



Starbreeze

Information Technology | Sweden

KEY DATA

Key data

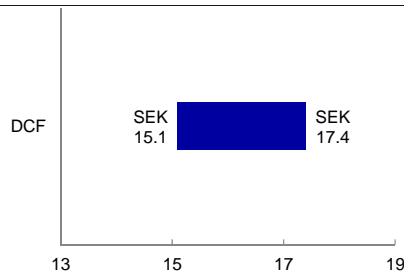
Country	Sweden
Bloomberg	STARB SS
Reuters	STZEB.ST
Share price	9.72
Free float	85%
Market cap (m)	SEK 3,154
Website	www.starbreeze.com
Next report date	21 August 2018

ABSOLUTE & RELATIVE PERFORMANCE



Source: FactSet and Bloomberg

VALUATION APPROACH



Source: FactSet and Nordea estimates

ESTIMATE REVISIONS

	2018E	2019E	2020E
Sales	0%	2%	2%
Adj. EBIT	1%	2%	3%

Source: Nordea estimates

Nordea Markets - Analysts

Predrag Savinovic
AnalystDan Johansson
Analyst

Far from dead on arrival

Playtest reveals OTWD is alive and kicking

Having spent two hours testing Starbreeze's upcoming game, we believe the E3 presentations did not do the game any justice and we find that it plays far better than the first gameplay trailer suggests. Overkill's The Walking Dead (OTWD) has a lot to offer. It is engaging, challenging and leaves the player hungry for more. We also argue there is scope to polish the game in the five months ahead of the slated release. We are ambivalent with regards to the pricing, but still believe that OTWD ticks the necessary boxes and has the potential to be a commercial success.

Sales scenario still looks realistic

We estimate that OTWD will sell more than 7.5 million copies during its lifetime up until 2020. Although this figure may seem high to some, we pencil in a price decline of ~95% during this time when it generates the bulk of its volume. We estimate that a total net reach of ~50 million people and counting have seen OTWD during its marketing campaign, and this is before the game has even been released. The game builds on a strong IP, broadly known among gamers and non-gamers. This presents OTWD with a strong starting point based on the name it carries. OTWD will also enjoy a simultaneous cross-platform launch globally. As a comparison, we find other games released recently netting copies in the millions, despite a limited marketing reach and having received mixed feedback for gameplay.

Strongest pipeline yet beyond OTWD

Near-term sales are clearly dependent on the upcoming release of OTWD, but we believe Starbreeze has plenty more to offer. The company has its strongest pipeline to date with around 20 announced launches, four of which we believe have blockbuster potential. Beyond OTWD, we believe System Shock 3, Payday 3 and Crossfire have the potential to be blockbuster games. The number could even extend to five, if we also count the latest publishing deal with 10 Crowns, a new strategy game from the lead designer of Civilization IV.

SUMMARY TABLE - KEY FIGURES

SEK/m	2013/14	2014/15	2015	2016	2017	2018E	2019E	2020E
Net sales	214	197	99	345	361	913	1,217	1,996
- growth	477.8%	-7.7%	-49.9%	249.6%	4.6%	152.6%	33.4%	64.0%
EBIT	142	46	21	56	-151	83	139	633
- margin	66.5%	23.5%	21.3%	16.3%	-41.9%	9.1%	11.4%	31.7%
EPS	0.83	0.15	0.09	0.22	-0.55	0.10	0.27	1.53
- growth		-82%	-39%	140%	n.m.	n.m.	170%	457%
DPS	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
P/E	8.2	78.1	170.0	87.0	n.m.	95.6	35.4	6.4
EV/EBIT	5.9	55.8	170.9	96.9	n.m.	34.7	19.3	3.1
EV/Sales	3.9	13.1	36.4	15.8	7.7	3.1	2.2	1.0
RoE	16.5%	6.6%	6.5%	-11.7%	2.2%	5.1%	24.4%	34.0%
Div. yield	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
FCF yield	12.6%	-1.2%	-1.0%	-4.7%	-25.0%	4.8%	5.9%	22.2%
ND/EBITDA	-0.9x	-1.2x	-3.6x	-5.0x	n.m.	-1.0x	-1.0x	-1.1x

Source: Company data and Nordea estimates

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Executive summary

Many questions were raised after the Electronic Entertainment Expo (E3). So far this year, the Starbreeze share has been volatile, to say the least, having surged ahead of E3, only to tumble from the first day of the expo. Even though the gameplay from Overkill's The Walking Dead (OTWD) received a mixed reception from fans, we still argue that the title has the potential to be a commercial success. Looking beyond 2018E, Starbreeze also has an interesting pipeline, where we identify four to five games that have blockbuster potential. We suggest that these will be earnings drivers until 2021E.

OTWD leaves the player
longing for more

Mixed reception at E3...

To say that OTWD did not meet the high expectations at E3 would be an understatement, which is very apparent in the share price volatility after the event. We acknowledge that the short gameplay teaser had its flaws. The longer gameplay following the teaser was of better quality, but the first impressions appear to have stuck in investors' minds. There was a disconnect between the world-class cinematic trailers revealed throughout the year, likely fuelling expectations that the game would be something extraordinary, compared with the gameplay teaser at E3, causing investors to fear that this would be another Raid, the publishing title that went bust in 2017.

Having spent two hours playtesting the game, our nerves are at ease. OTWD is a fun and engaging game that leaves the player hungry for more. Reading up on the feedback loop on the content released so far, we agree with the commentators who have played OTWD. The game offers a superior experience than the trailer suggests. There is a marked difference in perception between game critics, testers and audiences on platforms such as YouTube, where we note that comments on the latter have been particularly negative, but testers' feedback has been on the positive side overall. The same dynamic has been the case on various forums.

Small positive estimates
revisions, primarily due to
favorable FX movements

...but our estimates for OTWD remain largely unchanged

When we initiated coverage of Starbreeze, we had argued that OTWD would likely resemble the Left 4 Dead franchise, with new mechanics, better graphics and elements from Payday, the crown jewel in the portfolio. This still seems to be the case. After E3, our base case is unchanged – the gameplay is not as sharp as we had hoped, but OTWD still has the potential to be a commercial success. The media reach of the marketing campaign has been immense.

Based on a gross reach of 400 million before E3, we estimate a total net reach of ~50 million people, and this is even before the game has been released. The game builds on a strong IP, broadly known among gamers and non-gamers. This presents OTWD with a strong starting point based on the name it carries, whereas other games in Starbreeze's portfolio have basically started from scratch. OTWD will also enjoy a cross-platform, simultaneous launch around the world excluding the US, where the game will be playable two days earlier. As a comparison (one fair and one unfair), State of Decay 2 and Conan Exiles both sold millions of copies in their opening weekends, without excessive marketing campaigns while receiving mixed feedback from players and critics alike.

Diving into our estimates, we make only small positive revisions, primarily due to favourable FX movements (USD/SEK), while our other numbers are largely intact. Based on our new numbers, we derive a fair value of SEK 15.1-17.4 per share (previously SEK 15.1-17.3).

ESTIMATE REVISIONS

	2018E	2019E	2020E
Sales	0%	2%	2%
Adj. EBIT	1%	2%	3%

Source: Nordea estimates

Pipeline beyond OTWD looks appealing

Confidence shattered, but portfolio is golden

Starbreeze's portfolio has about 20 announced launches, four of which we believe have blockbuster potential. This could even extend to five, if we also count the latest publishing deal that the company had signed with some of the brains behind the Civilization franchise.

Besides OTWD, we deem System Shock 3, Payday 3 and Crossfire to be titles that could be big hits in gaming. System Shock 3 is a sequel to one of the most appreciated series in the gaming world, whereas Payday is the crown jewel in the company's portfolio, having sold over 16 million copies of the second game in the series. Crossfire is the dark horse. It was a huge success in Asia and amassed 650 million (!) players, generating above USD ~1bn in annual revenue for several consecutive years. Working with Smilegate, Starbreeze will launch the sequel for the game in a Western adaptation. All these may well be future earnings drivers. Psychonauts and the partnership with 10 Crowns for Civilization are two more wild cards for which we currently assume low estimates.

STRONGEST PORTFOLIO YET



Source: Starbreeze

Hands on: Playtesting Overkill's The Walking Dead

Following E3, we got the opportunity to playtest OTWD's Central Georgetown mission, at Starbreeze's headquarters in Stockholm. Having spent two hours with the game first-hand, we are looking forward to it hitting the shelves. Its post-apocalyptic delineation evokes memories of the original series as well as the likes of 28 Days Later and even Soderbergh's Contagion. Overkill's DC is a dark and sinister place, but it builds on moving storytelling and compelling gameplay. It has a resemblance to Left 4 Dead (L4D), Payday, Rainbow Six and Vermintide, but the fusion of these games and the addition of fresh game mechanics put a spin on the zombie genre like we have never seen before.

By no means an easy game

OTWD is not an easy game by any means. The emphasis is on a tactical and skilful approach. The similarities to Left 4 Dead (L4D) are obvious. In OTWD, players team up with their friends against zombies. However, its pacing is much slower and dying is less forgiving. The similarities to Payday, Overkill's strongest franchise, are apparent as well, thanks to the head-up display (HUD) and weapon design. It is different in the handling, the absence of mayhem and that the act of taking down an enemy feels much more rewarding in OTWD. Given the scarcity of resources and the lack of health generation, the feel of OTWD is unique yet its environments are oddly familiar.

DC IS A SINISTER PLACE



Source: Starbreeze

A variety of routes available to get the upper hand

We quickly realise that the walkers are not our only threat; other humans are as well, which introduces a new dynamic to the genre. The human AI is completely different and they pose a clearer threat than the walkers do, armed with guns, tactical thinking and communication. The crux here is that if players find an opposing squad that they want to take out, not only do they have to face these tough opponents but they would also have to contend with the walkers, who are attracted to the fray. This makes the fight much tougher. For this particular fight, we spotted a locked gate where a horde of zombies were lurking. Shooting the lock from a distance with the sniper released the walkers on our enemies, helping us to bring down one set of opponents. This is a good example of the dynamic gameplay in OTWD. While most shooter games utilise a Rambo-style gameplay, OTWD offers a variety of routes and an array of ways in which the players can gain the upper hand in a fight by exploiting their environment.

The difficulty level makes playing OTWD even more appealing

In some cases, like in our mission, the objective is to be on the offense in order to secure, for example, a water plant, while in others, the players' squad takes on a defensive role to protect the camp, which is a home base and one of the foundations of the game.

The emphasis on co-operation is evident. There are four playable classes, all with a unique role that is crucial to the success of the group. This niche is one of the factors that will set OTWD apart from its competition, as players will need to team up in order to complete the game. In one particular scene of the demo we played, we faced a considerable disadvantage by not bringing the wire cutter or the Molotov in our loadout, showing how punishing the game can be if players are not fully prepared. Overkill has also created a single-player-oriented theme for the lone wolves, but the essence of the game will be the co-operative gameplay.

GOING SOLO WILL NOT BE A WINNING STRATEGY



Source: Starbreeze

Graphically, OTWD does not stand out versus its peers

The game does not stand out on the graphical and technical fronts. Character animations are lacklustre compared with the likes of God of War (GOW), which was released earlier this year. GOW is not a comparable title in any way, but its animations and combinations are so polished that the game is worth playing for these elements alone. OTWD makes an attempt at this, most notably in the melee takeout sequences, but does not go all the way. Although the graphics are not on a par with new first-person shooter (FPS) games such as Battlefield 1 or the latest instalment of Far Cry, it is an appealing world containing plenty of details. OTWD is undergoing a lot of playtesting, and these are the elements that we expect to be improved in the coming months, whereas the content and story is already locked in.

The tension is real throughout our trial of the game, be it from meeting hostile humans, the constant threat of running into the walkers or from being too loud and attracting the walkers. Oh, and did we mention that your weapons can jam?

We found the gameplay to be very rewarding. Like the feeling that Counter-Strike: Global Offensive (CS:GO) has managed to capture on a successful kill, OTWD gives a similar rush. Due to the scarcity of resources, the fragility of the character and the persistent threat from other humans, OTWD has managed to capture an entertaining feeling when engaging in combat. The gun handling is also very enjoyable and much better than we had anticipated.

GAMEPLAY IS VERY REWARDING

Source: Starbreeze

We have not yet seen the character progression, which is said to be particularly deep. This adds another dimension to the game and is one of the factors fans look forward to the most. We expect there to be perks-based levelling, similar to the one in the Far Cry series. The Walking Dead franchise is known for its storytelling and Overkill's adaptation honours Robert Kirkman's universe. Every character has its own rich history, as do all the people around the camp, and the cinematic trailers leading up to E3 highlighted this. This increases the replayability of the game as well – if the players manage to complete it, that is.

The OTWD ticks several gaming boxes that are quite sought after these days: co-op that matters and a challenging experience.

There is an abundance of content yet to be released before we can give this game a full review, but from what we have seen so far, we find the game very intriguing. Where it lacks some of the graphical capabilities of other modern titles, it makes up for it in other aspects.

Although the game has been in production for quite a while and although there will be improvements, there is an element of "what you see is what you get". We rather expect more content being showcased and for the production to be perceptive of the community feedback, something which Overkill is known for. We really like what we have seen so far and cannot wait for more.

Release schedule

Red Dead Redemption 2 (26 October) and Let's Go Pokémon on Switch (15 November) are the titles with the closest release dates to that of OTWD, and neither of these are competitors. It is safe to assume that Red Dead Redemption 2 will steal a lot of the limelight as it is one of the most anticipated games of 2018. The release dates of competing titles such as World War Z and Dying Light 2 have not been announced yet, and we expect these to go live in H1 2019 at the earliest.

Our view on the key topics

What was in the markets' expectations?

Our impression was always that OTWD would be a hotter, more updated version of the Left for Dead franchise. It appears, from what we have seen so far, that this is the case. The trailer campaign ahead of E3 was world-class, likely creating expectations of something completely extraordinary. We agree that there was a disconnect between the quality of the trailers and the gameplay first shown at the expo, causing investor distress. This is amplified by the fact that the company did pretty much the same thing with Raid: WW2, where it released impressive cinematics and presented poorer gameplay, fuelling concerns that OTWD may be a repeat of the Raid debacle. Given the hype generated by the cinematics and the long development time, market expectations seem to have been that the gameplay would blow everyone away, like Last of Us 2 (LoU2) did, which was also announced at E3.

Speaking of Last of Us 2, how come Starbreeze couldn't deliver gameplay of that calibre?

The answer is budget. It takes considerable development costs to reach the graphical fidelity of AAA games. Gaming specialists at Kotaku estimate that the production costs of the big titles exceeds USD 140m without even considering the marketing efforts, which would cause total cost to swell even further. Other sources cite costs of hundreds of millions of US dollars, whereas the average games are – comparatively speaking – made on shoestring budgets. This is due to the fact that the average games are small indie titles and are created en masse. Graphical content today is very demanding and labour-intensive. In an interview with Forbes Steve Theodore, the former director at Bungie and artist at Valve, gave an example of a simple character he made for Half-Life in 1997. The character contained 307 triangles. A decade later, he made the same character but with updated graphics, containing 11 million triangles and 90x the amount of textures. And over ten years have passed since then. According to Mr Theodore, the labour involved in creating a similar character today would take 100 working days, compared with seven working weeks in 2017 and just two weeks in 1997. Without mentioning specific titles, he also gave examples of AAA productions costing USD 250m, which in turn need to generate some USD 350m just to reach break-even. We estimate that the production costs of OTWD is USD 40-60m (not considering the investment of some USD ~7m for the Valhalla project) and that it is reasonable to assume that 20-30% of this sum is attributed to remodelling in a new graphic engine environment alone, ie that the "real" production budget lies between USD 30-45m. However, we do not expect that LoU2 will be this polished for real gameplay when it hits the shelves, unless it is postponed until the next generation of consoles. The level of detail showed at E3 in terms of character animations, environmental interactivity and graphical performance is too high and was likely fine-tuned for the expo, in our view.

Is USD 59.99 a reasonable price for OTWD?

We always had USD 59.99 as our estimate for the game based on what the company has indicated that it will charge, but we still regard this is on the high side. From what we have seen so far, the graphical output and depth as well as the development budget does not warrant this premium price tag. Co-op games revolve around getting friends to play the games as well and creating a chain effect and generating word of mouth. It is important to get a large and active player base. We are not saying that USD 59.99 will not work, just that a level of USD ~30 would be more reasonable. We get the feeling that the retail price is not entirely in the hands of Starbreeze, as the company may have been pressured by stakeholders such as 505, Skybound or Smilegate. It could also be that the company wants to align the price tag with console games, which are typically priced higher than PC games.

Was the gameplay that Starbreeze showed only in an alpha stage?

Yes and no. The production has been active for years and roughly five months remain before this game is set to launch. Fine-tuning will be vastly accelerated for three to four months. The last month is used to implement some community feedback from the beta and selective testers, as well as a rollout to digital and physical channels for the game itself. We believe this includes the certifications for PS4 and Xbox, as we think the one for Steam has already settled. As such, the game we will see in November will probably look much more polished in terms of graphical experience while elements like character progression, physics, structures and the story will likely be the same.

Is our sales estimate of 7.5 million copies during its lifetime still reasonable?

Yes. We estimate 7.5 million copies sold during the game's lifetime up until 2020. However, given the longevity Starbreeze wants to achieve with its releases and what it has achieved so far, we reason that this could even be prolonged. Although this figure may seem high to some (and very low to others), we pencil in a price decline of ~95% during this time, where it should generate the bulk of sales volume.

How much does OTWD contribute to our valuation of the stock?

Having seen the share slide, we have received many requests to model nightmare scenarios for the upcoming titles – including, most notably, OTWD. If we pencil in 80% worse performance than our base case, the negative delta in our valuation would be about SEK 3.5 per share.

What about E3 performance overall?

Having followed the event for many years, E3 2018 was very content-packed and we believe it had more interesting releases than we have seen in a while. This means that competition for the same player pools will likely be sky-high. Mitigating factors to cut through the noise are successful marketing campaigns and a strong niche, which we believe OTWD has managed to achieve. Many of the games showcasing at E3, however, are due for release in 2019 and beyond.

What about Steam's global bestseller list?

This is not relevant at this point. We suggest that the game is highly unlikely to hit any top lists at present, something that we have seen other people argue. The trend is moving toward not pre-ordering games, unless players are given a steep discount, large cosmetic packages and the like. For many releases and especially for console games, most of these perks can be gained even without a pre-order. The point of ordering is not as clear as it used to be, especially not when most deliveries are done digitally. No one really knows how Steam calculates its top position, thus making it a very unclear indicator. At the moment, PUBG is no. 1 but does this mean it has been trending well this week or this month and does this also factor in its accumulated sold copies of ~40 million? This begs the question as to whether a top placement is even relevant. As a comparison, games from Ubisoft, for example, also showcased at E3 but have not gained any mentionable positions on Steam's bestseller list.

Factors to consider when investing in Starbreeze

Starbreeze is an established and respected name in the gaming industry, winning coveted partnerships with the likes of IMAX, Acer and SEGA. Its PAYDAY franchise is wildly popular and PAYDAY 2 has become one of the most popular games of all time, boasting the largest player community on the digital distribution platform Steam. Players of Starbreeze's games are active, engaged and loyal, spending money on downloadable content years after initial launch. This fan base offers Starbreeze a solid platform from which it can market its future releases. We expect a windfall as early as winter 2018 when it adds another sought-after game title to its name. In addition, Starbreeze has expanded its business in an effort to stabilise its earnings flows. Executed properly, Starbreeze can reach sales CAGR of over 70% up to 2020E while de-risking the business model, warranting a rerating of the share. We calculate a valuation range of SEK 15.1-17.4 per share.

We identify a number of key factors in Starbreeze's investment case

We consider the following factors to be key when evaluating an investment in Starbreeze:

- Transformation from a studio-for-hire to a global provider of world-class entertainment experiences
- Positioned to benefit from sizeable investments in its games pipeline, publishing projects and emerging technologies such as VR
- New business lines such as Publishing and VR add cash flows in periods between major game releases, potentially mitigating future earnings volatility
- Successfully applies its "games as a service" concept, with a frequent mix of paid and free updates for its games to prolong their lifetimes and earnings potential.

Key risk factors

- Its focus on AAA titles, which are released less frequently and require more time and resources than a typical game, makes it vulnerable to disappointments should its games garner a weak reception from players
- Starbreeze is dependent on its ability to attract and retain key employees, as the business is highly knowledge intensive
- The nature of the games industry, with a majority of revenues centred around the release of the game, could put pressure on finances if projects are delayed
- Competition in the industry is intense, which could put pressure on price and the number of sold copies. Competition does not only include other games developer, but also entertainment companies.

Attractively positioned to take part in a USD ~100bn market opportunity

Attractively positioned in the value chain

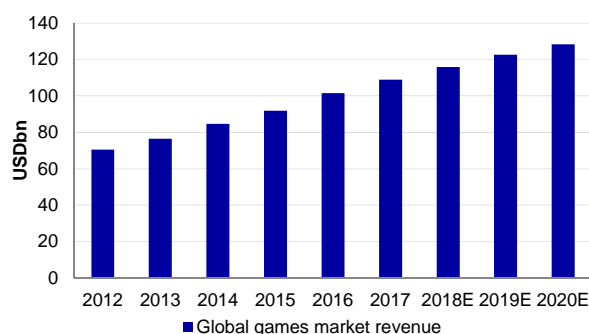
Aided by the success of its popular PAYDAY games, Starbreeze has transformed from a studio-for-hire into a global provider of entertainment experiences, penetrating multiple parts of the value chain in the games industry. We believe that Starbreeze is attractively positioned to take a share of the flourishing USD ~100bn market for games, which could grow at a 2017-20 CAGR of ~6%, according to market forecasts by Newzoo.

STARBREEZE'S POSITION IN GAMES ECOSYSTEM



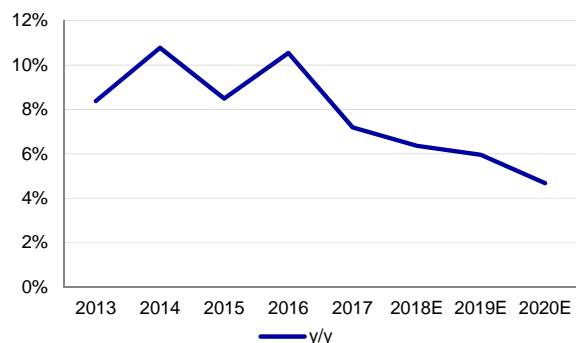
Source: Company data and Nordea

GLOBAL GAMES MARKET REVENUE



Source: Newzoo and Nordea estimates

GAMES REVENUE GROWTH Y/Y



Source: Newzoo and Nordea estimates

Overkill's The Walking Dead a likely hit

When the dead come knocking

The eagerly awaited Overkill's The Walking Dead (OTWD) is Starbreeze's first major internally developed project and is slated for release this autumn. Starbreeze has poured its PAYDAY 2 earnings into the development of OTWD and the first trailer, unveiled in December 2017, garnered considerable interest from players, receiving more than 15 million views on YouTube and Facebook in the first week alone. The popularity of The Walking Dead universe does not seem to be waning. In fact, it seems to be more alive than ever. We believe the game could be Starbreeze's next big franchise as it appeals to fans of The Walking Dead as well as the zombie genre. We are keenly aware that the gaming developer and publisher Telltale has been able to capitalise on the same franchise with an episode-based adventure game. In addition, The Walking Dead TV series still attracts an audience of millions each week and has been renewed for season nine, a testament of its popular appeal.

A timely fill to a void in the genre

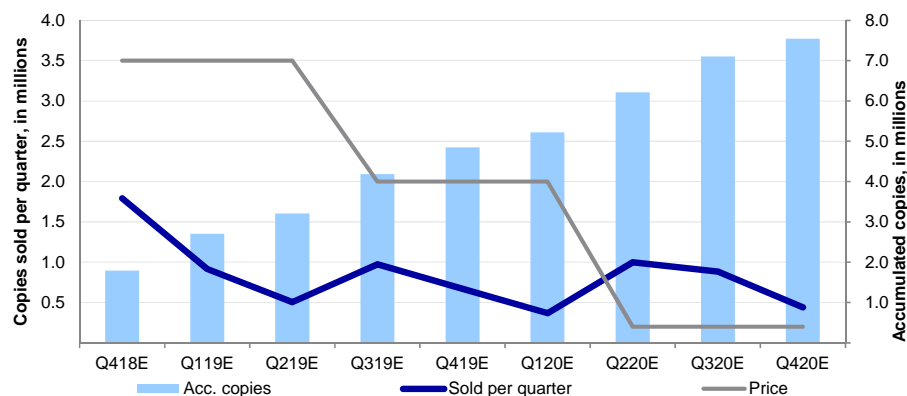
On the gaming front, we note that other comparable co-op survival games, such as Left 4 Dead 2, are among the top-selling games of all time. We believe Starbreeze's OTWD compares well with the Left 4 Dead franchise and will fill a void in the genre, which has not had a major release for several years. On top of this, Starbreeze's decision to use the renowned Unreal Engine for OTWD will boost the game's chances of success as it would give it a familiar look and feel, albeit modernised.

Potential to mirror the success of PAYDAY 2

We believe OTWD's sales trend will be similar to PAYDAY 2, Starbreeze's most successful game to date, and be determined by dynamic pricing. As with other titles, PAYDAY 2 generated most of its revenue from copies sold when it was launched, but the game still brings in a lot of revenue from downloadable content (DLC). We estimate that OTWD's owner base could approach 8 million over time, compared with the ~3 million at the release of the first DLC.

We estimate a similar sales uptake as for PAYDAY 2, implying a player base of nearly 8 million over time

COPIES SOLD, ACCUMULATED COPIES AND PRICING



Source: Nordea estimates

Project Crossfire – not all is quiet on the Western front

Project Crossfire, expected in 2020, is the next major game release following OTWD

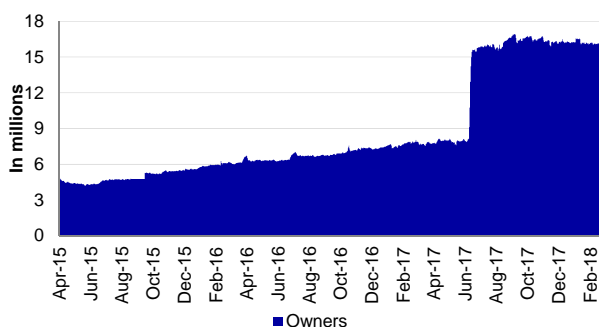
Following OTWD, Project Crossfire will be Starbreeze's next major game release. Crossfire is currently the third-highest grossing PC game in the world, with 2017 revenues of USD 1.4bn. In 2016, Starbreeze and Crossfire's developer Smilegate signed an agreement for the company to develop a Western version of the game, which currently generates a vast majority of its sales in Asia. We take a cautious view on Project Crossfire as the franchise, while huge in Asia with 650 million players, has not seen the same success in the Western world. A successful release of Starbreeze's version, however, could pose serious competition for CS:GO and Overwatch, each of which had sales of over USD 300m in 2017.

What to expect from PAYDAY 3

PAYDAY 3 has a superior platform from the start compared to its predecessor

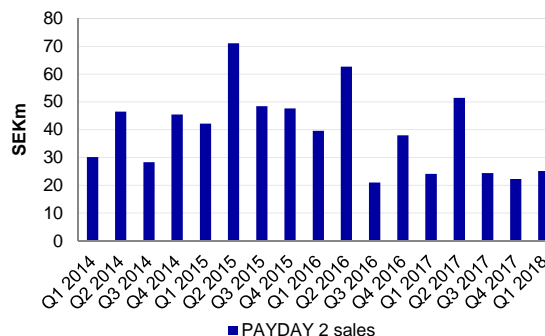
After the releases of OTWD and Project Crossfire, focus will shift to the next sequel in the PAYDAY series. As the game is still in the early design phase, it is difficult to make any predictions about its potential. Nonetheless, we believe it could be as profitable as PAYDAY 2. We note that the player base and Steam community is larger today than when PAYDAY 2 was released, and we believe that PAYDAY 3 will have a wider geographic scope and enjoy a full release across all platforms simultaneously. The development budget is likely to be considerably higher, meaning that the game is probably going to be more impressive than its predecessor. Plus, Starbreeze owns the full IP rights and revenue-sharing will be lower.

PAYDAY 2'S OWNERS



*Note that Overkill gave away five million copies of the game in June 2017
Source: Company data and Nordea

PAYDAY 2'S SALES



Source: Company data and Nordea

Better risk and earnings profile...

New business lines to improve Starbreeze's earnings profile

Starbreeze has made strategic investments to diversify its business, adding virtual reality (VR) technology and a publishing platform. We welcome these initiatives as we believe that they lower the company's risk and its reliance on game releases to

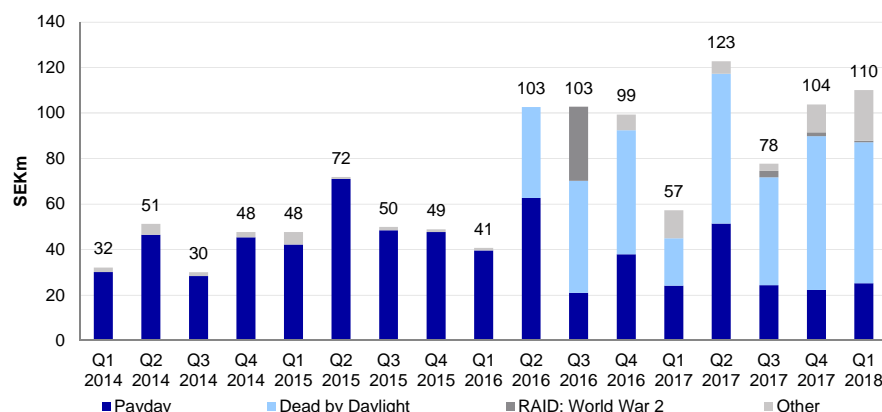
generate revenue, which had created severe income peaks and troughs. The cash flows of these new businesses are typically steadier, alleviating some of the pressure on Starbreeze's finances and making the game releases less vulnerable to delays caused by cash-strapped budgets.

...thanks to publishing arm...

To leverage on its expertise, Starbreeze mainly collaborates with developers of similar games to those in its own portfolio. The first publishing project, Dead by Daylight, was released on 14 June 2016 for PC and the console release followed in June 2017. It has so far sold more than three million copies on Steam. We see potential to further leverage the publishing platform by adding and releasing more titles. Currently, its pipeline includes popular franchises such as System Shock 3 and Psychonauts 2.

First publishing project, Dead by Daylight, has sold more than three million copies

SALES COMPOSITION



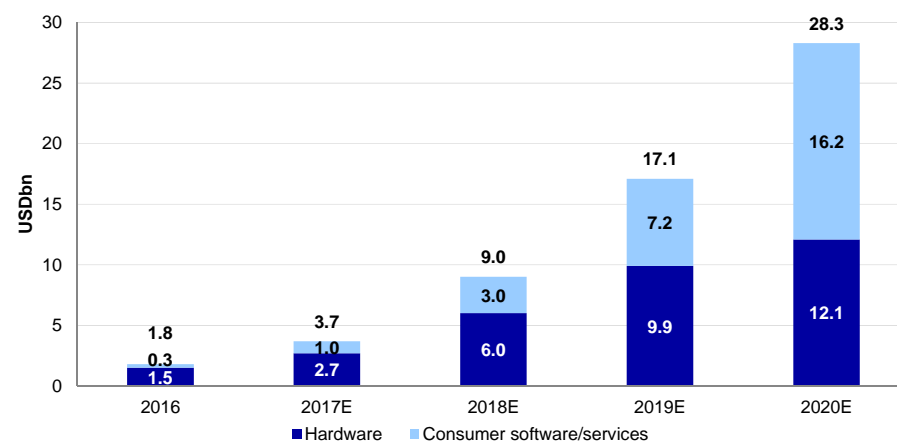
Source: Company data

...and VR technology

Virtual reality is an emerging technology that is likely to experience considerable growth. Although there is lingering uncertainty regarding the pace of development and adoption of the technology, PwC forecasts that the VR market will grow at an 80% five-year CAGR through 2021 and will then constitute a USD 15bn market. Beyond 2021, we expect growth rates to be maintained. In another report, Goldman Sachs forecasts that the combined market for VR and augmented reality (AR) will reach USD 80bn in 2025. SuperData, a market intelligence provider covering the global gaming markets, further estimates that software will account for USD 16.2bn of the total USD 28.3bn of VR revenues that it expects in 2020. This bodes well for Starbreeze's VR strategy of focusing on premium content.

VR is seen by market forecaster as an emerging technology that will grow rapidly

WORLDWIDE VR REVENUE BY SEGMENT

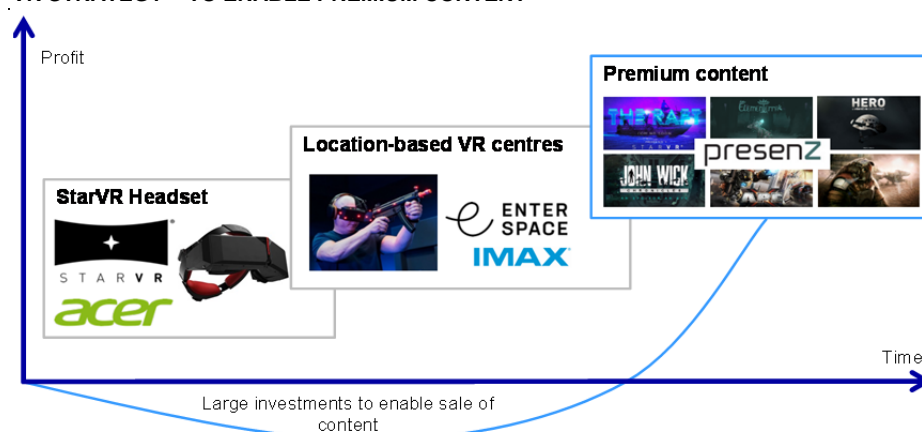


Source: SuperData

Starbreeze is pursuing a VR strategy with the ultimate goal of becoming a premium content provider to its consumers

Starbreeze's VR activities are now close to break-even point after several years of heavy investments. The company has pursued a strategy of developing the technology and the concept for location-based VR centres. It has deemed this necessary to delivering the last phase of its strategy – premium content. Starbreeze has made considerable strides in this strategy, partnering with Acer to develop its high-end StarVR headset, which will be featured at more than ten SEGA arcade locations across Japan by the end of the year. As Starbreeze's expertise lies in delivering premium content, where margins are highest in the value chain, its intention is to leverage its strong IPs, such as PAYDAY, on all entertainment channels and to expand its publishing portfolio by adding VR titles.

VR STRATEGY – TO ENABLE PREMIUM CONTENT



Source: Company data and Nordea

Games as a service approach aims to prolong the games' lifetime

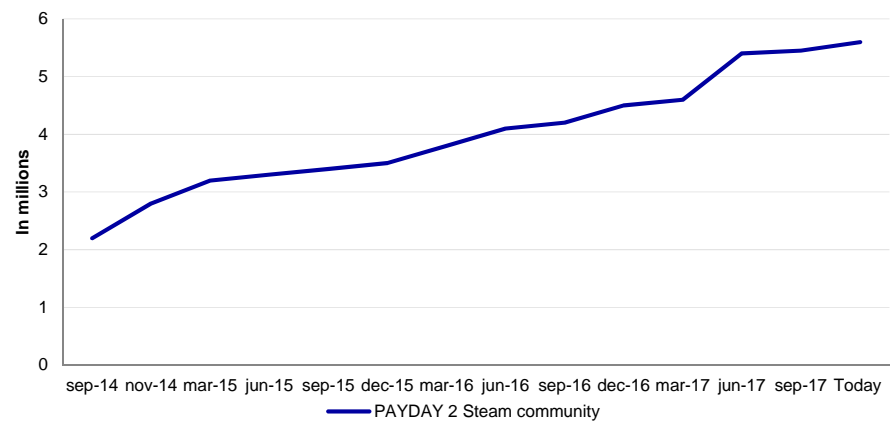
More than four years after launch, PAYDAY 2 is still generating sales

Successful execution with PAYDAY has created the largest player community on Steam

A formula to extend game-life and maximise monetisation

Starbreeze stands out from other games companies thanks to its "games as services" concept, a model it applies to all of its titles. The company's aim is to prolong the life of the game by offering free and paid updates, as well as tailored community events. This concept works particularly well with strong IPs, where PAYDAY 2 is the prime example of the strength of the concept.

PAYDAY 2 was released in August 2013 and has sold more than 16 million copies and generated more than SEK 700m to date for Starbreeze. Historically, the typical game earns the majority of its revenue around the release window. With PAYDAY 2, however, Starbreeze works actively with its player community, keeping them engaged long after initial release with more than 170 free and paid updates, successfully extending the game's lifetime. As an example of Starbreeze's accomplishments, PAYDAY 2's Steam community has amassed 5.5 million members making it the platform's largest community. Starbreeze's use of dynamic pricing also gives it more flexibility and a competitive edge. It means that it can attract more players to its games by quickly adjusting prices, offering the games at a lower retail price but monetising on the larger player base by selling DLCs.

PAYDAY 2'S STEAM COMMUNITY

Source: Company data, Steam and Nordea

A full description of the risk factors we find most relevant for Starbreeze is provided on pages 17-18

Risk factors

Starbreeze's main risk is related to its own game development, as it is expected to derive a majority of its future revenue from these games. The risk is related to the commercial success of its games and the timing of the games' launches. Starbreeze develops AAA games, which have the highest development budgets. If the games are not well-received by the market, this could result in capitalised development costs being impaired.

Games revenue is also unevenly distributed over time, with the majority made in conjunction with the release. Delays in ongoing projects could also hurt profitability and there is a risk that completion of a project requires more resources than estimated. It could put pressure on finances and induce a need of additional capital infusions.

As Starbreeze is a development company, it is highly knowledge intensive and a lot of the value in the company lies within its employees. This includes senior developers and executive management, among those CEO and major shareholder Bo Andersson Klint. Losing key employees could lead to disruptions and affect operations and future success of the company.

The market for games is highly competitive and Starbreeze competes with major global players such as Electronic Arts and Activision Blizzard for players' attention. There are also examples of smaller studios developing successful games, such as PlayerUnknown's Battlegrounds (PUBG), developed by PUBG Corporation (a subsidiary of Korean publisher Bluehole). Competition could also stem from alternative entertainment services such as films, TV, sports and other experiences that compete for consumers' time.

Detailed estimates

GROUP P&L

SEKm	Q1 18	Q2 18E	Q3 18E	Q4 18E	2017	2018E	2019E	2020E
Net sales	110	96	70	637	361	913	1,217	1,996
Growth	92.3%	-22.0%	-9.4%	513.7%		152.6%	33.4%	64.0%
Direct costs	-77	-72	-63	-479	-298	-691	-904	-1,174
Gross profit	33	23	7	158	63	222	314	822
Selling and marketing costs	-10	-12	-12	-15	-59	-50	-55	-58
Administrative expenses	-25	-23	-23	-27	-154	-97	-119	-131
Other	8	0	0	0	-1	8	0	0
Operating profit	6	-12	-28	116	-151	83	139	633
Net financials	-11	-10	-10	-9	-21	-40	-39	-24
Associates	-2	0	0	0	-4	-2	9	6
Pre-tax profit	-6	-22	-37	107	-176	41	109	615
Tax	1	4	7	-20	21	-8	-19	-115
Net profit	-5	-18	-30	86	-155	33	90	500
Margins								
Gross profit	30.1%	24.5%	10.3%	24.8%	17.5%	24.3%	25.8%	41.2%
EBITDA	44.4%	22.8%	9.7%	34.5%	-14.8%	32.6%	38.7%	54.4%
EBITA	37.8%	14.8%	-1.3%	32.5%	-19.2%	28.7%	35.6%	51.5%
Operating profit	5.7%	-12.2%	-39.3%	18.2%	-41.9%	9.1%	10.7%	31.1%

Source: Company data and Nordea estimates

DIVISIONAL SPLIT

SEKm	Q1 18	Q2 18E	Q3 18E	Q4 18E	2017	2018E	2019E	2020E
Net sales								
Games	32	47	30	580	122	688	877	1,211
Publishing	63	41	31	46	220	181	299	739
Virtual reality	13	6	7	9	4	34	31	37
Other	2	3	3	3	15	10	10	10
Direct costs								
Games	-28	-34	-26	-436	-37	-523	-704	-927
Publishing	-36	-22	-20	-28	-195	-106	-132	-174
Virtual reality	-2	-5	-6	-4	0	-17	-19	-25
Other	-11	-12	-12	-11	-66	-45	-49	-48
Operating costs								
Games	-2	-11	-11	-17	-85	-40	-77	-90
Publishing	-9	-8	-8	-10	-67	-35	-43	-47
Virtual reality	-5	-6	-6	-6	-4	-23	-21	-22
Other	-10	-10	-10	-10	-58	-41	-43	-42
Operating profit								
Games	2	2	-7	128	-1	125	96	194
Publishing	17	11	4	8	-42	40	124	518
Virtual reality	6	-5	-5	-1	0	-6	-9	-11
Other	-19	-19	-19	-19	-108	-76	-81	-80
Profit margin								
Games	6%	4%	-22%	22%	0%	18%	11%	16%
Publishing	27%	27%	11%	17%	-19%	22%	41%	70%
Virtual reality	44%	-94%	-77%	-12%	-11%	-18%	-30%	-29%
Y/Y								
Net sales								
Games	33%	-9%	22%	2516%		464%	27%	38%
Publishing	125%	59%	-9%	-24%		-18%	66%	147%
Virtual reality	n.m	n.m	n.m	n.m		770%	-8%	19%

Source: Company data and Nordea estimates

Risk factors

Below, we list the main risk factors we find relevant for Starbreeze. The purpose of this is not to provide a comprehensive picture of all of the risks that the company may be subject to, but instead to highlight those that we find most relevant. The main risks we see relate to games development, intellectual property rights and financing requirements.

Dependent on a limited numbers of distribution platforms; mainly Steam	Distributors A large portion of sales is attributable to a small number of distribution channels; mainly the digital platform Steam. As such, if the current terms for using the platform were to change, or if Steam were to lose market share to other platforms, it could have an adverse impact on Starbreeze's revenue and profitability.
Delays could impact profitability and increase cost of completion of games	Development of games and project delays Future revenue streams are dependent on the company's ability to develop new games on a regular basis. Delays in ongoing projects could also hurt profitability and there is a risk that completion of a project requires more resources than estimated.
Games might not be as commercially successful as predicted	Low revenue upon release of games or other products There is a risk that new games will not be well-received by the market. This could result in revenue losses and lower margins than expected as well as capitalised development costs having to be impaired. This relates both to games developed in-house and games where Starbreeze acts as a publisher and is accountable for part of the financing.
Starbreeze depends on a few key individuals, including senior management and developers	Dependency on key individuals Starbreeze's future success is dependent on its ability to attract and retain employees. The business is knowledge-intensive and if Starbreeze cannot employ individuals when the need arises, this could affect the operations negatively. A loss of senior management, including the CEO and main owner Bo Andersson Klint, as well as senior developers, could also lead to disruptions in its operations.
Intellectual property is an integral part to the viability of Starbreeze's business	Intellectual property rights Intellectual property (IP) rights comprise a large part of the company's assets. The IP rights are primarily in the form of copyright on its own games and software as well as publishing licences for games where rights are owned by third-party developers. Starbreeze's operations could be negatively impacted, if it was unable to protect the IP rights. There is also a risk that the company might infringe on third-party property rights.
Company may need additional funding in the future, due to its volatile cash flows	Capital need There is a risk that the company may need additional capital in the future due to revenue being unevenly distributed over a game's lifetime. This could lead to delays in projects and a slowdown of operations. If a game is not as successful as predicted, the company could also require more capital, as the company is dependent on a limited number of important games, including Overkill's The Walking Dead.
Market for games is highly competitive, with a number of current and future competitors	Market and competition Starbreeze operates in a highly competitive market. Competitors are not only game developers but also other entertainment companies. There is a risk that the company's product will be overshadowed by the competition and there could be pressure on the pricing of its games. Competition includes major multinational games companies and smaller games studios.

Starbreeze has historically acquired companies and technologies and is therefore exposed to certain acquisition-related risks

Acquisitions and integration

Starbreeze has acquired and will probably continue to acquire companies or assets. There is a risk that the integration will be more costly and time-consuming than expected or that the company will lose key customers following acquisitions. One key risk is that Starbreeze might overpay for companies or technologies in relation to their future financial performances. This could impact operations and hurt profitability.

Reported numbers and forecasts

INCOME STATEMENT										
SEKm	2013/14	2014/15	2015	2016	2017	2018E	2019E	2020E	2021E	2022E
Net revenue	214	197	99	345	361	913	1,217	1,996	2,820	1,648
Revenue growth	477.8%	-7.7%	-49.9%	249.6%	4.6%	152.6%	33.4%	64.0%	41.3%	-41.6%
EBITDA	159	59	24	81	-54	297	481	1,099	1,554	759
Depreciation and impairments PPE	-0	-1	-2	-4	-16	-35	-38	-58	-56	-33
EBITA	158	58	22	77	-69	262	442	1,041	1,498	726
Amortisation and impairments	-16	-12	-1	-21	-82	-179	-303	-408	-327	-312
EBIT	142	46	21	56	-151	83	139	633	1,171	415
of which associates	0	0	0	0	0	0	0	0	0	0
Associates excl. from EBIT	0	0	0	0	-4	-2	9	6	17	7
Net financials	0	0	0	-1	-21	-40	-39	-24	-13	-0
Pre-Tax Profit	142	46	21	56	-176	41	109	615	1,175	421
Reported taxes	-24	-12	1	1	21	-8	-19	-115	-234	-83
Net profit from cont. operations	118	34	22	57	-155	33	90	500	941	338
Discontinued operations	0	0	0	0	0	0	0	0	0	0
Minority interest	0	0	0	0	0	0	0	0	0	0
Net profit to equity	118	34	22	57	-155	33	90	500	941	338
EPS	0.83	0.15	0.09	0.22	-0.55	0.10	0.27	1.53	2.88	1.03
DPS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
of which ordinary	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
of which extraordinary	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Profit margin in percent										
EBITDA	74.2%	30.0%	23.9%	23.5%	-14.8%	32.6%	39.5%	55.0%	55.1%	46.1%
EBITA	74.0%	29.5%	22.0%	22.3%	-19.1%	28.7%	36.3%	52.1%	53.1%	44.1%
EBIT	66.5%	23.5%	21.3%	16.3%	-41.9%	9.1%	11.4%	31.7%	41.5%	25.2%
Adjusted earnings										
EBITDA (adj.)	159	59	24	81	-54	297	481	1,099	1,554	759
EBITA (adj.)	158	58	22	77	-69	262	442	1,041	1,498	726
EBIT (adj.)	142	46	21	56	-151	83	139	633	1,171	415
EPS (adj.)	0.83	0.15	0.09	0.22	-0.55	0.10	0.27	1.53	2.88	1.03
Adjusted profit margins in percent										
EBITDA (adj.)	74.2%	30.0%	23.9%	23.5%	-14.8%	32.6%	39.5%	55.0%	55.1%	46.1%
EBITA (adj.)	74.0%	29.5%	22.0%	22.3%	-19.1%	28.7%	36.3%	52.1%	53.1%	44.1%
EBIT (adj.)	66.5%	23.5%	21.3%	16.3%	-41.9%	9.1%	11.4%	31.7%	41.5%	25.2%
Performance metrics										
CAGR last 5 years										
Net revenue	n.a.	n.a.	n.a.	n.a.	n.a.	33.7%	43.9%	82.4%	52.2%	35.4%
EBITDA	n.a.	n.a.	n.a.	n.a.	n.a.	13.4%	52.0%	115.6%	80.5%	-270.0%
EBIT	n.a.	n.a.	n.a.	n.a.	n.a.	-10.3%	24.5%	97.5%	83.4%	-222.3%
EPS	n.a.	n.a.	n.a.	n.a.	n.a.	-34.3%	12.8%	75.3%	66.9%	-213.5%
DPS	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Average EBIT margin	66.5%	45.9%	41.1%	31.1%	9.4%	2.9%	5.0%	15.7%	25.6%	28.4%
Average EBITDA margin	74.2%	53.0%	47.3%	37.7%	22.1%	21.3%	28.2%	39.4%	46.2%	48.8%

Source: Company data and Nordea estimates

VALUATION RATIOS - ADJUSTED EARNINGS										
SEKm	2013/14	2014/15	2015	2016	2017	2018E	2019E	2020E	2021E	2022E
P/E (adj.)	8.2	78.1	170.0	87.0	n.m.	95.6	35.4	6.4	3.4	9.4
EV/EBITDA (adj.)	5.2	43.8	152.3	67.3	n.m.	9.7	5.6	1.8	0.5	0.7
EV/EBITA (adj.)	5.3	44.5	165.7	71.0	n.m.	11.0	6.1	1.9	0.6	0.7
EV/EBIT (adj.)	5.9	55.8	170.9	96.9	n.m.	34.7	19.3	3.1	0.7	1.2
Valuation ratios/reported earnings										
P/E	8.2	78.1	170.0	87.0	n.m.	95.6	35.4	6.4	3.4	9.4
EV/Sales	3.9	13.1	36.4	15.8	7.7	3.1	2.2	1.0	0.3	0.3
EV/EBITDA	5.2	43.8	152.3	67.3	n.m.	9.7	5.6	1.8	0.5	0.7
EV/EBITA	5.3	44.5	165.7	71.0	n.m.	11.0	6.1	1.9	0.6	0.7
EV/EBIT	5.9	55.8	170.9	96.9	n.m.	34.7	19.3	3.1	0.7	1.2
Dividend yield (ord.)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
FCF yield	12.6%	-1.2%	-1.0%	-4.7%	-25.0%	4.8%	5.9%	22.2%	35.9%	10.8%
Payout ratio	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Source: Company data and Nordea estimates

BALANCE SHEET

SEKm	2013/14	2014/15	2015	2016	2017	2018E	2019E	2020E	2021E	2022E
Intangible assets	25	184	389	1,303	1,785	1,883	1,824	1,717	1,592	1,451
of which R&D	10	31	115	304	643	741	682	574	450	309
of which other intangibles	11	115	200	595	597	597	597	597	597	597
of which goodwill	4	39	74	405	545	545	545	545	545	545
Tangible assets	1	10	17	23	99	91	77	59	59	59
Shares associates	0	0	0	9	42	40	49	55	72	79
Interest bearing assets	0	0	0	0	0	0	0	0	0	0
Deferred tax assets	0	0	5	31	108	0	0	0	0	0
Other non-int. bearing assets	0	0	0	0	0	0	0	0	0	0
Other non-current assets	1	13	16	32	38	0	0	0	0	0
Total non-current assets	28	208	427	1,398	2,072	2,014	1,951	1,831	1,723	1,590
Inventory	0	0	0	0	0	0	0	0	0	0
Accounts receivable	18	19	33	26	28	70	94	154	217	127
Other current assets	49	34	23	56	125	316	422	692	977	571
Cash and bank	137	111	85	669	234	776	963	1,669	2,809	3,151
Total current assets	203	164	141	751	387	1,162	1,479	2,514	4,003	3,848
Assets held for sale	0	0	0	0	0	0	0	0	0	0
Total assets	230	371	568	2,149	2,459	3,177	3,429	4,345	5,726	5,438
Shareholders equity	158	254	398	1,370	1,282	1,706	1,795	2,295	3,237	3,575
of which preferred stock	0	0	0	0	0	0	0	0	0	0
of which Equity of hyb. debt	0	0	0	0	0	0	0	0	0	0
Minority interest	0	0	0	0	0	0	0	0	0	0
Total Equity	158	254	398	1,370	1,282	1,706	1,795	2,295	3,237	3,575
Deferred tax	1	0	42	119	169	169	169	169	169	169
Long term int. bearing debt	0	0	0	0	0	0	0	0	0	0
Non-current liabilities	0	8	8	307	348	348	348	348	348	348
Pension provisions	0	0	0	0	0	0	0	0	0	0
Other long-term provisions	0	0	0	0	0	0	0	0	0	0
Other long-term liabilities	0	0	0	0	0	0	0	0	0	0
Convertible debt	0	40	0	266	467	467	467	467	467	467
Shareholder debt	0	0	0	0	0	0	0	0	0	0
Hybrid debt	0	0	0	0	0	0	0	0	0	0
Total non-curr. liabilities	1	48	51	692	984	984	984	984	984	984
Short-term provisions	0	0	0	0	0	0	0	0	0	0
Accounts payable	52	36	54	42	122	309	412	676	955	558
Other current liabilities	19	33	65	45	71	178	238	390	551	322
Short term interest bearing debt	0	0	0	0	0	0	0	0	0	0
Total current liabilities	71	70	119	87	193	487	650	1,066	1,506	880
Liab.for assets held for sale	0	0	0	0	0	0	0	0	0	0
Total liabilities and equity	230	371	568	2,149	2,459	3,177	3,429	4,345	5,726	5,438
Balance sheet and debt metrics										
Net debt	-137	-71	-85	-404	233	-309	-496	-1,202	-2,342	-2,684
Working capital	-5	-17	-63	-5	-40	-101	-134	-220	-311	-182
Invested capital	23	191	364	1,393	2,032	1,914	1,816	1,611	1,412	1,408
Capital employed	159	301	449	2,062	2,266	2,689	2,779	3,279	4,221	4,558
ROE	16.5%	6.6%	6.5%	-11.7%	2.2%	5.1%	24.4%	34.0%	9.9%	11.5%
ROIC	476.1%	31.9%	7.8%	6.5%	-7.9%	3.3%	6.0%	29.9%	61.8%	23.5%
Net debt/EBITDA	-0.9	-1.2	-3.6	-5.0	n.m.	-1.0	-1.0	-1.1	-1.5	-3.5
Interest coverage	n.m.	n.m.	n.m.	4.1	-4.6	1.9	3.1	20.7	58.9	55.6
Equity ratio	68.7%	68.3%	70.1%	63.8%	52.1%	53.7%	52.4%	52.8%	56.5%	65.7%
Net gearing	-86.3%	-28.0%	-21.4%	-29.5%	18.2%	-18.1%	-27.7%	-52.4%	-72.4%	-75.1%

Source: Company data and Nordea estimates

CASH FLOW STATEMENT

SEKm	2013/14	2014/15	2015	2016	2017	2018E	2019E	2020E	2021E	2022E
EBITDA (adj.) for associates	159	59	24	81	-54	297	481	1099	1554	759
Paid taxes	-3	-24	-4	4	-5	-8	-19	-115	-234	-83
Net financials	0	0	0	3	-5	-40	-39	-24	-13	0
Change in Provisions	0	0	0	0	0	0	0	0	0	0
Change in other LT non-IB	0	-4	-7	257	-43	146	0	0	0	0
Cash flow to/from associates	0	0	0	0	0	0	0	0	0	0
Dividends paid to minorities	0	0	0	0	0	0	0	0	0	0
Other adj. to reconcile to cash flow	-18	5	34	-329	85	0	0	0	0	0
Funds from operations (FFO)	137	37	47	15	-21	396	422	960	1308	675
Change in NWC	0	0	0	0	0	61	34	86	91	-129
Cash flow from op. (CFO)	137	37	47	15	-21	457	456	1046	1399	546
Capital Expenditure	-15	-49	-79	-229	-561	-305	-269	-341	-258	-204
Free Cash Flow before A&D	122	-13	-32	-214	-582	152	187	706	1140	342
Proceeds from sale of assets	0	0	0	0	0	0	0	0	0	0
Acquisitions	0	-18	-4	-60	-59	0	0	0	0	0
Free cash flow	122	-31	-36	-274	-641	152	187	706	1140	342
Dividends paid	0	0	0	0	0	0	0	0	0	0
Equity issues / buybacks	0	0	0	555	0	390	0	0	0	0
Net change in debt	0	40	-40	265	301	0	0	0	0	0
Other financing adjustments	1	0	0	14	0	0	0	0	0	0
Other non-cash adjustments	1	-34	51	24	-95	0	0	0	0	0
Change in cash	123	-26	-25	584	-436	542	187	706	1140	342
Cash flow metrics										
Capex/D&A	90%	291%	2982%	887%	510%	142%	79%	73%	67%	59%
Capex/Sales		19%	78%	64%	138%	33%	22%	17%	9%	12%
Key information										
Share price year end (current)	6.8	11.8	15.7	19.3	8.4	9.7	9.7	9.7	9.7	9.7
Market cap	968	2,665	3,681	5,874	2,565	3,180	3,180	3,180	3,180	3,180
Enterprise value	832	2,594	3,596	5,470	2,798	2,871	2,683	1,978	838	496
Diluted no. of shares, year-end (m)	142.4	226.8	234.4	304.4	305.4	327.1	327.1	327.1	327.1	327.1

Source: Company data and Nordea estimates

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