



ERIK PENSER BANK

Penser Access | Software | Sweden | 28 November 2023

Beyond Frames Entertainment AB

Virtual reality here to stay

Rapidly growing entertainment form...

Beyond Frames is active in the field of VR (virtual reality) games development. We believe the market for such games will grow in the future, given the high growth in VR hardware spurred by the pandemic and made possible by decreasing prices and less stringent systems requirements. We anticipate a robustly expanding market in the coming years. In our view, the volumes of headsets sold during the pandemic and the fact that headset prices have now diminished has led to a relatively large market into which games developers can release titles. Moreover, we believe many of the large hardware vendors, such as Meta, are dependent on more titles being released for their headsets, which will help with the marketing and financing of new titles. For these reasons, we and the leading statistics bureaus believe VR games will see growth surpassing 20% in the coming years.

...at a reasonable valuation...

The healthy share price development during the year has stemmed from the successful stealth launch of Ghosts of Tabor. This launch shows the strength of the company's business model, where it was only responsible for publishing the game. Being responsible for elements of game development or using external financing reduces the company's operational risk, partly at the expense of operational leverage, as reflected in its gross margin. Despite more expansive growth than the sector thanks to successful games releases, the company is valued at par with other games developers listed on the Stockholm exchange. In Q3 the company has signed a development deal on a VR-title with a leading entertainment franchise, we believe that this shows Beyond Frames strong position in the market.

...with a proven business model

We believe Beyond Frames is on the cusp of a period of robust growth in the next six to 12 months, partly reflected in its current share price. In our view, its business model suits the current market environment, as the risks associated with games development are somewhat mitigated. Given the market sentiment, we believe a DCF model best reflects the company's value creation. This suggests a fair value of SEK 26–27. We believe that there is further room for upside potential in the estimates and valuation if the company should release a blockbuster game since we have based our estimates on normalised data for return on investments in games. Furthermore, we believe that the risk premium should decrease if the company can publish another successful title like Ghosts of Tabor.

| Change in estimates | | | Forecast (SEK m) | | | | Value and risk | | | | | | | | | | | | | | |
|-------------------------------|--------------------------|-----|-------------------|----------------|--------|-------|----------------|---|------------------------------------|------|-----|----|--------------------|--|---|-------------------|--|---|------------------|--|---|
| | 23e | 24e | 25e | 2022 | 2023e | 2024e | 2025e | Fair value | SEK 26.0 - 27.0 | | | | | | | | | | | | |
| Total Revenues | - | - | - | 48 | 153 | 177 | 196 | Share price | SEK 22.8 | | | | | | | | | | | | |
| EBITDA, adj. | - | - | - | Revenue growth | 21% | >100% | 16% | 11% | Risk level | High | | | | | | | | | | | |
| EPS, adj. | - | - | - | EBITDA, adj. | -14 | 9 | 27 | 39 | Price Performance 12 months | | | | | | | | | | | | |
| Upcoming events | | | EBIT, adj. | -21 | -6 | 11 | 20 | | | | | | | | | | | | | | |
| Q4 - report | 23 February 2023 | | EPS, adj. | -1.4 | -0.3 | 0.6 | 0.9 | | | | | | | | | | | | | | |
| Company facts (SEKm) | | | EPS growth, adj. | N.m. | N.m. | N.m. | 65% | | | | | | | | | | | | | | |
| Number of shares | 17m | | BV/share | 5.3 | 5.1 | 5.6 | 6.6 | Conflicts of interest <table border="1"> <thead> <tr> <th></th> <th>Yes</th> <th>No</th> </tr> </thead> <tbody> <tr> <td>Liquidity provider</td> <td></td> <td>✓</td> </tr> <tr> <td>Certified adviser</td> <td></td> <td>✓</td> </tr> <tr> <td>Transactions 12m</td> <td></td> <td>✓</td> </tr> </tbody> </table> | | | Yes | No | Liquidity provider | | ✓ | Certified adviser | | ✓ | Transactions 12m | | ✓ |
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| Certified adviser | | ✓ | | | | | | | | | | | | | | | | | | | |
| Transactions 12m | | ✓ | | | | | | | | | | | | | | | | | | | |
| Market capitalization | 348 | | EBIT margin | Neg. | Neg. | 7.3% | 11.9% | | | | | | | | | | | | | | |
| Net debt | -32 | | ROE, adj. | Neg. | Neg. | 10.6% | 15.3% | | | | | | | | | | | | | | |
| EV | 316 | | ROCE, adj. | Neg. | Neg. | 12.1% | 19.3% | | | | | | | | | | | | | | |
| Free float | 74% | | EV/Sales | 2.7x | 2.1x | 1.8x | 1.6x | Conflicts of interest <table border="1"> <thead> <tr> <th></th> <th>Yes</th> <th>No</th> </tr> </thead> <tbody> <tr> <td>Liquidity provider</td> <td></td> <td>✓</td> </tr> <tr> <td>Certified adviser</td> <td></td> <td>✓</td> </tr> <tr> <td>Transactions 12m</td> <td></td> <td>✓</td> </tr> </tbody> </table> | | | Yes | No | Liquidity provider | | ✓ | Certified adviser | | ✓ | Transactions 12m | | ✓ |
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| Transactions 12m | | ✓ | | | | | | | | | | | | | | | | | | | |
| Daily trading volume, average | k | | EV/EBITDA | Neg. | 33.5x | 11.5x | 8.1x | | | | | | | | | | | | | | |
| Bloomberg Ticker | BEYOND SS EQUITY | | EV/EBIT | Neg. | -56.0x | 28.3x | 15.6x | | | | | | | | | | | | | | |
| Analyst | | | P/E, adj. | -7.1x | -76.0x | 35.9x | 21.7x | Conflicts of interest <table border="1"> <thead> <tr> <th></th> <th>Yes</th> <th>No</th> </tr> </thead> <tbody> <tr> <td>Liquidity provider</td> <td></td> <td>✓</td> </tr> <tr> <td>Certified adviser</td> <td></td> <td>✓</td> </tr> <tr> <td>Transactions 12m</td> <td></td> <td>✓</td> </tr> </tbody> </table> | | | Yes | No | Liquidity provider | | ✓ | Certified adviser | | ✓ | Transactions 12m | | ✓ |
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| Certified adviser | | ✓ | | | | | | | | | | | | | | | | | | | |
| Transactions 12m | | ✓ | | | | | | | | | | | | | | | | | | | |
| Rikard Engberg | rikard.engberg@penser.se | | P/BV | 1.8x | 4.0x | 3.6x | 3.1x | | | | | | | | | | | | | | |
| | | | FCF yield | -24% | -2% | 0% | 4% | | | | | | | | | | | | | | |
| | | | Net debt / EBITDA | 3.6x | -4.3x | -1.5x | -1.4x | | | | | | | | | | | | | | |

Investment case

Exposure to growing entertainment form: Beyond Frames develops games in VR, one of the fastest-growing forms of digital entertainment. We believe the VR market will grow rapidly in the coming years, given the price erosion for headsets and as the games ecosystem is, in our view, approaching more of a critical mass than a few years ago. We thus believe Beyond Frames will develop well in the future.

Risk mitigation built into the business model: Beyond Frames uses financial partners in its games development. This minimises the risks associated with games releases and makes it possible to reach critical mass more rapidly in games volumes. Moreover, it also allows it to utilise spare capacity via work for hire projects – loaning out the use of its developers on an hourly basis. This all reduces the company's risk of failed games releases owing to delays or lack of capital. We thus believe management has succeeded in mitigating a sizeable share of the risks associated with games development and publishing.

Accelerating growth: Beyond Frames will keep its volumes high since it has a number moving into the commercial phase soon. This, combined with VR being on the cusp of increased penetration among players, leaves us anticipating a bright six to 18 months ahead for Beyond Frames.

Company profile

Beyond Frames develops VR games. In recent years, this market has grown considerably thanks to the large number of headsets sold during the pandemic. Combined with the substantial drop in prices of VR headsets in recent years, this means we expect the market for such gaming platforms will grow exponentially more than the traditional games market. We also believe that games, rather than video, will be the leading vertical for VR content, putting Beyond Frames in a good position.

Beyond Frames uses external financing for a large share of its games development. This mitigates a sizeable portion of the risks typical with games development, making Beyond Frames' capital requirements far lower than if it relied on financing with its own capital. This strategy has proven successful: sales of the Ghosts of Tabor game have surpassed USD 3m since its beta launch. The full launch is set for H1 2024, leaving us expecting solid growth during that period. The external financing has minimised the operational leverage, as reflected in the company's gross margin. We thus consider the business model well suited to the current market situation in the gaming sector.

During 2024, Beyond Frames has several externally financed games set for release, which we believe set it on a solid growth path for the coming years. Moreover, we expect the successful launch of Ghosts of Tabor to render it easier for Beyond Frames to attract financing or publishing contracts for similar games.

In our view, the company is well able to develop traditional computer/console games, should the right project materialise or if it sees that the VR market is not developing in line with the current forecasts of substantial growth.

Valuation

We believe a DCF model is the best method to value Beyond Frames. A relative valuation would be more challenging at present, given the commercial stage the company is currently in. Our DCF model suggests a valuation of SEK 26–27.

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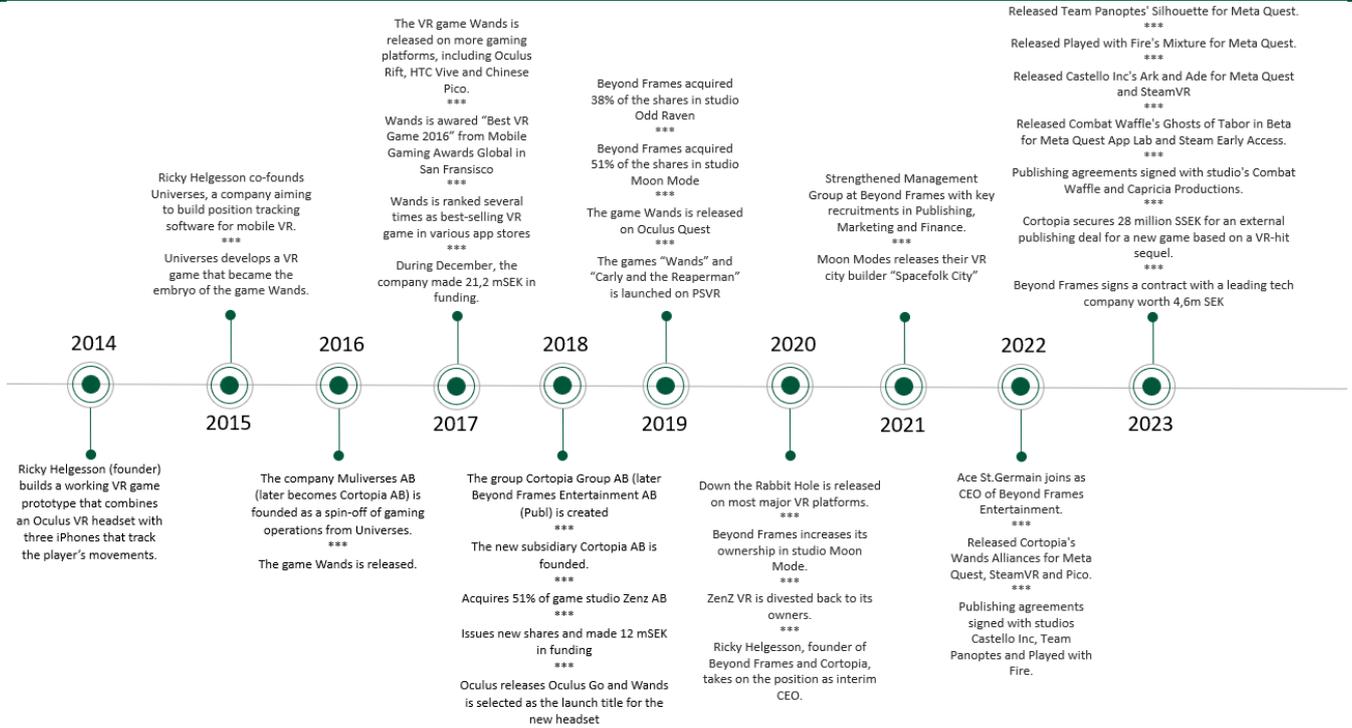
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History

Company description

Beyond Frames operates in the field of XR (extended reality). XR is an umbrella term for virtual reality (VR) and augmented reality (AR). Beyond Frames focuses chiefly on developing games for these platforms. The ecosystem for XR is the same as for traditional computer games.

Involved since the start of VR

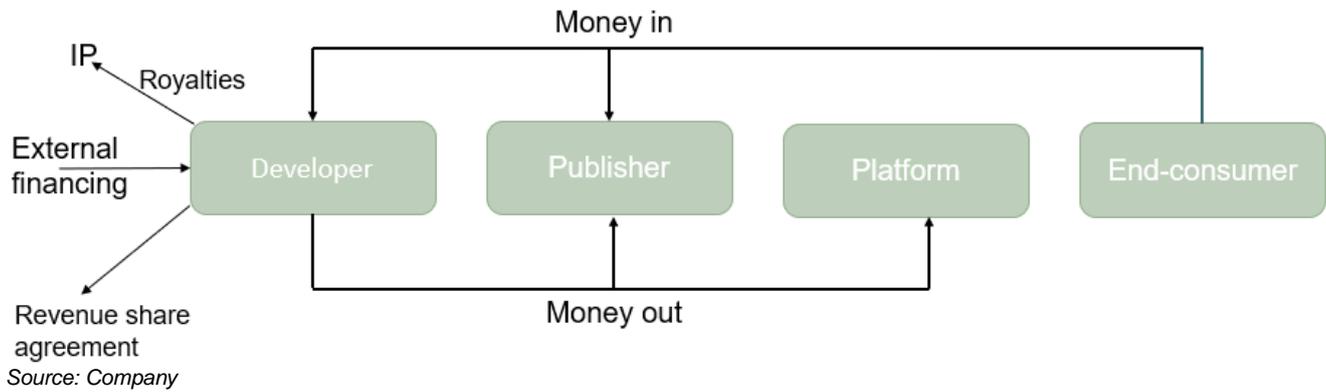


Source: Company

Beyond Frames' position in the field and its operations

The diagram below shows the ecosystem in which Beyond Frames operates and the different stages a game goes through, from ideation/development to launch. This general overview is followed by a summary of the areas in which Beyond Frames is involved.

A relatively complex ecosystem



There is an established industry methodology to calculate the number of sold titles: 1–2% of all game purchasers write a review on the distribution platform. We have used this to estimate the number of copies sold of all games released.

Games development

This is the stage where all the programming and development of the games takes place. This includes the narrative development for the games. A large share of the investments made to develop the games are used at this stage, and this has historically been the most difficult step for which to estimate costs and timing in the industry. Games can be developed using own IP (intellectual property) or third-party IP. If a game is developed using external IP, the developer or publisher pays a royalty to the holder of the IP. Historically, developers have been independent and have relied on publishers, but over the years, there has been a wave of consolidation in the industry, with publishers acquiring independent games developers.

Publishing activities

Publishers are responsible for financing and marketing games titles. They have also historically been responsible for signing distribution agreements with stores and other distribution channels. Publishers have typically relied on internal or external financing. They also find the studios where the development is undertaken. Over a longer period, the market has consolidated, with the larger publishers absorbing a number of studios.

Distribution

The final stage of games development is distribution. Currently, most of the distribution of the different games types takes place on digital platforms. The leading platform for VR/AR is Quest – owned by Meta and Steam, the dominant player in traditional gaming. Distribution fees are 20–30%.

Third-party financing

As games development is associated with high fees and a fairly high level of uncertainty regarding sales, unless a game is connected to a well-known IP or included in an established games series, it is typical in the industry to utilise third-party financing. These agreements are often designed so the funding party has priority access to games revenues until the game reaches breakeven, after which they receive 30–50% of residual profits. This allows smaller studios, such as those Beyond Frames has invested in, access to capital for development.

Studios owned by Beyond Frames

Cortopia

Cortopia is 100% owned by Beyond Frames. The company was founded in 2016 and has released a total of three projects:

- **Wands:** This is an FPS (first person shooter) game that is played in a magical environment, focusing on duels. The game was released in 2017 for Oculus Quest and Playstation VR. According to Steam, the leading database for games, the game has mixed reviews, with about 52% favourable ratings. On Meta Store, it has 533 reviews and a rating of 4/5. We believe the game has sold around 50,000–60,000 copies at a price of USD 20, which implies revenues after platform fees of about SEK 3.5m. We believe the development cost of the game was some SEK 2m.
- **Down The Rabbit Hole:** This adventure/puzzle game is built partly on the story of Alice In Wonderland. The game was released in 2020 for Oculus, Playstation VR, Steam VR, and Viewport. It has some 1,700 reviews in Meta Store with a rating of 4/5, better than Wands, and it is one of the highest-rated games on the Oculus platform, the leading hardware. We believe the game has sold around 100,000 copies at an average price of USD 20, which suggests revenues after platform fees of some SEK 14–16m. We believe the development cost for the game was SEK 10–12m.
- **Wands Alliances:** This can be seen as a sequel to Wands. The game was released in October 2022 and has had a similar reception by the critics and lower sales.
- **Beyond these three titles:** Cortopia has two other projects in its pipeline, one with a budget of SEK 4.6m and the other of SEK 28m, involving developing a sequel to a well-known VR game. Both are expected to be released in 2024–2025. The second of these is with Cortopia's partner, which means revenues will be split, with the publisher first recouping its investment and then receiving 30–50% of the game's profits.

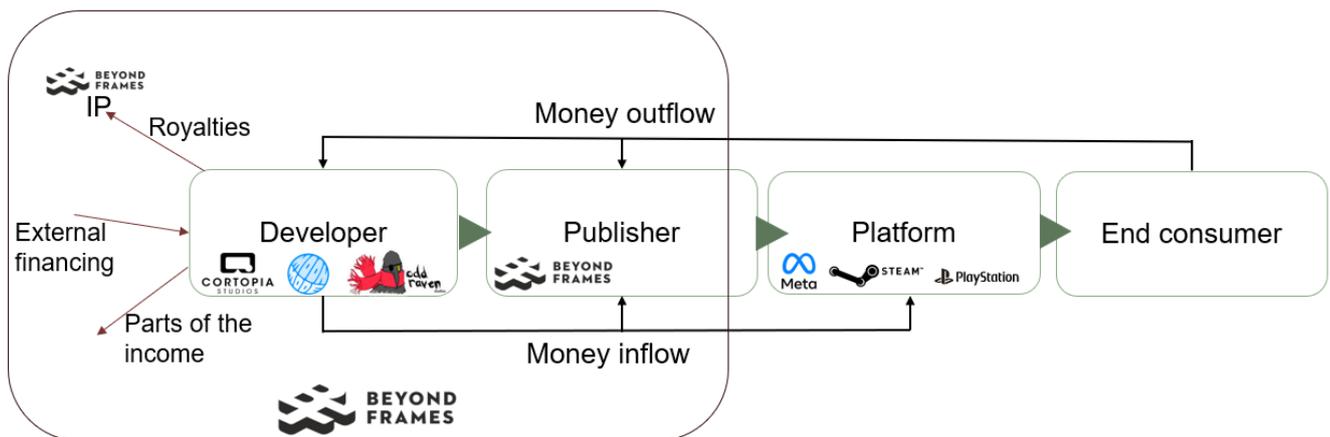
Moon Made

55%-owned by Beyond Frames. The company has released a smaller game but has largely focused on work for hire, loaning out its team to other larger developers. This has contributed to positive cash flows and represents considerably lower risk than proprietary IP.

Odd Raven

38%-owned by Beyond Frames. In 2018, this studio released Carly and the Reaperman, which we believe has sold some 12,000–15,000 copies. It has also released Spacefolk City, which has sold similar volumes. Currently, the studio is working on developing a VR title for an established publisher that is part-financing the title and will be fully responsible for its publication.

Beyond Frames operates across large parts of the ecosystem



Source: EPB, Company

Publishing activities

In this business area, Beyond Frames markets, finances and supports its own studios or provides games for third-party studios. This stage also includes beta and soft launches through which games are tested with a selected audience. In addition to its proprietary titles, Beyond Frames has also acted as the publisher of Ghosts of Tabor, which has been developed by Combat Waffle, another developer.

- **Ghosts of Tabor:** This is an FPS game played in a VR environment, both PVP (player vs player) and PVE (player vs environment). The game can be played on all VR platforms, an early beta having been launched in H1 2023. The game has a relatively high rating of 76% on Steam and since its beta release has sold 200,000–250,000 copies on Meta Store. Total revenues from the game have surpassed USD 5m. The full release is planned for H1 2024.
-
- **Outta Hand:** This game can best be compared to a classic arcade/platform game, having 37 levels to complete. Its developer is the independent games studio Capricia. The game was released on Meta Quest on 28 September.
-
- **Toy Monsters:** A game that draws comparisons with a traditional board game but via VR. It has been beta-released on the Meta Quests store and has a handful of reviews.
-
- In addition to these, Beyond Frames has published three smaller titles.

Work for hire

Work for hire involves developers from Beyond Frames' studios undertaking consultancy work with larger studios or publishers to help with their development work, for which Beyond Frames is paid per hour.

Business model analysis

In theory, games development and publishing activities represent a business model with extreme economies of scale, as the gross margin represents only the distributor's share of sales. In practice, however, games revenues tend to correlate with development costs and the budget. Games that sell at higher volumes have typically had larger development budgets, which explains the dominance of just a few publishers globally.

We have noticed, however, an emerging scene for "indie games" – games from smaller, independent developers – and sales of these do not necessarily correlate with their development budgets, although the associated risks are substantially greater as these developers/publishers do not have the same resources as the global players. We also highlight that the VR gaming market is in an earlier phase and is considerably more fragmented than the console/PC market.

Through its business model, Beyond Frames attempts to mitigate the risks associated with indie games by attracting external financing, which means its financial risks are lower. Its operational leverage is thus lower, as reflected in the company's gross margin. We believe this business model is well-suited to the current market environment of limited access to capital.

To further reduce its cash flow risks and finance its proprietary titles, the company offers its services versus work for hire, loaning out the developers in its studios on an hourly basis when they have spare capacity. The scalability is considerably lower than in development and publishing, but so too is the risk. We consider it an advantage that the company can successfully balance work for hire with developing proprietary titles, thus reducing the volatility in its sales.

In addition, we see an opportunity and the skills for Beyond Frames to develop traditional computer/console games, should the right project materialise.

A number of commercial titles released

| Title | Developer | Estimated copies sold | Estimated R&D | Estimated revenue | Reviews in Meta Store |
|-----------------------|-----------------------|-----------------------|---------------|-------------------|-----------------------|
| Wands | Cortopia | 80 000 -100 000 | SEK 2- 5m | SEK 8-12m | 533 |
| Down the Rabbit hole | Cortopia | 200 000 | SEK 10-12m | SEK 30-40m | 1 706 |
| Wands alliances | Cortopia | 20 000 | SEK 8-12m | SEK 10-14 | 224 |
| Carly & the Reaperman | Odd Raven | 12-15 000 | | 2,5-5 mkr | 149 |
| Spacefolk City | Moon Mode | 20 000 | | SEK 4-6m | 222 |
| Mixture | Played with Fire | 5 000 | Publisher | SEK 0,5-1m | 49 |
| Silhouette | Team Panoptes | 6 000 | Publisher | SEK 0,6-0,8m | 57 |
| Ark and ADE | Castello Inc | 15 000 | Publisher | SEK 1-2m | 154 |
| Ghosts of Tabor | Comabt Waffle Studios | 200-250 000 | Publisher | SEK 50-60m | 5 880 |
| Outta Hand | Capricia Production | 10 000 | Publisher | SEK 1-2m | 107 |

Source: Meta Quest Store

Business environment/market analysis

Beyond Frames operates in the global market for XR – an umbrella term for VR (virtual reality) and AR (augmented reality).

History of VR

VR has long existed as a concept, and the first system for 3D video can be traced back to the 1950s, when cinematographer Morton Heilig launched Sensorama, a machine that combined light and sound in what can best be described as an arcade machine. Six films were produced for the Sensorama and it was marketed as the future film experience. The same creator also took out a patent for the first VR headset in the 1960s.

Early VR experience



Source: EPB

SEGA was early with VR in the 1990s



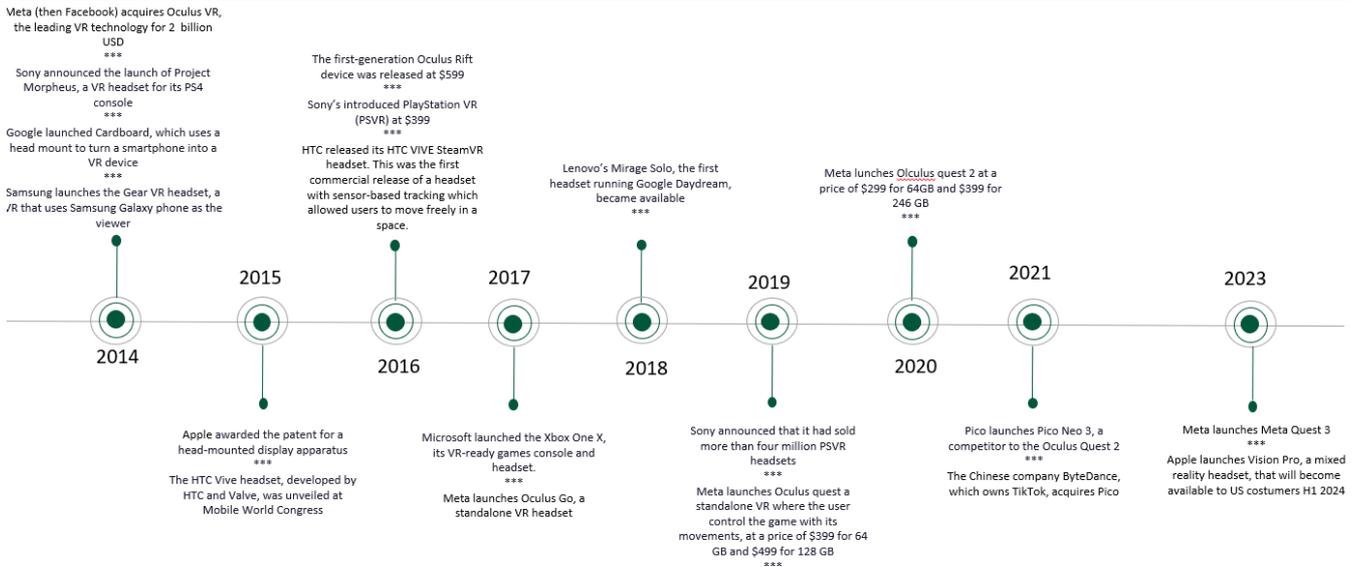
Source: SEGA

By the 1990s, leading games console developers SEGA and Nintendo tried to launch VR products. All of these products failed, though. Nintendo summed up its launch and subsequent withdrawal of its Virtual Boy console by saying:

- Existing technology could only cope with black and white graphics
- Too little software/too difficult to develop games owing to limited technology and opportunities
- Uncomfortable and unpleasant to use; users quickly became nauseous and suffered from headaches

We consider 2014 to be the year when VR first started to near commercialisation, partly because processors allowed for a better user experience but mainly as Meta (then called Facebook) bought Oculus VR for USD 2bn. This brought more capital into the sector. That same year, Sony announced the development of a VR kit for the Playstation 4, Samsung launched Samsung Gear VR, and Google launched Google Cardboard. Since then, prices for hardware have come down markedly, while the ecosystem for gaming and apps has expanded, maturing the market further.

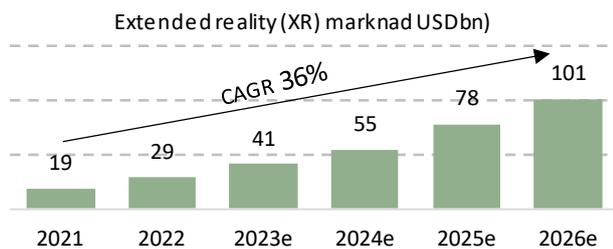
An immature industry with anticipated growth



Source: Statista

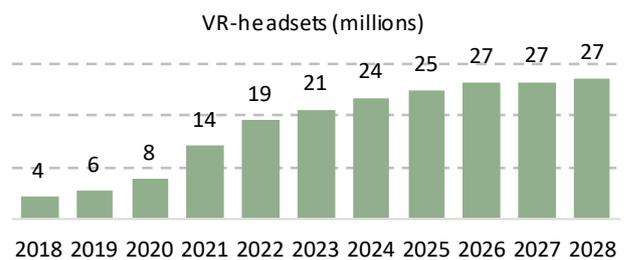
This market is one of the fastest-growing media platforms globally, with the total market expected to grow by more than 30% in the coming years. We believe growth in hardware volumes will decline in the coming years following the temporary boom in sales during the pandemic. A similar development has been seen in several other home electronics categories. We also expect the key vertical for VR software will be entertainment/games – an area in which Beyond Frames is active.

A growing global market...



Source: Statista

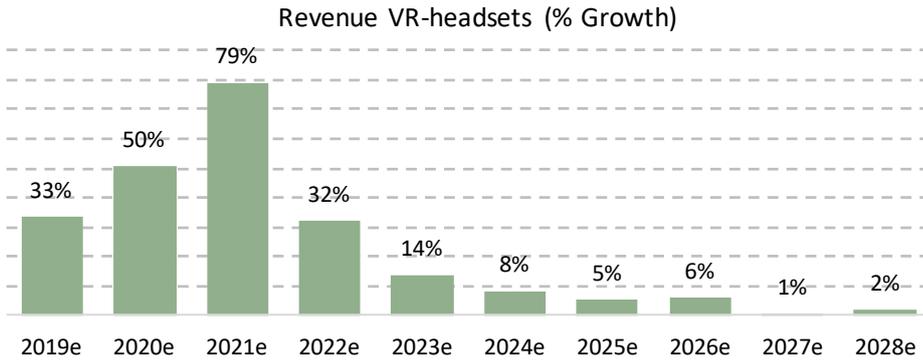
...where growth accelerated during the pandemic



Source: Statista

The VR gaming market is primarily driven by the number of headsets, sales of which accelerated during the pandemic. This was partly spurred by the pandemic but also because price levels have come down over time. VR for gaming has historically been affected by high systems requirements, making headsets expensive, but prices have dropped as the cost of processing power tends to decrease over time. We also believe the growing number of players in the market will drag down hardware prices.

The pandemic prompted substantial headset market growth

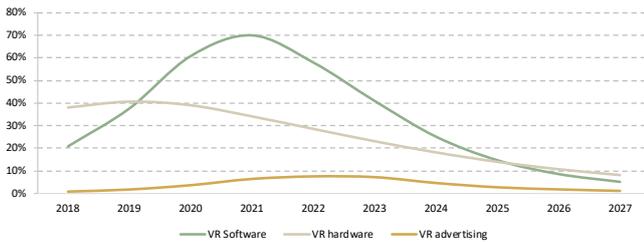


Source: Statista

The leading player in VR hardware is Meta, which launched the Rift system and then Quest. Meta acquired Oculus in 2014. Oculus currently has a market share of some 40–50%. The most common headset in the market at present is Meta Quest 2. Headset sales have come down somewhat in the run-up to the launch of Meta Quest 3, due in Q4 2023. Meta is the dominant player in this field, with nearly 50% of games on marketplace Steam developed for Meta platforms. We thus consider Beyond Frames well positioned thanks to its focus on developing titles for Meta.

Software will dominate the growth...

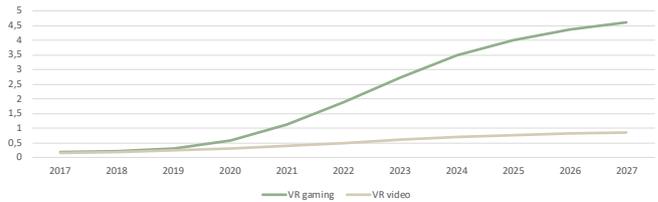
Virtual reality (VR) B2C market revenue growth worldwide from 2018 to 2027, by segment



Source: Statista

...with games as the key vertical

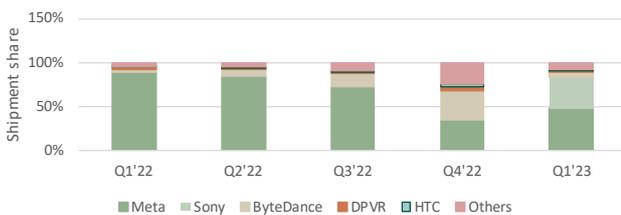
Virtual reality (VR) software B2C market revenue worldwide from 2017 to 2027, by segment (in billion USD)



Source: Statista

Meta the dominant player within hardware...

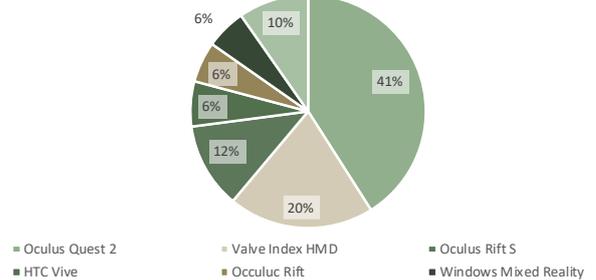
AR and VR headsets Markeshare



Source: Statista

...and even stronger on games...

Share of stream users with a virtual reality (VR) headset worldwide as of July 2023, by device

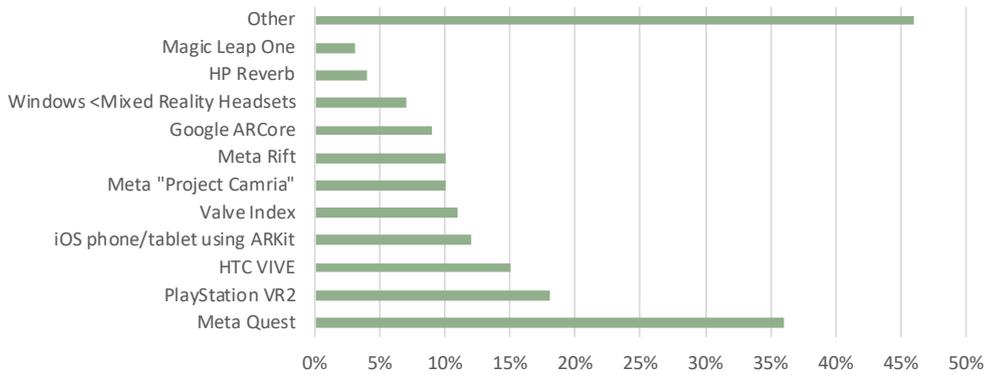


Source: Statista

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...the lion's share of development being for its platform

Share of game developers projects for select VR/AR platforms in 2023

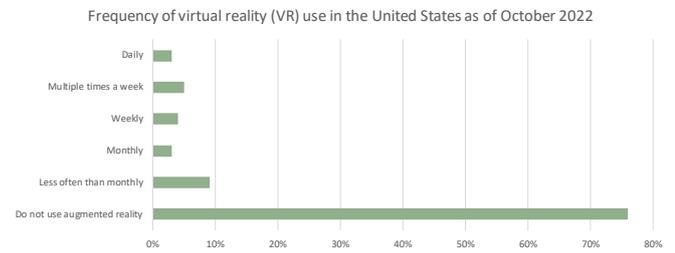


Source: Statista

As we stated earlier when discussing the history of VR, we believe the main reason why market penetration is not higher has been the elevated prices for VR hardware. As systems requirements have minimised and only a basic PC or console/headset is now needed to use VR, we expect usage to increase. Currently, a sizeable group is said to be very/especially interested in VR, but it is used by relatively few.

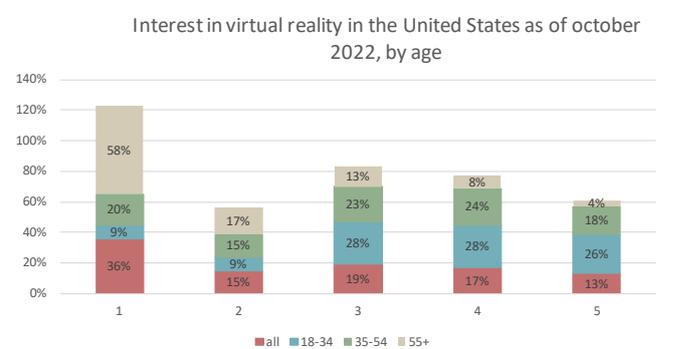
We thus believe ongoing volume growth can be expected and that VR for games will reach an inflection point towards the end of our forecast period. The greatest problem with VR remains the discomfort that users experience. This is a challenge for the industry, although we expect future products will partly be able to solve this issue. The latest versions of the market-leading headsets have addressed this problem in three ways:

Still low penetration of the user base...



Source: Statista

...but a small group of enthusiasts exists

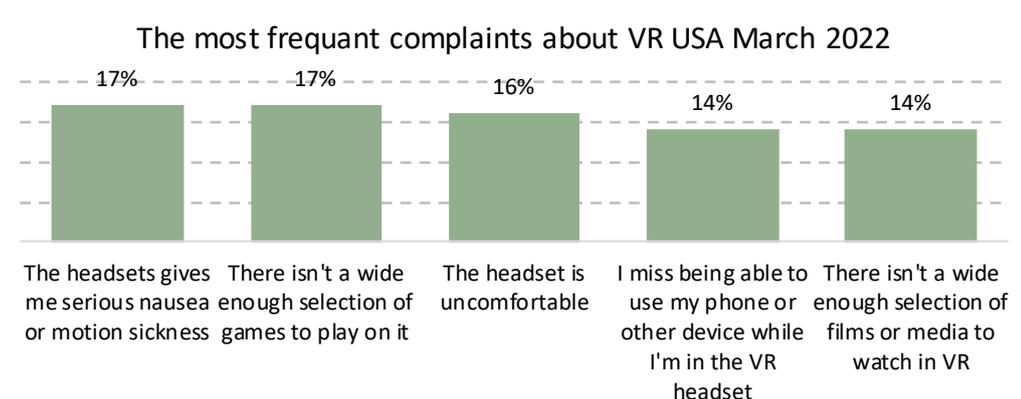


Source: Statista

- **Tech development has made graphics more stable:** VR headsets have previously had an issue with maintaining a high frame rate, leading to lag that can cause nausea. Performance of current headsets is better, meaning less risk of lag.
- **Greater level of mixed reality in games:** Mix reality is the blending of virtual elements with the real world. This does not "disturb" the brain as much as an entirely virtual environment.
- **Headset ergonomics:** A cause of nausea and discomfort when using VR headsets has been their weight and lack of ergonomics. The more recent headsets are considerably lighter than earlier versions, and we believe this will make them more stable.

However, we believe the next biggest problem for VR – the lack of games and content – will gradually be resolved as the market expands and developers release more titles. In conclusion, we consider Beyond Frames to be in a relatively solid position to meet the growing consumer demand, although for the next three to six months, we expect demand to be lower owing to the weak global consumer economy.

Historical problems and lack of content behind low usage



Source: Statista

Overview of prices for VR headsets/PCs

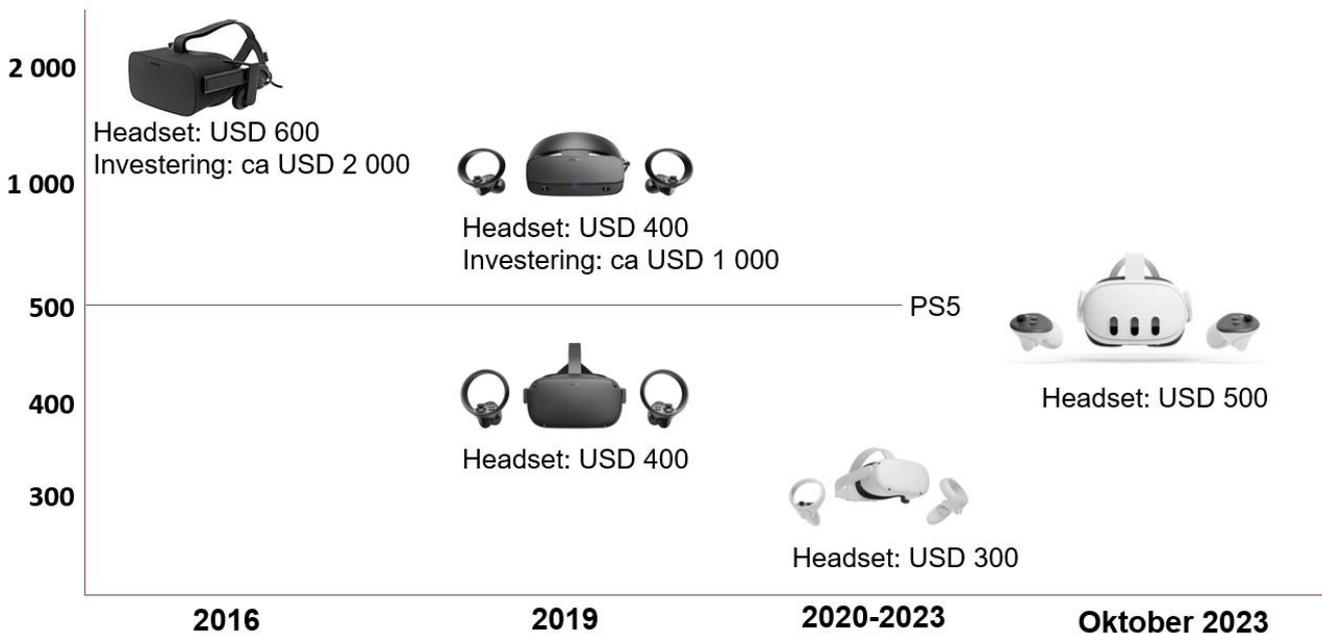
An additional factor that we believe has hindered VR/XR is the elevated price level for the necessary hardware. When Oculus was launched in March 2016, a headset retailed at USD 599. A computer with a graphics card in the USD 550 price range was also required. Playing the then limited number of VR games thus required an investment of close to USD 2,000.

When Oculus Quest Rift S and Oculus Quest were released in 2019, the price of a headset had dropped to USD 399. Moreover, Quest did not need a PC to work. The PC required for Oculus Rift S only needed a graphics card costing around USD 300, which reduced the cost of playing VR games from some USD 2,000 to just under USD 1,000 when using a PC or to just USD 400 when using a headset on its own.

Looking at currently available headsets, we can see prices around USD 300, making them cheaper than either a console or a standard gaming PC. We expect this price erosion to continue, with VR headsets now having reached a price level that is ready for mass market, which has not been the case before. We thus believe sales of games for these headsets will accelerate in the near term.

We judge that the new versions of the Oculus will cost around USD 500, which is lower than the leading consoles – X-Box One, Playstation 5, and Nintendo Switch – all of which cost USD 500–700.

Price erosion thanks to tech makes it possible for VR penetration to expand further



Source: Webbhallen

Overview of the market's leading headsets

Meta

The key player in the VR market is Meta, owner of the Oculus brand. During Q4, Meta has released its latest headset version, Meta Quest 3, which currently has a price tag from SEK 7,000. Below, we provide an overview of the systems requirements for the headset. We believe games sales will accelerate following this delayed release.

Sony VR

This headset is linked to the PS5, one of the market's leading consoles. The headset currently retails at SEK 7,000–8,000. As a PS5 is required to use the headset, we believe its sales will be lower than for Meta's products, which do not need a specific console.

ByteDance

ByteDance (owner of TikTok) bought Chinese headset manufacturer Pico in 2021. It has since released the Pico 4 headset, which is on sale in Sweden for around SEK 5,000. We consider this the leading headset on the Chinese market, somewhere Beyond Frames is not targeting.

DPVR

One of the Chinese headsets on the market that is linked to a PC.

Valve index

A headset developed by Valve, the owner of Steam. This headset requires a PC and a full set including base station, headset, and controller costs EUR 1,000.

| Overview of VR headsets | | | |
|-------------------------|-------------|------------|--|
| Manufacturer | Price | Resolution | Audio |
| Meta Quest 3 | SEK 7 000 | 2064x2208 | Integrated stereo speakers with 3D spatial audio places you in your space with 40% louder audio range, bass range and optimal L/R matching capabilities. |
| Sony VR – PSVR2 | SEK 7-8 000 | 2000x2040 | 3D sound and microphone |
| ByteDance - Pico 4 | SEK 5 000 | 2000x2000 | integrated stereo speakers |
| HTC Vive - XR Elite | SEK 16 000 | 3840x1920 | Immersive audio |
| DPVR - P2 | SEK5 000 | 3664x1920 | Integrated stereo speakers |
| Valve Index | SEK 10 000 | 1440x1600 | Off ear headphones |

Source: *Webbhallen*

HTC Vive

Vive is a brand from Taiwanese electronics conglomerate HTC. Its most recent headset is the Vive XR Elite, which sells for around SEK 15,000–16,000. We believe it primarily sells in Asian markets, although it can also be bought in Western markets. We consider it a strong competitor to Meta Quest.

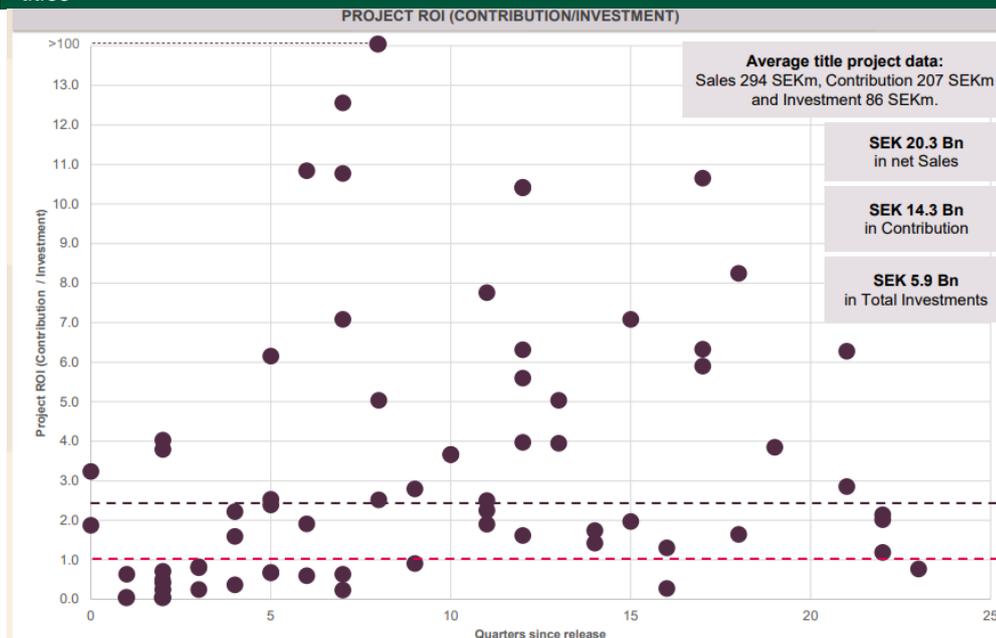
We have chosen to focus on the key standalone headsets. There are also a number of other manufacturers with headsets linked to phones, such as Samsung. We believe these are also part of this market, although they can only handle simpler games, while Beyond Frames focuses on more advanced titles.

Estimates

Methodology and rationale behind estimates

We consider the basis on which to establish estimates for games developers lies in how much is invested in their titles. Earnings from sales are thus a direct function of the budget. There is considerable variation in the results versus their development budgets, though, as shown below in the graph from Embracer, a leading games developer. On an aggregated basis, we expect that games generate a return on investment of some 2.5x. We note, however, the variation among games that are not part of a key franchise in the market is high, which should be taken into account when considering our estimates.

On an aggregated basis, we consider a multiple of 2.5x reasonable for Beyond Frames' titles



Source: Embracer

Revenue estimates

Current year

We believe the current year will end with a similar development to that of Q3, with the contribution from Ghosts of Tabor driving sales. We also expect revenues from other partner projects, such as Outta Hand, and the smaller contribution from work for hire to be visible in Q4 sales.

Publishing Ghosts of Tabor

The first part of our revenue estimates relates to the publishing of the Ghosts of Tabor title. The game was developed by Combat Waffle and sold some 100,000–150,000 copies during beta launch. We expect the game to be launched fully in H1 2024 and to sell around 350,000 copies during 2024, with a further 240,000 sold during 2025. Sales are reported across years and are dependent on when the game is released. We believe Beyond Frames' partner has invested sufficiently in this project to secure sales of SEK 180m during 2024–2025.

Publishing of other part-financed projects

The other share of revenues in our estimates stems from titles developed by Beyond Frames and for which it is also the publisher. These titles are externally financed, affecting the gross margin. We believe Beyond Frames will release externally financed titles totaling a budget of some SEK 40m during our forecast period, offering a return of 2.5x. From these, we see upside potential for our estimates should some of the planned games releases prove to be a blockbuster (defined as a game with revenues of 5–10x its budget).

Sales of part-financed projects in 2024

| | X multiple, Y R&D budget | | | | |
|----|--------------------------|------|------|------|------|
| | 1,5x | 2,0x | 2,5x | 3,0x | 3,5x |
| 8 | 12 | 16 | 20 | 24 | 28 |
| 10 | 15 | 20 | 25 | 30 | 35 |
| 12 | 18 | 24 | 30 | 36 | 42 |
| 14 | 21 | 28 | 35 | 42 | 49 |
| 16 | 24 | 32 | 40 | 48 | 56 |

Source: EPB

Sales of part-financed projects in 2025

| | X multiple, Y R&D budget | | | | |
|----|--------------------------|------|------|------|------|
| | 1,5x | 2,0x | 2,5x | 3,0x | 3,5x |
| 18 | 27 | 36 | 45 | 54 | 63 |
| 20 | 30 | 40 | 50 | 60 | 70 |
| 22 | 33 | 44 | 55 | 66 | 77 |
| 24 | 36 | 48 | 60 | 72 | 84 |
| 26 | 39 | 52 | 65 | 78 | 91 |

Source: EPB

Proprietary titles

Another share of our estimates – for which we consider volatility to be highest – is from games titles both financed and published by Beyond Frames. We apply the same return multiple for these sales as above, but since their budgets are lower, the volatility is significantly higher. We expect the company to release such titles with a total budget of SEK 20m.

In conclusion, we expect a return multiple of around 3.35x current capitalised development fees. We believe this is reasonable since the greatest investment source for coming titles is external and does not impact Beyond Frames' balance sheet. Moreover, certain development costs are taken on an ongoing basis, meaning that actual multiples are lower on capitalisation than the balance sheet suggests.

Sales of proprietary projects in 2024

| | X multiple, Y R&D budget | | | | |
|---|--------------------------|------|------|------|------|
| | 1,5x | 2,0x | 2,5x | 3,0x | 3,5x |
| 3 | 5 | 6 | 8 | 9 | 11 |
| 4 | 6 | 8 | 10 | 12 | 14 |
| 5 | 8 | 10 | 13 | 15 | 18 |
| 6 | 9 | 12 | 15 | 18 | 21 |
| 7 | 11 | 14 | 18 | 21 | 25 |

Source: EPB

Sales of proprietary projects in 2025

| | X multiple, Y R&D budget | | | | |
|----|--------------------------|------|------|------|------|
| | 1,5x | 2,0x | 2,5x | 3,0x | 3,5x |
| 9 | 14 | 18 | 23 | 27 | 32 |
| 11 | 17 | 22 | 28 | 33 | 39 |
| 13 | 20 | 26 | 33 | 39 | 46 |
| 15 | 23 | 30 | 38 | 45 | 53 |
| 17 | 26 | 34 | 43 | 51 | 60 |

Source: EPB

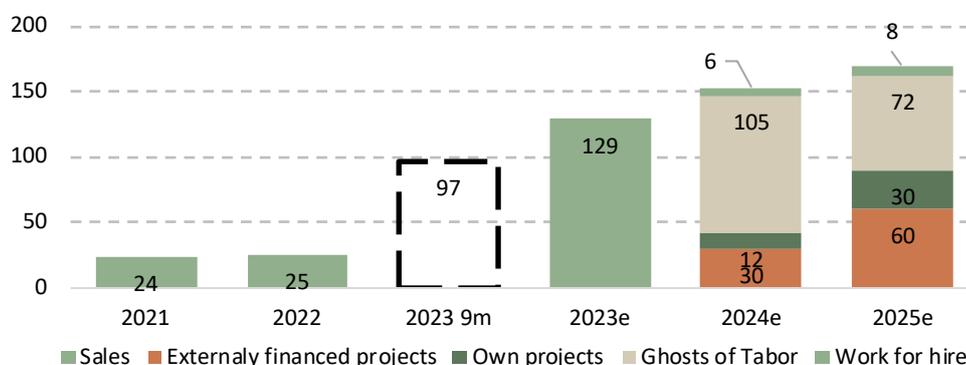
Work for hire

We expect a small share of revenues from work for hire, growing in line with the personnel base in the future.

We conclude that Beyond Frames will see a healthy increase in turnover in the coming years for three key reasons:

- Ongoing games releases onto the market
- Acceleration of R&D investments, leading to more releases
- Ghosts of Tabor developing according to the trend

Solid growth on the cards, in our view



Source: Company, EPB

Gross margin

We calculate differing gross margins for the various revenue sources in Beyond Frames. This stems from the differing financing terms for the various projects:

Ghosts of Tabor

We expect that Beyond Frames has a gross margin of some 25% on sales of Ghosts of Tabor since its development has been financed by external parties. We consider this the key reason why the company has seen a declining gross margin despite solid sales in H1 2023. Moreover, as Ghosts of Tabor will be fully commercially launched in H1 2024, we expect this gross margin trend will persist, since sales of this title will increase on its launch.

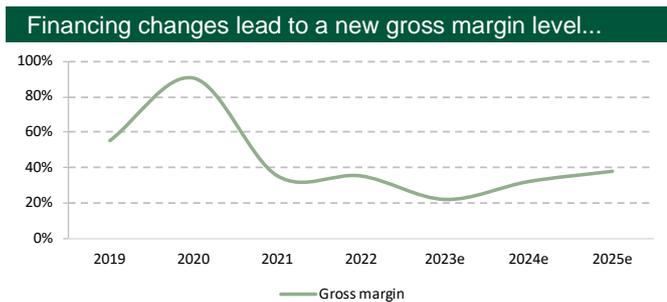
Other titles with external financing

We believe the gross margin on sales of other externally financed titles is higher than for the publishing of Ghosts of Tabor. As we believe Beyond Frames' investment share is higher for these, we thus apply a gross margin of 30% on these sales in the future.

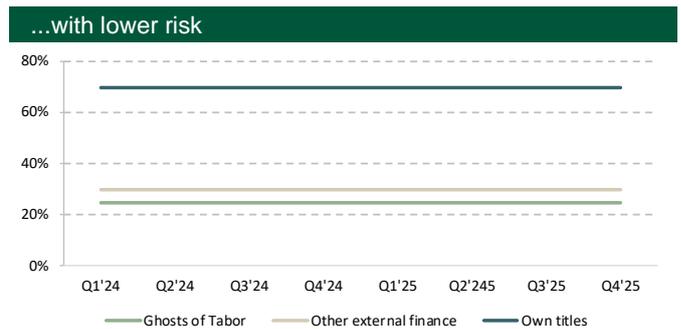
Proprietary IP

For the own-financed titles, we assume Beyond Frames only pays a distribution fee of 30% to the platforms, meaning a gross margin of 70%. With work for hire, we apply the costs under personnel expenses, meaning the gross margin here is technically 100%.

We expect Beyond Frames' gross margin to increase gradually over our forecast period as Ghosts of Tabor declines as a share of sales and more proprietary titles are released. We favour the company's business model of external financing since we consider it an effective method of mitigating the risks in games development.



Source: Company, EPB



Source: Company, EPB

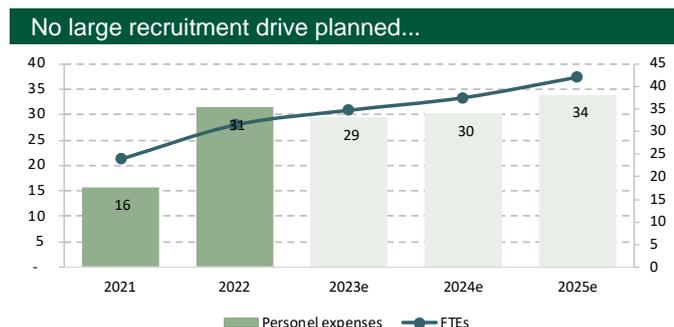
Other external and personnel costs

Other external costs

We expect other external costs to increase somewhat in the coming years and to scale up somewhat in line with sales. This is based on the company having reached a new level of sales and growth. As other external costs will increase at a slower pace than turnover, we believe Beyond Frames will start to see economies of scale in its activities during 2024–2025.

Employee costs

In our view, Beyond Frames will gradually increase its staff base over our forecast period. Moreover, we anticipate costs per FTE rising somewhat, owing to current inflation levels. We also expect personnel expenses to increase at a slower pace than the growth in turnover, providing the company with ongoing scale advantages given good sales performance. Personnel expenses could rise if Beyond Frames receives external financing for a new project and then chooses to expand its staff base.



Source: Company, EPB

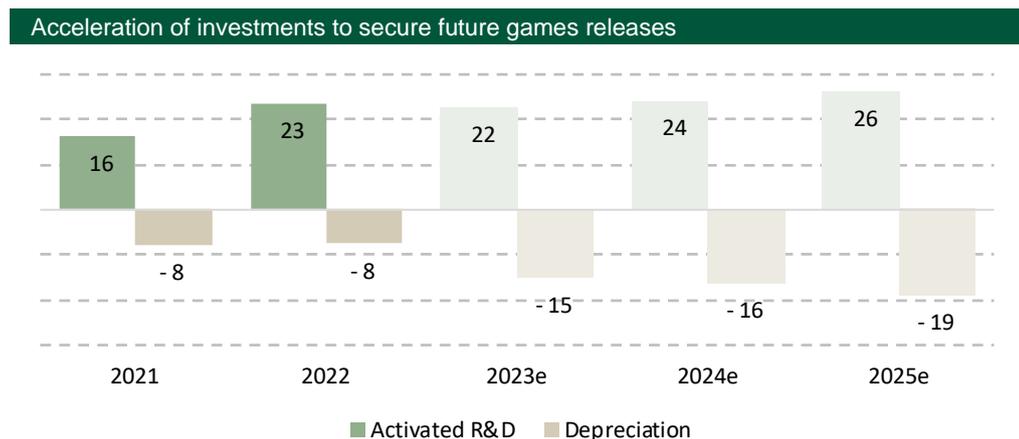


Source: Company, EPB

Depreciations and amortisation

Our estimates include the company writing off its intangible fixed assets over three years and its goodwill over five. With games development, depreciation of the development associated with a specific title starts at launch. At launch, a test of the capitalised work associated with the game is undertaken (i.e., whether it lives up to expectations). If not, the company writes off the previously made capitalisations. We see the risk for writedowns of current activities as low.

In our view, Beyond Frames will gradually increase capitalisations over our forecast period since several games will enter a later project phase in the coming year. These are expected to generate future cash flows for the company.

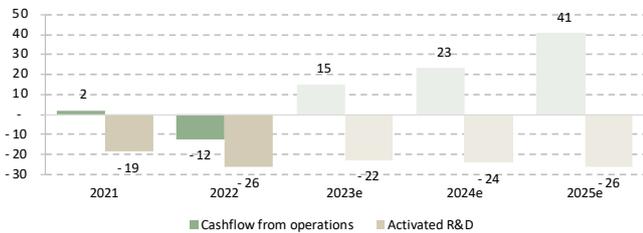


Source: Company, EPB

Cash flows

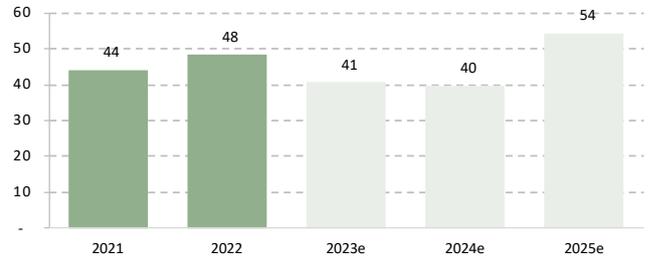
The company will, in our view, see neutral to positive cash flows from its activities in the coming years. We base this primarily on the earnings development we expect given the games releases planned for 2024–2025. We believe, however, that capitalisation in the years to come will leave cash flows relatively neutral. We do not see a capital need for the company, however, as we believe it likely to use external financing for a large share of the development.

Despite neutral cashflows...



Källa: Company, EPB

...we believe that the cash situation is under control



Källa: Company, EPB

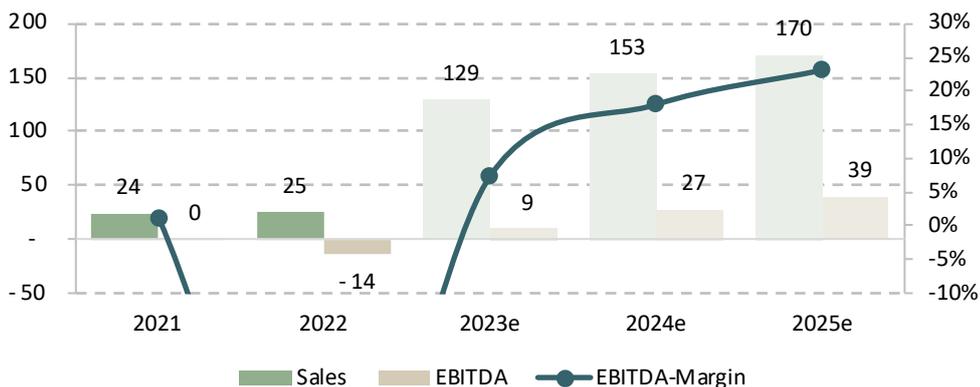
Estimates – summary

We have based our estimates for the company on the budgets for its future games releases. To model these, we have taken a conservative approach and judged that none of these games will prove a blockbuster but will deliver around a 2.5x return on invested capital.

That Beyond Frames uses external financing for many titles reduces the risk for the company but also the potential. We believe, however, that games development at the stage where Beyond Frames operates brings high risks associated with delays and market acceptance, and so we consider its strategy of using a high share of external capital to be better in the current market environment.

Beyond the standard risks associated with games development stated above, Beyond Frames also develops games for a hardware that is not as widely used as traditional gaming PCs or consoles, increasing the volatility in estimates.

Sales acceleration will prompt margin expansion



Source: Company, EPB

Valuation

We believe that a DCF is the most accurate valuation method to value Beyond Frames using a DCF. The reason for this is that most listed gaming companies are in a different commercial stage. However, we choose to present a relative valuation to get a reference on how the stock is currently valued. We believe that this method becomes less relevant due to the market cap difference and the fact that Beyond Frames is in an earlier commercial phase than the companies presented in the peer set. These two facts motivate us to choose a DCF as primary valuation method.

Relative valuation – based on Western developers and publishers

In our relative valuation we have looked at a number of Western games companies in our valuation of Beyond Frames, splitting them into mature market leaders and smaller companies. We believe it is most appropriate to use other developers and publishers among the games companies rather than pure VR companies, as we see the games companies operating in the same environment as Beyond Frames and employing similar business models with similar risks.

| Peers | | | | | | | | | | | | | | |
|-----------------------|------------|----------|--------------|--------------|--------------|--------------|-------------|-------------|--------------|--------------|--------------|------------------|--------------|--------------|
| Värdering | MCAP (SEK) | EV (SEK) | EV / Sales | | | EV / EBITDA | | | EV / EBIT | | | Price / Earnings | | |
| | | | LTM | 2024 | 2025 | LTM | 2024 | 2025 | LTM | 2024 | 2025 | LTM | 2024 | 2025 |
| Electronic Arts | 385 790 | 381 944 | 4,90x | 4,54x | 4,33x | 20,2x | 12,7x | 12,4x | 25,6x | 14,2x | 13,3x | 37,8x | 17,8x | 16,1x |
| Take-Two Interactive | 278 003 | 302 865 | 5,31x | 3,64x | 3,54x | 31,0x | 16,1x | 14,6x | -- | 17,2x | 15,4x | (17,5x) | 21,0x | 17,8x |
| Ubisoft Entertainment | 42 871 | 56 527 | 2,57x | 2,16x | 2,06x | 5,8x | 4,5x | 4,1x | -- | 11,0x | 9,8x | (10,9x) | 16,4x | 14,3x |
| Embracer Group | 29 180 | 45 470 | 1,08x | 0,98x | 0,94x | 5,4x | 3,6x | 3,4x | -- | 5,5x | 5,0x | 6,3x | 5,0x | 4,4x |
| CD Projekt | 28 784 | 27 592 | 11,67x | 13,38x | 16,67x | 21,9x | 31,2x | 42,9x | 30,0x | 44,9x | 76,6x | 33,9x | 46,0x | 64,0x |
| Stillfront Grp | 6 122 | 10 204 | 1,45x | 1,41x | 1,36x | 5,5x | 3,8x | 3,5x | 11,4x | 5,0x | 4,8x | 29,3x | 5,1x | 4,7x |
| Paradox Interactive | 23 004 | 22 191 | 9,97x | 7,67x | 7,29x | 15,7x | 11,0x | 10,4x | 28,7x | 20,4x | 17,4x | 36,7x | 25,9x | 22,4x |
| Keywords Studios | 14 531 | 15 250 | 1,76x | 1,50x | 1,36x | 9,8x | 7,5x | 6,9x | 17,4x | 10,1x | 9,1x | 37,3x | 13,0x | 11,7x |
| Frontier Developments | 811 | 681 | 0,50x | 0,46x | 0,45x | 3,5x | (18,5x) | (64,8x) | -- | (6,0x) | (7,6x) | (3,0x) | -- | -- |
| G5 Entertainment | 1 263 | 922 | 0,67x | 0,70x | 0,67x | 5,1x | 3,1x | 2,9x | 6,8x | 6,0x | 5,3x | 7,5x | 8,7x | 7,7x |
| Team 17 Group | 3 557 | 2 955 | 1,47x | 1,49x | 1,43x | 3,8x | 5,4x | 4,9x | 6,4x | 5,6x | 5,5x | 13,2x | 7,6x | 7,3x |
| Medel | | | 3,76x | 3,45x | 3,65x | 11,6x | 7,3x | 3,7x | 18,0x | 12,2x | 14,0x | 15,5x | 16,7x | 17,0x |
| Median | | | 1,76x | 1,50x | 1,43x | 5,8x | 5,4x | 4,9x | 17,4x | 10,1x | 9,1x | 13,2x | 14,7x | 13,0x |

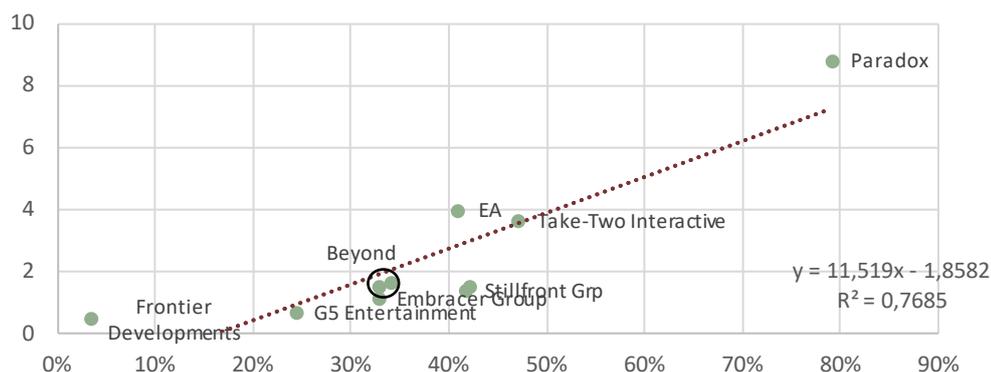
| Marginaler | Gross Income | | | EBITDA | | | EBIT | | | Net Income | | |
|-----------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|-------------|--------------|--------------|
| | LTM | 2024 | 2025 | LTM | 2024 | 2025 | LTM | 2024 | 2025 | LTM | 2024 | 2025 |
| Electronic Arts | 73,9% | 78,1% | 79,3% | 24,3% | 35,8% | 34,9% | 19,1% | 31,9% | 32,7% | 13,3% | 26,0% | 26,7% |
| Take-Two Interactive | 32,5% | 61,0% | 63,0% | 16,9% | 22,6% | 24,3% | -24,5% | 21,2% | 23,0% | -27,8% | 16,3% | 19,3% |
| Ubisoft Entertainment | 27,7% | 90,3% | 89,6% | 44,1% | 48,1% | 50,5% | -16,5% | 19,7% | 21,1% | -17,6% | 9,8% | 11,7% |
| Embracer Group | -0,6% | 63,4% | 65,1% | 19,9% | 27,0% | 27,5% | -0,6% | 17,9% | 18,8% | 9,3% | 6,4% | 7,9% |
| CD Projekt | 72,2% | 65,7% | 58,4% | 53,2% | 42,9% | 38,9% | 38,9% | 29,8% | 21,8% | 36,1% | 31,3% | 25,4% |
| Stillfront Grp | 22,9% | 79,0% | 79,6% | 26,4% | 37,5% | 38,7% | 12,7% | 28,5% | 28,7% | 3,0% | 6,7% | 9,2% |
| Paradox Interactive | 49,7% | 51,9% | 55,8% | 63,6% | 69,6% | 69,9% | 34,8% | 37,5% | 41,9% | 28,1% | 29,4% | 33,7% |
| Keywords Studios | 30,3% | 38,4% | 38,2% | 18,0% | 20,0% | 19,7% | 10,1% | 14,9% | 14,9% | 4,5% | 6,9% | 7,4% |
| Frontier Developments | 26,1% | 64,3% | 58,6% | 14,2% | -2,5% | -0,7% | -25,4% | -7,6% | -5,9% | -20,0% | -3,1% | 0,6% |
| G5 Entertainment | 64,2% | 70,0% | 69,6% | 13,2% | 22,3% | 23,6% | 9,9% | 11,6% | 12,7% | 12,0% | 10,5% | 11,5% |
| Team 17 Group | 40,8% | 45,1% | 44,3% | 38,9% | 27,7% | 29,2% | 23,0% | 26,7% | 25,9% | 13,1% | 14,9% | 19,1% |
| Medel | 40,0% | 64,3% | 63,8% | 30,2% | 31,9% | 32,4% | 7,4% | 21,1% | 21,4% | 4,9% | 14,1% | 15,7% |
| Median | 32,5% | 64,3% | 63,0% | 24,3% | 27,7% | 29,2% | 10,1% | 21,2% | 21,8% | 9,3% | 10,5% | 11,7% |

| Tillväxt | Sales | | | EBITDA | | | EBIT | | | Net Income | | |
|-----------------------|--------------|-------------|-------------|-------------|--------------|-------------|----------------|--------------|-------------|--------------|--------------|--------------|
| | LTM | 2024 | 2025 | LTM | 2024 | 2025 | LTM | 2024 | 2025 | LTM | 2024 | 2025 |
| Electronic Arts | 3,7% | 5,7% | 4,8% | 3,1% | 11,2% | 2,2% | 14,4% | 9,7% | 7,3% | 10,2% | 8,4% | 7,7% |
| Take-Two Interactive | 25,6% | 43,9% | 2,9% | 29,3% | 103,8% | 10,5% | -5352,4% | 119,0% | 11,7% | 1334,0% | 137,8% | 21,7% |
| Ubisoft Entertainment | -8,8% | 10,4% | 5,2% | -9,4% | 11,2% | 10,4% | -297,8% | nm | 12,4% | 202,4% | nm | 25,7% |
| Embracer Group | 56,5% | 6,4% | 4,5% | 32,8% | 13,3% | 6,3% | -86,6% | 12,2% | 9,4% | -630,7% | 39,8% | 29,1% |
| CD Projekt | 13,1% | -30,7% | -19,7% | 0,6% | -44,7% | -27,3% | -2,1% | -45,8% | -41,3% | 8,2% | -39,0% | -34,8% |
| Stillfront Grp | 4,5% | 3,3% | 3,6% | -7,5% | 6,1% | 6,9% | -13,8% | 12,5% | 4,3% | -59,6% | 435,1% | 42,5% |
| Paradox Interactive | 24,8% | 12,6% | 5,1% | 22,5% | 21,8% | 5,7% | 4,1% | 37,1% | 17,5% | -0,6% | 45,0% | 20,1% |
| Keywords Studios | 30,1% | 11,4% | 10,7% | 23,0% | 11,8% | 8,9% | 8,3% | 9,8% | 10,3% | -25,8% | 40,5% | 19,0% |
| Frontier Developments | -8,3% | 7,1% | 2,4% | -63,5% | nm | nm | -413,3% | nm | nm | -317,1% | nm | nm |
| G5 Entertainment | 0,4% | -0,8% | 3,3% | 7,6% | -2,3% | 9,6% | 60,1% | 11,0% | 12,7% | 117,9% | -7,9% | 12,9% |
| Team 17 Group | 48,5% | 4,0% | 4,3% | 43,0% | 46,6% | 9,8% | 26,5% | 46,9% | 1,4% | -6,2% | -13,3% | 33,6% |
| Medel | 17,3% | 6,7% | 2,5% | 7,4% | 17,9% | 4,3% | -550,2% | 23,6% | 4,6% | 57,5% | 71,8% | 17,8% |
| Median | 13,1% | 6,4% | 4,3% | 7,6% | 11,5% | 7,9% | -2,1% | 12,2% | 9,8% | -0,6% | 39,8% | 20,9% |

Source: Factset

It is worth noting that our peer group in principle comprises companies at a more mature stage than Beyond Frames. To account for this, we have focused on value creation rather than on simply comparing valuation multiples. We define value creation as the total of growth and the EBITDA margin. To adjust for individual years and game releases, we have chosen to look at average growth and margins for 2024–25. We have then eliminated the outliers, Ubisoft and CD Projects, where company-specific factors have affected the comparison.

X = value creation, Y = EV/Sales 2024



Source: Factset

The model provides a correlation between the two factors of R2 approx.. 0,75, which we consider adequate to use as the basis for our relative valuation and gives support to the current valuation of Beyond Frames. We believe, however, that as Beyond Frames is at a different commercial stage, an absolute valuation is preferable.

DCF

Given the commercial stage that Beyond Frames is currently in, we consider a DCF model the best way to reflect the value in the company. The two latest quarters indicates that the firm has reached a new level of commercialisation and volume.

DCF output

| Valuation output | | WACC assumptions | | Terminal value assumptions | |
|---|------------|-----------------------------|--------------|----------------------------|-------|
| Sum of PV of FCF (explicit period) | 209 | Risk free nominal rate | 3,5% | Long term growth rate | 3,0% |
| PV of terminal value (perpetuity formula) | 225 | Risk premium | 5,5% | Long term EBIT margin | 27,0% |
| Enterprise value | 434 | Extra risk premium | 6,0% | Depreciation (% of sales) | 5,0% |
| Latest net debt | -32 | Beta | 0,0 | Capex (% of sales) | 5,0% |
| Minority interests & other | 0 | Cost of equity | 15,0% | Working cap. (% of sales) | 4,0% |
| Equity value | 466 | Cost of debt (pre-tax) | 0,0% | Tax rate | 22% |
| No. of shares outstanding (millions) | 17 | Tax rate | 0% | | |
| Equity value per share | 27 | Target debt/(debt + equity) | 10% | | |
| | | WACC | 15,0% | | |

Sensitivity analysis

| WACC | Long-term growth rate | | | | | WACC | Long-term EBIT margin | | | | |
|--------------|-----------------------|------|-----------|------|------|--------------|-----------------------|-------|-----------|-------|-------|
| | 2,0% | 2,5% | 3,0% | 3,5% | 4,0% | | 22,0% | 24,5% | 27,0% | 29,5% | 32,0% |
| 14,0% | 29 | 30 | 30 | 31 | 32 | 14,0% | 26 | 28 | 30 | 32 | 34 |
| 14,5% | 27 | 28 | 29 | 29 | 30 | 14,5% | 25 | 27 | 29 | 31 | 33 |
| 15,0% | 26 | 27 | 27 | 28 | 28 | 15,0% | 24 | 25 | 27 | 29 | 31 |
| 15,5% | 25 | 25 | 26 | 26 | 27 | 15,5% | 22 | 24 | 26 | 28 | 29 |
| 16,0% | 24 | 24 | 25 | 25 | 26 | 16,0% | 21 | 23 | 25 | 26 | 28 |

Source: EPB

Our DCF model provides a valuation of SEK 26–27, which we consider a reasonable value for the share at present.

Risk factors

Below, we list the risks we have defined that may affect the company. This list should not be seen as comprehensive, as there may be other risks we have not identified.

- Technology risk – new hardware can change the market
- Development risk – delays to games being developed
- Launch risk – sales of games might fall short of the budget
- Cyclical risk – end-customers (consumers) might struggle economically to buy games
- Personal risk

Ownership structure and board

Ownership structure

Beyond Frames' largest owner in terms of both capital and votes is Arvr Holding AB (15.5%). The next largest are Magnus Unger (13.8%) and Avanza Pension (13.2%). In total, the company has a free float of 56%. The company has two co-founders, with Ricky Helgesson holding 5.5% of the votes and capital and Mikael Söderström (also chair of the board) owning 1.16%.

Board:

The board of Beyond Frames comprises four board members, including the chair.

Mikael Söderström:

Mikael is the chair of the board and one of the company's two co-founders. He is also the CEO of Init Invest AB, an investment company that he co-founded in 2016. In addition, he is the chair of the board at Whispr Group Sverige AB, a board member at Unordinal AB, and a deputy board member at Odd Raven Studios AB.

Ace St Germain

Ace has been CEO of Beyond Frames since February 2022 and has experience from the US games and entertainment industry, including Twitch (Amazon), Sony, and Twitter. In addition, he is the chair of the board at Moon Mode AB and a board member at Cortopia AB.

Erik Åkerfeldt

Independent board member at Beyond Frames and the CEO of Palingenesis Holding AB. Moreover, he is the chair of the board at Unordinal AB and AGGCON AB. He has previously been chair of the board at Sveaverken Svea Agri AB and a board member at Znipe.TV, with its e-sports business.

Ricky Helgesson

Co-founder and board member since 2018, and formerly the CEO. His previous experience includes as Product and Lead developer at Dice and as Senior Software Engineer at Frostbite. Ricky is also a board member at Univrses AB and Zelk AB.

ESG – Beyond Frames Entertainment

Beyond Frames operates in the field of XR (extended reality). Its chief focus is on developing games, which are digital and thus have a limited impact on the environment. The games it produces demand a sizeable amount of data to be saved on servers, which is particularly energy intensive. Many games companies thus work with sustainability by using renewable energy for their servers and thus minimising the climate effects of their products.

An open and collaborative working environment is essential for Beyond Frames and it works to create an environment in which its employees can be creative. The share of women in the company is 15%, a typical level in this industry. Equality and the recruitment of more women are topics that many companies in the industry are pursuing.

The company's board consists solely of men, while senior management is 75% women. The company has a clear incentive policy for both management and staff in the form of warrants.

| Income statement | | | | | | |
|------------------------------------|-----------|-----------|------------|------------|------------|------------|
| | 2020 | 2021 | 2022 | 2023e | 2024e | 2025e |
| Net sales | 13 | 24 | 25 | 129 | 153 | 170 |
| Other operating income | 6 | 16 | 23 | 24 | 24 | 26 |
| Total revenues | 18 | 40 | 48 | 153 | 177 | 196 |
| Cost of goods sold | -1 | -15 | -16 | -99 | -103 | -105 |
| Gross profit | 17 | 25 | 32 | 53 | 74 | 91 |
| Other Operating Expenses | -15 | -24 | -46 | -44 | -46 | -52 |
| EBITDA | 2 | 0 | -14 | 9 | 27 | 39 |
| EBITDA, adjusted | 2 | 0 | -14 | 9 | 27 | 39 |
| EBITA, adjusted | 2 | 0 | -14 | 9 | 27 | 39 |
| Amortization | -6 | -8 | -8 | -15 | -16 | -19 |
| EBIT | -4 | -8 | -21 | -6 | 11 | 20 |
| EBIT, adjusted | -4 | -8 | -21 | -6 | 11 | 20 |
| Net Financial Items | -3 | -1 | -2 | 1 | 0 | 0 |
| Profit before tax | -7 | -8 | -23 | -5 | 11 | 20 |
| Profit before tax, adjusted | -7 | -8 | -23 | -5 | 11 | 20 |
| Taxes | 0 | 0 | 0 | 0 | -1 | -4 |
| Net income | -8 | -9 | -23 | -5 | 10 | 16 |
| Net income, adjusted | -8 | -9 | -23 | -5 | 10 | 16 |
| Sales Growth | - | >100% | 21% | >100% | 16% | 11% |
| Gross Margin | >100% | >100% | >100% | 41.2% | 48.1% | 53.5% |
| EBIT Margin, Adjusted | Neg. | Neg. | Neg. | Neg. | 7.3% | 11.9% |
| EPS, Adjusted | -0.54 | -0.58 | -1.38 | -0.27 | 0.57 | 0.94 |
| EPS Growth, Adjusted | - | N.m. | N.m. | N.m. | N.m. | 65% |

Source: Beyond Frames Entertainment AB, EPB

| Cash flow statement | | | | | | |
|--|------------|------------|------------|------------|------------|------------|
| | 2020 | 2021 | 2022 | 2023e | 2024e | 2025e |
| EBIT | -4 | -8 | -21 | -6 | 11 | 20 |
| Other Cash flow Items | 6 | 8 | 7 | 16 | 15 | 15 |
| Changes in working capital | 5 | 1 | 2 | 4 | -3 | 6 |
| Cash flow from operating activities | 7 | 1 | -12 | 15 | 23 | 41 |
| Investments in Fixed Assets | 0 | -2 | -2 | 0 | 0 | 0 |
| Investments in intangible fixed assets | -6 | -17 | -25 | -22 | -24 | -26 |
| Cash flow from Investments | -6 | -19 | -26 | -22 | -24 | -26 |
| Free cash flow | 1 | -18 | -39 | -8 | -1 | 15 |
| New share issue / repurchase | 13 | 42 | 42 | 0 | 0 | 0 |
| Other items | 2 | 0 | 0 | 0 | 0 | 0 |
| Cash flow from financing | 15 | 42 | 43 | 0 | 0 | 0 |
| Cash flow | 16 | 24 | 4 | -8 | -1 | 15 |
| Net debt | -19 | -44 | -48 | -41 | -40 | -54 |

Source: Beyond Frames Entertainment AB, EPB

| Balance sheet | | | | | | |
|-------------------------------------|-----------|-----------|-----------|------------|------------|------------|
| | 2020 | 2021 | 2022 | 2023e | 2024e | 2025e |
| ASSETS | | | | | | |
| Goodwill | 2 | 2 | 1 | 1 | 1 | 1 |
| Other intangible assets | 11 | 21 | 39 | 48 | 56 | 63 |
| Financial assets | 3 | 2 | 0 | 0 | 0 | 0 |
| Other fixed assets | 1 | 3 | 3 | 3 | 3 | 3 |
| Total fixed assets | 18 | 27 | 44 | 53 | 60 | 67 |
| Accounts receivable | 2 | 3 | 2 | 14 | 15 | 14 |
| Other current assets | 2 | 5 | 5 | 25 | 29 | 26 |
| Cash and cash equivalents | 19 | 44 | 48 | 41 | 40 | 54 |
| Total current assets | 22 | 53 | 55 | 80 | 84 | 94 |
| TOTAL ASSETS | 40 | 79 | 99 | 132 | 145 | 161 |
| EQUITY AND LIABILITIES | | | | | | |
| Equity | 38 | 72 | 92 | 87 | 97 | 113 |
| Total equity | 38 | 72 | 92 | 87 | 97 | 113 |
| Accounts payable | 0 | 3 | 2 | 9 | 10 | 11 |
| Other current liabilities | 2 | 4 | 6 | 36 | 38 | 37 |
| Total current liabilities | 2 | 8 | 8 | 45 | 48 | 48 |
| TOTAL EQUITY AND LIABILITIES | 40 | 79 | 99 | 132 | 145 | 161 |

Source: Beyond Frames Entertainment AB, EPB

| Growth and margins | | | | | | |
|-------------------------|-------|-------|-------|-------|-------|-------|
| | 2020 | 2021 | 2022 | 2023e | 2024e | 2025e |
| Revenue growth | - | >100% | 21% | >100% | 16% | 11% |
| EBITDA growth, adjusted | - | -88% | N.m. | N.m. | >100% | 43% |
| EBIT growth, adjusted | - | N.m. | N.m. | N.m. | N.m. | 81% |
| EPS growth, adjusted | - | N.m. | N.m. | N.m. | N.m. | 65% |
| Gross margin | >100% | >100% | >100% | 41.2% | 48.1% | 53.5% |
| EBITDA margin | 16.0% | 1.0% | Neg. | 7.3% | 17.9% | 23.0% |
| EBITDA margin, adjusted | 16.0% | 1.0% | Neg. | 7.3% | 17.9% | 23.0% |
| EBIT margin | Neg. | Neg. | Neg. | Neg. | 7.3% | 11.9% |
| EBIT margin, adjusted | Neg. | Neg. | Neg. | Neg. | 7.3% | 11.9% |
| Profit margin, adjusted | Neg. | Neg. | Neg. | Neg. | 6.3% | 9.4% |

Source: Beyond Frames Entertainment AB, EPB

| Return | | | | | | |
|----------------|------|------|------|-------|-------|-------|
| | 2020 | 2021 | 2022 | 2023e | 2024e | 2025e |
| ROE, adjusted | Neg. | Neg. | Neg. | Neg. | 11% | 15% |
| ROCE, adjusted | Neg. | Neg. | Neg. | Neg. | 12% | 19% |
| ROIC, adjusted | Neg. | Neg. | Neg. | Neg. | 22% | 35% |

Source: Beyond Frames Entertainment AB, EPB

| Capital efficiency | | | | | | |
|---|------|------|------|-------|-------|-------|
| | 2020 | 2021 | 2022 | 2023e | 2024e | 2025e |
| Accounts receivable / total revenue | 9% | 8% | 5% | 9% | 9% | 7% |
| Accounts payable / COGS | 20% | 22% | 10% | 9% | 9% | 10% |
| Total short-term liabilities / total cost | 13% | 19% | 12% | 31% | 32% | 31% |
| Working capital / total revenue | 9% | 2% | -1% | -4% | -2% | -4% |
| Capital turnover rate | 0.5x | 0.6x | 0.5x | 1.8x | 1.8x | 1.7x |

Source: Beyond Frames Entertainment AB, EPB

| Financial position | | | | | | |
|--------------------|-------|---------|------|-------|-------|-------|
| | 2020 | 2021 | 2022 | 2023e | 2024e | 2025e |
| Net debt | -19 | -44 | -48 | -41 | -40 | -54 |
| Equity ratio | 95% | 90% | 92% | 66% | 67% | 70% |
| Net debt / EBITDA | -9.3x | -189.6x | 3.6x | -4.3x | -1.5x | -1.4x |

Source: Beyond Frames Entertainment AB, EPB

| Per share data | | | | | | |
|--|-------|-------|-------|-------|-------|-------|
| | 2020 | 2021 | 2022 | 2023e | 2024e | 2025e |
| EPS | -0.54 | -0.58 | -1.38 | -0.27 | 0.57 | 0.94 |
| EPS, adjusted | -0.54 | -0.58 | -1.38 | -0.27 | 0.57 | 0.94 |
| FCF per share | 0.06 | -1.19 | -2.34 | -0.44 | -0.05 | 0.85 |
| Book value per share | 2.69 | 4.55 | 5.35 | 5.08 | 5.65 | 6.58 |
| Number of shares, m | 14.2 | 15.8 | 17.2 | 17.2 | 17.2 | 17.2 |
| Number of shares after dilution, average | 14.2 | 15.0 | 16.5 | 17.2 | 17.2 | 17.2 |

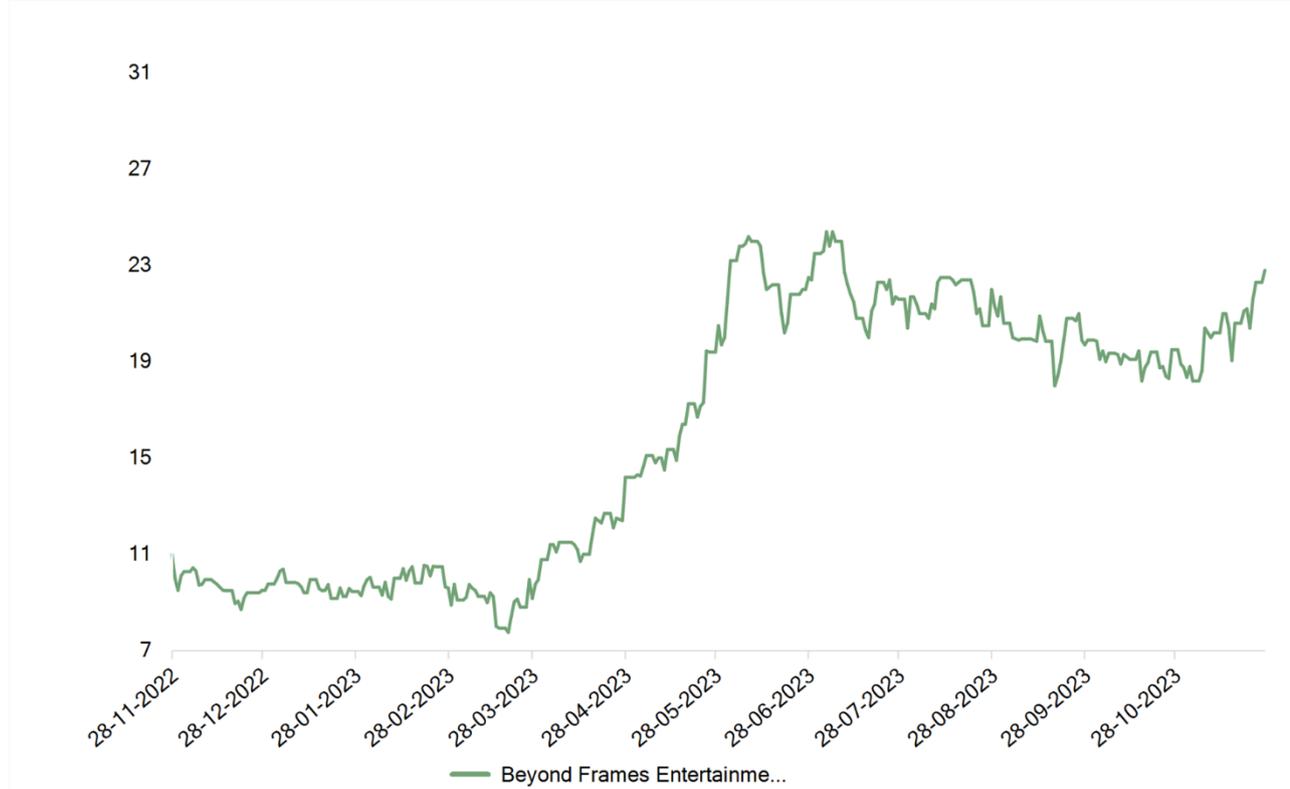
Source: Beyond Frames Entertainment AB, EPB

| Valuation | | | | | | |
|------------------------|--------|--------|------|--------|-------|-------|
| | 2020 | 2021 | 2022 | 2023e | 2024e | 2025e |
| P/E, adjusted | Neg. | Neg. | Neg. | Neg. | 35.9x | 21.7x |
| P/BV | 7.7x | 7.8x | 1.8x | 4.0x | 3.6x | 3.1x |
| P/FCF | 334.3x | Neg. | Neg. | Neg. | Neg. | 23.9x |
| FCF-yield | 0% | Neg. | Neg. | Neg. | Neg. | 4% |
| Dividend yield | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |
| Payout ratio, adjusted | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |
| EV/Sales | 7.1x | 3.0x | 2.7x | 2.1x | 1.8x | 1.6x |
| EV/EBITDA, adjusted | 65.1x | 508.4x | Neg. | 33.5x | 11.5x | 8.1x |
| EV/EBIT, adjusted | Neg. | Neg. | Neg. | -56.0x | 28.3x | 15.6x |
| EV | 131 | 118 | 130 | 316 | 316 | 316 |
| Share price, year end | 10.3 | 10.3 | 10.3 | 19.0 | 19.0 | 22.8 |

Source: Beyond Frames Entertainment AB, EPB

Share Price and Average Fair Value Chart

Beyond Frames Entertainment AB (BEYOND SS EQUITY)



Source: EPB, IDC

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