to give insights into human behaviour, attention and cognitive processes. Tobii Tech is the business unit that focuses on the mass market by developing hardware and software to be integrated into devices such as mainstream computers, gaming computers and VR headsets.

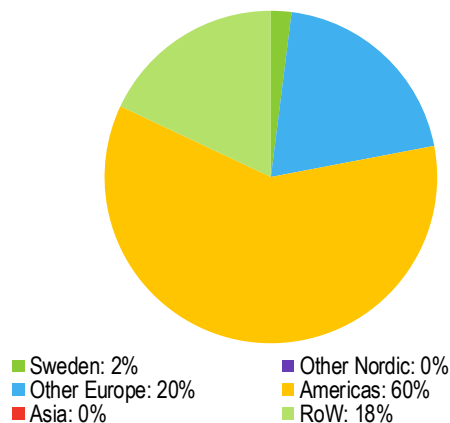
## Valuation approach

Our valuation approach for Tobii uses a separate peer comparison for each of its three business units that we have built into a sum-of-the parts structure. We have also applied a DCF to the business as a whole.

## Target price risks

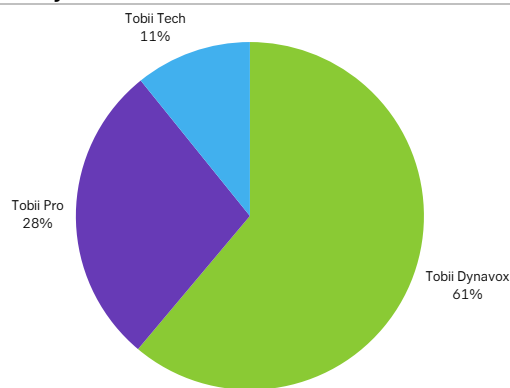
Key risks are that Tobii Tech is not developing the way we expect and price pressure risk due to interest in eye tracking products from large players such as Apple, Google and Facebook. The price pressure risk is significant in all segments due to increased competition.

### Revenues by region



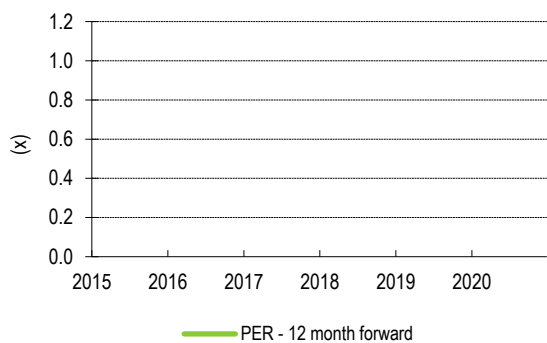
Source: SEB

### Revenues by division



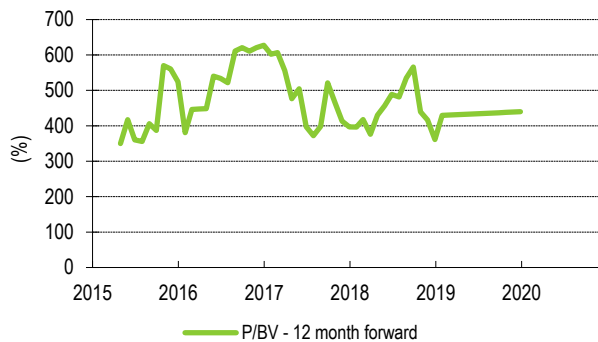
Source: SEB

**PER - 12 month forward**



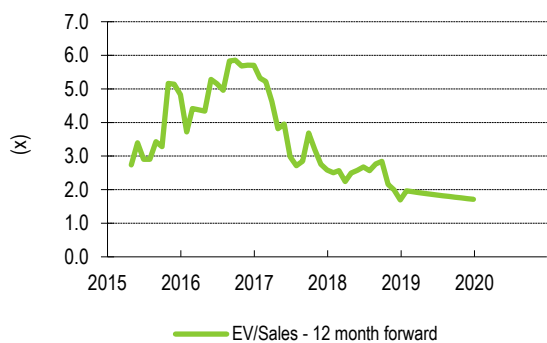
Source: SEB

**P/BV - 12 month forward**



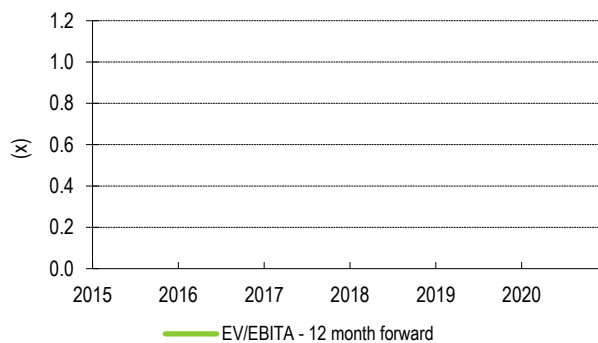
Source: SEB

**EV/Sales - 12 month forward**



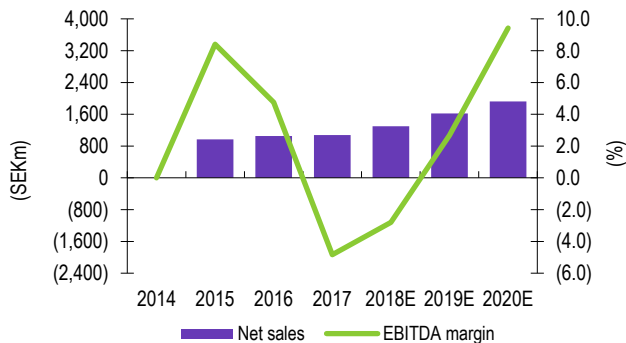
Source: SEB

**EV/EBITA - 12 month forward**



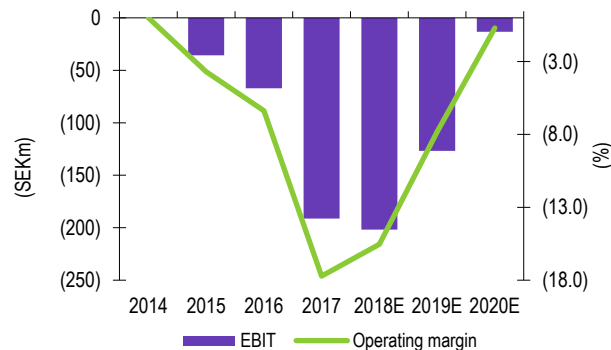
Source: SEB

**Net sales & EBITDA margin**



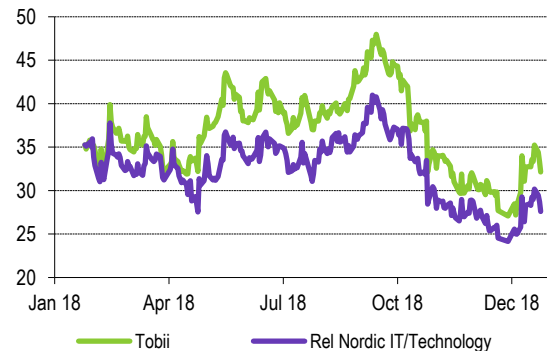
Source: SEB

**EBIT & Operating margin**



Source: SEB

**Comparison with sector index - 1 year**



Source: SIX

**Comparison with Tobii - 1 year**



Source: SIX

<b>Profit &amp; loss statement - Tobii</b>							
<b>(SEKm)</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018E</b>	<b>2019E</b>	<b>2020E</b>
Net Sales	0	967	1,053	1,079	1,299	1,622	1,921
Other revenues	0	0	0	0	0	0	0
<b>Total revenues</b>	<b>0</b>	<b>967</b>	<b>1,053</b>	<b>1,079</b>	<b>1,299</b>	<b>1,622</b>	<b>1,921</b>
Total expenses	0	(886)	(1,003)	(1,131)	(1,336)	(1,579)	(1,740)
<b>Profit before depreciation</b>	<b>0</b>	<b>81</b>	<b>50</b>	<b>(52)</b>	<b>(36)</b>	<b>43</b>	<b>181</b>
Depreciation - Fixed assets	0	(28)	(23)	(20)	(33)	(30)	(49)
Depreciation - Other assets	0	(89)	(94)	(119)	(132)	(140)	(145)
Amortisation - Goodwill	0	0	0	0	0	0	0
Amortisation - Other intangibles	0	0	0	0	0	0	0
<b>Operating profit</b>	<b>0</b>	<b>(36)</b>	<b>(67)</b>	<b>(191)</b>	<b>(202)</b>	<b>(127)</b>	<b>(13)</b>
Net interest expenses	0	8	19	(34)	0	(4)	(4)
Foreign exchange items	0	0	0	0	0	0	0
Other financial items	0	0	0	0	0	0	0
Value changes - Fixed assets	0	0	0	0	0	0	0
Value changes - Financial assets	0	0	0	0	20	0	0
Value changes - Other assets	0	0	0	0	0	0	0
<b>Reported pre-tax profit</b>	<b>0</b>	<b>(27)</b>	<b>(48)</b>	<b>(225)</b>	<b>(182)</b>	<b>(131)</b>	<b>(18)</b>
Minority interests	0	0	0	0	0	0	0
Total taxes	0	5	(4)	33	(9)	(7)	(1)
<b>Reported profit after tax</b>	<b>0</b>	<b>(22)</b>	<b>(52)</b>	<b>(192)</b>	<b>(191)</b>	<b>(138)</b>	<b>(19)</b>
Discontinued operations	0	0	0	0	0	0	0
Extraordinary items	0	0	0	0	0	0	0
<b>Net Profit</b>	<b>0</b>	<b>(22)</b>	<b>(52)</b>	<b>(192)</b>	<b>(191)</b>	<b>(138)</b>	<b>(19)</b>
<b>Adjustments:</b>							
Discontinued operations	0	0	0	0	0	0	0
Interest on convertible debt	0	0	0	0	0	0	0
Minority interests (IFRS)	0	0	0	0	0	0	0
Value changes	0	0	0	0	(20)	0	0
Goodwill/intangibles amortisations	0	0	0	0	0	0	0
Restructuring charges	0	0	0	0	0	0	0
Other adjustments	0	0	0	0	0	0	0
Tax effect of adjustments	0	0	0	0	0	0	0
<b>Adjusted profit after tax</b>	<b>0</b>	<b>(22)</b>	<b>(52)</b>	<b>(192)</b>	<b>(211)</b>	<b>(138)</b>	<b>(19)</b>
<b>Margins, tax &amp; returns</b>							
Operating margin	0.0	(3.7)	(6.4)	(17.7)	(15.5)	(7.8)	(0.7)
Pre-tax margin	0.0	(2.8)	(4.5)	(20.9)	(14.0)	(8.1)	(0.9)
Tax rate	0.0	19.0	(9.2)	14.7	(5.0)	(5.0)	(5.0)
ROE	0.0	(3.7)	(5.2)	(16.9)	(19.8)	(17.2)	(2.6)
ROCE	0.0	(4.6)	(5.8)	(14.7)	(17.0)	(11.6)	(1.3)
<b>Growth rates y-o-y (%)</b>							
Total revenues	n.a.	n.a.	8.9	2.4	20.4	24.9	18.4
Operating profit	n.m.	n.m.	n.m.	n.m.	n.m.	n.m.	n.m.
Pre-tax profit	n.m.	n.m.	n.m.	n.m.	n.m.	n.m.	n.m.
EPS (adjusted)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Cash flow</b>							
<b>(SEKm)</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018E</b>	<b>2019E</b>	<b>2020E</b>
Net profit	0	(22)	(52)	(192)	(191)	(138)	(19)
Non-cash adjustments	0	108	109	103	145	170	194
<b>Cash flow before work cap</b>	<b>0</b>	<b>85</b>	<b>57</b>	<b>(89)</b>	<b>(46)</b>	<b>33</b>	<b>176</b>
Ch. in working capital / Other	(101)	(6)	11	21	(8)	(29)	(30)
<b>Operating cash flow</b>	<b>(101)</b>	<b>80</b>	<b>69</b>	<b>(68)</b>	<b>(54)</b>	<b>3</b>	<b>146</b>
Capital expenditures	0	(123)	(141)	(186)	(193)	(200)	(200)
Asset disposals	0	2	(2)	(0)	0	0	0
L/T financial investments	0	0	0	0	0	0	0
Acquisitions / adjustments	0	0	0	0	(130)	0	0
<b>Free cash flow</b>	<b>(101)</b>	<b>(41)</b>	<b>(75)</b>	<b>(254)</b>	<b>(377)</b>	<b>(197)</b>	<b>(54)</b>
Net loan proceeds	0	(142)	0	0	130	0	0
Dividend paid	0	0	0	0	0	0	0
Share issue	0	432	472	0	0	0	0
Other	0	0	0	(8)	0	0	0
<b>Net change in cash</b>	<b>(101)</b>	<b>250</b>	<b>397</b>	<b>(262)</b>	<b>(247)</b>	<b>(197)</b>	<b>(54)</b>
<b>Adjustments</b>							
C/flow bef chng in work cap	0	85	57	(89)	(46)	33	176
Adjustments	0	0	0	0	0	0	0
Int on conv debt net of tax	0	0	0	0	0	0	0
Cash earnings	0	85	57	(89)	(46)	33	176
<b>Per share information</b>							
Cash earnings	0.0	1.09	0.62	(0.92)	(0.47)	0.33	1.81
Operating cash flow	0.0	1.02	0.74	(0.7)	(0.55)	0.03	1.5
Free cash flow	0.0	(0.52)	(0.81)	(2.61)	(3.87)	(2.02)	(0.56)
<b>Investment cover</b>							
Capex/sales (%)	0.0	3.1	1.8	2.5	2.3	1.8	1.6
Capex/depreciation (%)	0	109	85	136	90	99	61

Source for all data on this page: SEB

<b>Balance sheet - Tobii</b>							
<b>(SEKm)</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018E</b>	<b>2019E</b>	<b>2020E</b>
Cash and liquid assets	119	371	772	537	290	93	39
Debtors	148	169	152	146	173	209	247
Inventories	51	46	67	59	71	89	105
Other	31	30	39	41	30	30	30
<b>Current assets</b>	<b>350</b>	<b>615</b>	<b>1,030</b>	<b>783</b>	<b>564</b>	<b>421</b>	<b>422</b>
Interest bearing fixed assets	50	55	55	90	90	90	90
Other financial assets	4	2	4	4	24	24	24
Capitalized development cost	219	223	255	293	323	353	378
Goodwill	0	0	0	30	110	110	110
Other intangibles	100	108	115	113	163	163	163
Fixed tangible assets	31	32	28	31	28	27	8
Other fixed assets	0	0	0	0	0	0	0
<b>Fixed assets</b>	<b>403</b>	<b>420</b>	<b>457</b>	<b>560</b>	<b>738</b>	<b>767</b>	<b>773</b>
<b>Total assets</b>	<b>753</b>	<b>1,035</b>	<b>1,487</b>	<b>1,343</b>	<b>1,301</b>	<b>1,189</b>	<b>1,195</b>
Creditors	54	44	59	62	82	107	132
Other trade financing	0	0	0	0	0	0	0
S/T interest bearing debt	140	154	160	161	0	0	0
Other	76	24	23	28	28	28	28
<b>Current liabilities</b>	<b>269</b>	<b>222</b>	<b>241</b>	<b>251</b>	<b>110</b>	<b>135</b>	<b>160</b>
L/T interest bearing debt	77	0	0	0	291	291	291
Other long-term liabilities	14	18	22	31	31	31	31
Convertible debt	0	0	0	0	0	0	0
Pension provisions	0	0	0	0	0	0	0
Other provisions	4	2	8	2	2	2	2
Deferred tax	1	1	0	0	0	0	0
<b>Long term liabilities</b>	<b>95</b>	<b>20</b>	<b>30</b>	<b>33</b>	<b>324</b>	<b>324</b>	<b>324</b>
Minority interests	0	0	0	0	0	0	0
<b>Shareholders' equity</b>	<b>389</b>	<b>794</b>	<b>1,215</b>	<b>1,058</b>	<b>867</b>	<b>730</b>	<b>711</b>
<b>Total liabilities and equity</b>	<b>753</b>	<b>1,035</b>	<b>1,487</b>	<b>1,343</b>	<b>1,302</b>	<b>1,189</b>	<b>1,195</b>
Net debt (m)	48	(272)	(667)	(466)	(89)	108	162
Working capital (m)	101	177	177	156	164	193	223
Capital employed (m)	606	947	1,375	1,219	1,158	1,021	1,002
Net debt/equity (%)	12	(34)	(55)	(44)	(10)	15	23
Net debt/EBITDA (x)	n.a.	(3.3)	(13.3)	8.9	2.4	2.5	0.9
Equity/total assets (%)	52	77	82	79	67	61	60
Interest cover	0.0	4.2	3.5	(5.7)	0.0	(29.0)	(3.1)

<b>Valuation</b>							
<b>(SEK)</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018E</b>	<b>2019E</b>	<b>2020E</b>
No of shares, fully dil. (y/e)	68.9	87.6	97.0	97.3	97.3	97.3	97.3
No of shares, fully dil. avg.	0.0	78.3	92.3	97.2	97.3	97.3	97.3
Share price, y/e		65.7	68.3	35.4	32.1	32.1	32.1
Share price, high		85.0	82.5	72.0	48.0		
Share price, low		31.7	40.6	33.3	25.6		
Share price, avg		49.4	61.5	47.7	37.3		
EPS (reported)	0.00	(0.28)	(0.57)	(1.98)	(1.96)	(1.41)	(0.19)
EPS (adjusted)	0.00	(0.28)	(0.57)	(1.98)	(2.17)	(1.41)	(0.19)
Cash earnings/share	0.00	1.09	0.62	(0.92)	(0.47)	0.33	1.81
Dividend/share	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Enterprise value/share		63	61	31	31	33	34
Book value/share	5.6	9.1	12.5	10.9	8.9	7.5	7.3
Adjusted equity/share	5.6	9.1	12.5	10.9	8.9	7.5	7.3
PER (adjusted)		n.m.	n.m.	n.m.	n.m.	n.m.	n.m.
CEM		60.2	110.1	(38.6)	(68.7)	96.1	17.8
Dividend yield		0.0	0.0	0.0	0.0	0.0	0.0
EV/EBITDA		67.4	118.9	(57.1)	(83.4)	74.4	18.2
EV/EBITA		(153.5)	(88.7)	(15.6)	(15.1)	(25.5)	(246.7)
EV/EBIT		(153.5)	(88.7)	(15.6)	(15.1)	(25.5)	(246.7)
EV/Sales (x)		5.67	5.65	2.76	2.34	1.99	1.71
Price/Book value		7.25	5.45	3.25	3.61	4.29	4.40
Price/adjusted equity		7.25	5.45	3.25	3.61	4.29	4.40
Free cash flow/Market cap (%)		(0.8)	(1.1)	(7.4)	(7.9)	(6.3)	(1.7)
Operating cash flow/EV (%)		1.5	1.2	(2.3)	(1.8)	0.1	4.4
EV/Capital employed (x)		5.8	4.3	2.4	2.6	3.2	3.3

<b>Main shareholders</b>			<b>Management</b>		<b>Company information</b>	
<b>Name</b>	<b>(%)</b>	<b>Votes</b>	<b>Capital</b>	<b>Title</b>	<b>Name</b>	<b>Contact</b>
Swedbank Robur Fonder	9.3		9.3	COB	Kent Sander	Internet
Henrik Eskilsson	6.3		6.3	CEO	Henrik Eskilsson	Phone number
Handelsbanken Fonder	5.8		5.8	CFO	Johan Wilsby	+46 8 663 69 90
				IR	Sara Hyléén	

Source for all data on this page: SEB

**About this publication**

This report is a marketing communication commissioned by Tobii and prepared by Skandinaviska Enskilda Banken AB (publ). It does not constitute investment research; as such, it has not been prepared in accordance with the legal requirements to promote the independence of investment research, nor is it subject to any prohibition on dealing ahead of the dissemination of investment research.

**This statement affects your rights**

This report is confidential and may not be reproduced, redistributed or republished by any recipient for any purpose or to any person. Redistributing this report to third parties may invoke legal requirements on the person engaging in such activities.

**Producers and Recipients**

SEB Research is approved and issued by Skandinaviska Enskilda Banken AB (publ) ("SEB"), a bank organized under the laws of the Kingdom of Sweden, on behalf of itself and its affiliates for institutional investors. When SEB Research is issued by an SEB subsidiary, the subsidiary itself is subject to this disclaimer.

**Use**

This material has been prepared by SEB for information purposes only. It does not constitute investment advice and is being provided to you without regard to your investment objectives or circumstances. The document does not constitute an invitation or solicitation of an offer to subscribe for or purchase any securities and neither this document nor anything contained herein shall form the basis for any contract or commitment whatsoever. Opinions contained in the report represent the authors' present opinion only and may be subject to change. In the event that the authors' opinion should change, we shall endeavour (but do not undertake) to disseminate any such change, within the constraints of any regulations, applicable laws, internal procedures within SEB, or other circumstances.

**Good faith and limitations**

All information, including statements of fact, contained in this research report have been obtained and compiled in good faith from sources believed to be reliable. However, no representation or warranty, express or implied, is made by SEB with respect to the completeness or accuracy of its contents, and it is not to be relied upon as authoritative and should not be taken in substitution for the exercise of reasoned, independent judgement by you. Recipients are urged to base their investment decisions upon such investigations as they deem necessary. To the extent permitted by applicable law, no liability whatsoever is accepted by SEB for any direct or consequential loss arising from the use of this document or its contents.

**Distribution**

This research report has been prepared by SEB or its affiliates and is being distributed by SEB offices in Stockholm, Copenhagen, Oslo, Helsinki, Frankfurt, London, Tallinn, Vilnius, Riga and Hong Kong. Research reports are prepared and distributed in Lithuania by AB SEB bankas and in Estonia by AS SEB Pank in accordance with the requirements of the local laws and Financial Supervision Authority's conduct of business rules. This document may not be distributed in the United States, Canada, Japan or Australia or in any other jurisdiction where to do so would be unlawful. Addresses and Phone numbers for each office can be found at the end of the report.

**The SEB Group: members, memberships and regulators**

SEB is a member of, inter alia, Nasdaq OMX Nordic, Oslo Stock Exchange, the London Stock Exchange, NYSE Euronext, SIX Swiss Exchange, Frankfurt Stock Exchange, Tallinn Stock Exchange as well as certain European MTF's such as BATS-Chi-X, Turquoise and Burgundy. SEB is regulated by Finansinspektionen in Sweden and, for the conduct of investment services business, in (i) Denmark by Finanstilsynet, (ii) Norway by Finanstilsynet, (iii) Finland by Finanssivalvonta, (iv) Germany by Bundesanstalt für Finanzdienstleistungsaufsicht, (v) the UK by the Financial Conduct Authority and Prudential Regulation Authority (details about the extent of our regulation by the Financial Conduct Authority and Prudential Regulation Authority are available from us on request), (vi) Estonia by the Estonian Financial Supervision Authority, (vii) Lithuania by the Bank of Lithuania, (viii) Latvia by the Financial and Capital Markets Commission and (ix) Hong Kong by Securities and Futures Commission.

SEB's research reports are prepared in accordance with the industry standards and codes of conduct applicable to financial analysts in the countries where they are based. In Denmark, Finland, Norway and Sweden, analysts act in accordance with the rules of ethics of each country's Society of Financial Analysts. Analysts comply with the recommendations and industry standards of the Danish, Norwegian and the Swedish Securities Dealers Associations and with those of the Federation of Finnish Financial Services. Analysts certified by the CFA Institute also comply with the Code of Ethics of the CFA Institute.

**Prevention and avoidance of conflicts of interest**

The remuneration of staff within the Research department is determined exclusively by research management and senior management and may include discretionary awards based on the firm's total earnings, including investment banking and markets (sales and trading businesses) income; however, no such staff receive remuneration based upon specific investment banking or markets transactions. SEB's Compliance department monitors the production of research and the observance of the group's procedures designed to prevent any potential conflicts of interest from affecting the content of research; the latter are described in greater detail in the "Statement of Policies for dealing with potential conflicts of interest surrounding our Research activities" which is available on our SEB Research website.

**Your attention is also drawn to the fact that:**

The current market price of the securities shown in this report is the price prevailing at the close of the business day preceding the date of publication, save where such price was more than 5% different from the price prevailing as at the time of publication, in which case it is the latter.

Unless explicitly stated otherwise in this report, SEB expects (but does not undertake) to issue updates to this report following the publication of new figures or forecasts by the company covered, or upon the occurrence of other events which could potentially have a material effect on it.

The securities discussed in this research report may not be eligible for sale in all countries, and such securities may not be suitable for all types of investors. Offers and sales of securities discussed in this research report, and the distribution of this report, may be made only in countries where such securities are exempt from registration or qualification or have been so registered or qualified for offer and sale, and in accordance with applicable broker-dealer and agent/salesman registration or licensing requirements. A copy of this report, not including the recommendation, has been provided to the issuer prior to its dissemination to check factual statements for accuracy; as a result, some amendments have been made.

A full list of disclosures for other companies mentioned herein (in which SEB has research coverage), can be found on our SEB Research website

**Methodology**

Final consideration as to any valuations, projections and forecasts contained in this report are based on a number of assumptions and estimates and are subject to contingencies and uncertainties, and their inclusion in this report should not be regarded as a representation or warranty by or on behalf of the Group or any person or entity within the Group that they or their underlying assumptions and estimates will be met or realized. Different assumptions could result in materially different results. Past performance is not a reliable indicator of future performance. Foreign currency rates of exchange may adversely affect the value, price or income of any security or related investment mentioned in this report. In addition, investors in securities, such as ADRs, whose values are influenced by the currency of the underlying security, effectively assume currency risk.

**Company specific disclosures and potential conflicts of interest**

A member of, or an entity associated with, SEB or its affiliates, officers, directors, employees or shareholders of such members (a) is not, and has never been, represented on the board of directors or similar supervisory entity of Tobii, (b) has from time to time bought or sold the securities issued by the company or options relating to the company, and (c) SEB does not hold any short / long position exceeding 0.5% of the total issued share capital of Tobii as of 31 Dec 2018.

The analyst(s) responsible for this research report (jointly with their closely related persons) hold(s) 0 shares in Tobii and do(es) not have holdings in other instruments related to the company.

Skandinaviska Enskilda Banken AB (publ). All rights reserved.

---

**Copenhagen**

Bernstorffsgade 50  
P.O. Box 100  
DK-1577 Copenhagen V

Telephone: (45) 3328 2828

**Oslo**

Filipstad Brygge 1,  
P.O. Box 1363 Vikta  
NO-0113 Oslo

Telephone: (47) 2100 8500

**Frankfurt**

Stephanstrasse 14-16  
D-60313 Frankfurt am Main

Telephone: (49) 69 9727 7740

**Stockholm**

Kungsträdgårdsgatan 8  
S-106 40 Stockholm

Telephone: (46) 8 522 29500

**Helsinki**

Eteläesplanadi 18  
P.O. Box 630  
FIN-00101 Helsinki

Telephone: (358) 9 616 28700

**Tallinn**

Tornimäe 2  
EE-Tallinn 15010

Telephone: (372) 665 7762

**London**

One Carter Lane  
London, EC4V 5AN

Telephone: (44) 20 7246 4000