

YOU CAN'T HANDLE THE TRUTH

**TRANSPARENCY AND EXPECTATIONS FOR EARLY-STAGE
COMPANIES DURING FUNDRAISING PROCESSES**

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You Can't Handle the Truth: Transparency and Expectations for Early-Stage Companies During Fundraising Processes

Abstract:

Given the limited research on the existence of anchoring bias in professional contexts in general and its existence in financial investment-related contexts in particular, this thesis aims to contribute to the existing literature on anchoring bias with data gathered through an online self-completion questionnaire. Via the questionnaire, an experiment is constructed to investigate and understand how the pre-money valuation of an early-stage company as well as related decisions and opinions of it are impacted by anchoring bias stemming from the communication of the company's own pre-money valuation expectations. The same experiment is also performed on a business school student sample in an effort to improve the statistical power of the study. At a 5% significance level, the results indicate that anchoring bias impacts the pre-money valuations estimated by investment professionals while having no impact on the perceived attractiveness of the company as an investment opportunity. The results also suggest that the revenue growth and business model quality have a profound impact on the pre-money valuation alongside the company's own valuation expectations. However, no anchoring bias or other effects can be found for the student sample. It is impossible to determine if this result is a consequence of increased statistical power or the difference in experience between the students and the professional sample in financial investment decision-making and its related concepts.

Keywords:

Anchoring Bias, Entrepreneurial Finance, Decision-making, Investments, Valuation

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1. Introduction

1.1. Background and Research Question

One of the most important events that an early-stage company faces is to raise capital as this is not only needed to keep the venture afloat but also to further scale its operations. Raising capital is however not always a straightforward process as entrepreneurs need to deal with substantial uncertainty before managing to find appropriate investors that are willing to back them and their company.

This capital-raising process is typically characterized by significant amounts of information asymmetry between the entrepreneur and investors, especially in the context of venture capital (Amit, Brander and Zott, 1998; Glücksman, 2020). The information asymmetry in turn nurtures a set of frictions between the two parties, including agency problems in the form of adverse selection and moral hazard (Amit et al., 1998), which are key for investors to mitigate during the negotiation process leading up to capital raising and an investment (Fried and Hisrich, 1994; Cumming, 2006).

Consequently, entrepreneurs can lever the prevalent information asymmetry to their benefit, enabling them to behave opportunistically toward the investors during capital rounds by among other things, overselling the value of the company in order to try to negotiate better financing terms (Christensen, Wuebker and Wüstenhagen, 2009). In essence, this type of opportunistic behaviour is two-sided with both entrepreneurs and investors likely to leverage the information asymmetry advantages on both sides to optimize valuation from their respective perspectives (Christensen et al., 2009; Glücksman, 2020).

Given the information asymmetry inherent in these capital raising processes, the valuation of an early-stage company thus represents a key source for conflict of interest between the entrepreneurs on the one side and investors on the other side. This occurs since on the one hand achieving the highest possible valuation maximizes the wealth of the entrepreneurs while diluting their ownership stake in the venture as little as possible, while investors on the other hand want to invest at a valuation that is as low as possible in order to maximize potential returns. Also, the conflict of interest may not only occur between the entrepreneurs and new investors but may also take place between existing

and new investors. This can for instance happen if a company needs to raise larger sums of money than previously, sums that the current investors cannot or will not provide, making it necessary to bring on new outside investors. Then, just as in the case of entrepreneurs and investors, the old investors would want to achieve the highest possible valuation while new investors would want the opposite.

Because of this conflict of interest, investors have developed rigorous mechanisms that should reduce the risks of such opportunistic behaviour (Christensen et al., 2009), including extensive and meticulous screening processes (Fried and Hisrich, 1994). Yet the question remains whether these screening processes are as waterproof as investors may hope, or if there is still room for entrepreneurs to boost their negotiation position and push up the valuation of their company by utilising a cognitive bias called anchoring bias. By utilising this bias, investors can become anchored to a value that the entrepreneurs beforehand know is too high in order to drive up the valuation of their company as much as possible.

Therefore, this paper aims to contribute to the existing literature by studying the impact that the entrepreneurs' communicated valuation expectations may have on investors during the initial screening process, by setting the following research question:

In the context of the Swedish early-stage investor landscape, does the communication of expectations regarding a company's pre-money valuation during the initial screening for a prospective capital raising round exhibit an impact on the investor's valuation of the company, as well as the investor's perception of other key business qualities and the likelihood of the company's success going forward?

1.2. Methodology Introduction

Given that data related to early-stage investments and prospects is not publicly available and often is strictly confidential, the interaction between the early-stage company and a potential investor or set of investors is simulated using an experiment that is conducted through an online self-completion questionnaire (see Appendix 11 – The Main Study Questionnaire).

The online self-completion questionnaire format has been selected for the conduction of this study's experiment after considering multiple aspects including the fact that it is a

research tool that is commonly used in social scientific research (Bryman and Bell, 2011). In addition, the standardized nature of the self-completion questionnaire is enabling efficient provision of the same stimulus to the test subjects and thus ensures the comparability of the responses (Trobia, 2008). Other benefits that are considered include the self-completion questionnaire format being helpful in establishing an anonymous setting that allows the test subject to feel more secure in answering truthfully to the questions rather than feeling pressured to answer in a specific way instead (Bryman and Bell, 2019).

Going forward, the subsequent distribution method of the self-completion questionnaire has been planned with consideration taken to the target population of this thesis being the population of Swedish investment professionals. Given the limitation of the geographic scope to Sweden, the experiment and associated data collection can well be executed by distributing the online self-completion questionnaire through the use of convenience (Battaglia, 2008), network (Lee, 2008) and snowball (Chromy, 2008) sampling methods. With the application of these methods, test subjects for the questionnaire-based experiment are recruited by leveraging existing contact networks and spreading awareness about the study through word-of-mouth. In addition, the selected sampling methods are deemed appropriate for the purposes of this study based on the advice of Chromy (2008) and Lee (2008) to use these sampling methods when the population of interest is a so-called rare population (Porter, 2008) with only a select few individuals being part of it, as is the case for the population of Swedish investment professionals.

Ultimately, as a successful distribution of the self-completion questionnaire is contingent on the initially invited 1st degree connections passing it on to 2nd degree connections and eventually also 3rd degree connections in the ideal case, a contingent incentive is introduced for all invited test subjects. A donation to the Swedish Childhood Cancer Fund (Swedish: Barncancerfonden) of 10 SEK per each completed and submitted questionnaire response is pledged to intrinsically motivate primarily 2nd and 3rd degree connections to participate and complete the questionnaire, as advised by Trussell (2008).

In the end, the self-completion questionnaire was distributed to investment professionals with experience from among other fields, venture capital, private equity, investment

banking, equity research, family offices, and more. Multiple channels were used for the purpose of distribution, including personal invitations being sent to 1st degree connections on LinkedIn, as well as reaching out to work colleagues and acquaintances working in relevant fields while encouraging them to spread the survey to other 2nd and 3rd degree connections with relevant professional experience. In total, 113 completed responses are registered, providing a sufficient sample size as suggested by a priori sample size estimations made based on effect sizes observed in previous experimental studies observing anchoring bias in similar contexts (see 5.7.1. Sample Size Estimation).

However, considering that there might be a risk of sample size underestimation (see 5.7.1. Sample Size Estimation) we decided to complement the investment professionals sample by recruiting a larger number of students for participation in the self-completion questionnaire as well to perform the same experiment on a larger sample, something that would ensure the provision of sufficient amounts of statistical power. As a result, 310 students studying Accounting, Business, Economics, and Finance subjects have also completed the questionnaire via the online research platform, Prolific (<https://www.prolific.com/>), stemming from select geographies including the US and Canada, Western Europe, Australia, and New Zealand. To further improve the conditions for quality responses, the Prolific participants were also screened for an approval rate of above 90% from previous participation in other studies made through Prolific.

2. Literature Overview

Since the concept of anchoring biases was introduced by Tversky and Kahneman in the 1970s (see section 4.1. Anchoring Bias), its existence has been investigated in various fields and situations. However, in the context of early-stage financial investments and entrepreneurial finance, research is limited, something that has created a gap that this thesis is aiming to address. Despite the shortness of prior research, five articles have been identified as relevant for this thesis. While these articles do not investigate the exact same research question as this thesis does, they are still examining the existence of anchoring biases in similar contexts as the context set out through this research experiment. They can therefore provide valuable insights, assisting with the structuring of this thesis.

To begin with, Kaustia, Alho, and Puttonen (2008) investigate how anchoring bias may affect investment professionals and students by utilising two different experiments where the respondents are asked to predict future stock returns. Through these experiments, Kaustia et al. (2008) find that anchoring bias does have a statistically significant effect on investment professionals in their predictions and an even larger effect on students. This is an interesting result given that this thesis aims to further investigate how investment professionals may be impacted by anchoring bias, albeit in a different way by focusing on hypothetical investment decisions rather than the prediction of stock returns.

Moving on to the second study, Serfas (2011) finds that anchoring bias does have an impact in a capital investment context, affecting both non-professional and professional experiment participants. This is shown through six empirical experiments where test groups are subjected to anchors introduced in different ways. Since Serfas (2011) focuses on anchoring biases in a capital investment context, this thesis mainly contributes by investigating the existence of anchoring biases in a financial investment context while also narrowing down the scope to focusing on investment professionals specifically.

Furthermore, focusing more narrowly on professionals and a financial market context, Campbell and Sharpe (2009) find that economic forecasts made by professionals suffer from anchoring bias in that the forecasts are anchored toward data from recent month's forecasts. This result also makes a part of forecast surprises predictable. However, the study also concludes that while the forecasts themselves suffer from an anchoring bias, market participants seem to not be affected by the bias as the market reaction to the predictable surprises stemming from professional economic forecasts is small and insignificant. This paper is interesting for this thesis as it provides further evidence that experts are prone to suffer from anchoring bias in their analyses and forecasts, but at the same time problematizes the topic by suggesting that other professional actors can see through this. This leaves us with a question about whether investment professionals do in fact exhibit this bias when assessing investment opportunities or if they will, similarly to the market players that Campbell and Sharpe studied, assess the company's own valuation expectations with more criticism when looking at the investment opportunity.

In addition, Hess and Orbe (2013) further add to the research conducted by Campbell and Sharpe (2009) and conclude that anchoring bias does indeed exist in macroeconomic forecasts. However, compared to Campbell and Sharpe, Hess and Orbe try to adjust for

this bias. When doing so, they find no systematic improvement and therefore conclude that the test used to find the anchoring bias in Campbell and Sharpe's study must be biased in itself. The conclusions of this study are interesting as they suggest that professionals, in this case, macroeconomic analysts, are not affected by an anchoring bias when they have access to a large amount of information. This might therefore also apply to other professionals, even though the next article indicates the opposite. Regardless, it would be interesting to see if professionals (in this case investment professionals) are able to avoid being affected by anchoring bias given their relatively limited set of information, in comparison to the professionals studied by Hess and Orbe (2013).

Finally, Cen, Hilary, and Wei (2013) show, among other things, that analysts anchor to earnings per share (EPS) industry medians when making earnings forecasts. That is, firms that show low forecasted EPS relative to the industry median receive more optimistic earnings forecasts by analysts compared to firms that show high forecasted EPS relative to the industry median. Furthermore, the authors also show that firms with high forecasted EPS relative to the industry median have higher future stock returns compared to firms with low forecasted EPS. For the purpose of this thesis, this article is interesting in that it not only concludes that there is an existence of anchoring bias among professionals, but also that it exists among professionals in the financial markets. This is of course important given that this thesis focuses particularly on professionals within financial markets.

3. Hypotheses

While prior research is somewhat inconclusive regarding the prevalence of an anchoring bias among professionals, research is still limited when it comes to studying the prevalence of anchoring bias in a professional investment setting. However, it is also noted that a majority of the studies covered in the literature overview do find that anchoring bias does affect professionals in various finance-related fields. Therefore, it is expected that investment professionals will be prone to anchoring bias as well, with the following hypothesis formulated for this thesis:

H1: When having to make an investment decision based on a short presentation of an investment opportunity, investment professionals will exhibit an anchoring bias when estimating the appropriate pre-money valuation for the company in

question, with the company's own pre-money valuation expectation stated in the presentation acting as an anchor.

Furthermore, it is anticipated that the company's pre-money valuation expectation as outlined in the investment presentation material will not only influence investment professionals in the form of an anchoring bias in relation to what pre-money valuation they themselves will deem appropriate but it will also enact more qualitative effects on investment professionals. As a consequence of the anchoring bias effect outlined in H1, the higher pre-money valuation attributed to the considered company will make the investment opportunity less attractive to investment professionals, as it would leave less room for an upside in returns and thereby earnings for the new investors in question. In line with this reasoning, the following second hypothesis has been formulated for this study:

H2: Investment professionals will perceive an investment opportunity in a company where the company communicates a relatively higher expected pre-money valuation level, as less attractive than if the company's expected pre-money valuation level were lower.

4. Theoretical Frameworks

4.1. Anchoring Bias

The anchoring bias, a concept developed by psychologists Daniel Kahneman and Amos Tversky, refers to the tendency of individuals to rely on the first piece of information that they are given or that they encounter when they need to make a decision or set estimates about something. This first piece of information thereby works as a reference point (or an "anchor"), something that influences subsequent judgments or estimations (Tversky and Kahneman, 1974). For this thesis, the anchoring bias is relevant in that it is hypothesised that the pre-money valuation expectation as set out by the company will influence the pre-money valuation as estimated by investment professionals since the pre-money valuation expectation acts as the first piece of information or anchor to the valuation of the company.

4.2. Company Valuation

In the domain of company valuation, a wide array of valuation methods speak to the fact that assessing the worth of a company can be done in various ways, with each alternative having its own pros and cons. While many, the different nature of the various valuation methods can provide investors with diverse frameworks for understanding the value of an investment opportunity and the return that it can provide to them.

One such valuation method that can be utilised by investment professionals is the discounted free cash flow (DCF) method. As explained by Berk and DeMarzo (2017), the discounted free cash flow method entails forecasting future free cash flows generated by the company being assessed and discounting these cash flows back to their present value using an appropriate discount rate. The discount rate used is often the company's weighted average cost of capital (WACC). By focusing on free cash flows that accrue to both equity and debt holders, it is also possible to arrive at a total company value (Enterprise Value). While a discounted free cash flow method is preferable in that it values the company intrinsically, that is, its projected cash flows, it might not be the best alternative to use when valuing companies that currently have negative free cash flows.

Because of the above limitation with the free cash flow method, investment professionals may use the “method of comparables” for valuing a company. By utilising this relative valuation method, the value of the firm is estimated based on the value of other comparable companies or projects that are similar and will produce similar cash flows in the future. In order to practically use this approach, so-called valuation multiples are often used where the value of a comparable company is set in relation to some characteristic of that company. One such metric is Enterprise Value / EBITDA where the enterprise value of the firm is divided by the company's reported EBITDA. By then multiplying this ratio by the EBITDA of the company that is being valued, we get a measure of that company's enterprise value. Naturally, completely identical companies do not exist, and the usefulness of this method will therefore depend on how different the various companies used for the valuation are to each other. It is however an alternative method to the discounted cash flow model when positive free cash flows are not available and can therefore prove to be useful when valuing early-stage companies that often do not generate positive free cash flows, yet (Berk and DeMarzo, 2017). Research also shows that the use of valuation ratios has traditionally been used extensively by venture

capitalists, especially in Western countries (Manigart, Wright, Robbie, Desbrières and De Waele, 2000; Sander and Kõomägi, 2007).

5. Data and Methodology

5.1. Ideal Empirical Setting

When examining the anchoring bias among investment professionals, the ideal empirical setting would naturally be to test the hypotheses of this thesis in real-life market environments. This would involve engaging the investment professionals in real investment decision-making processes and focusing on scenarios where the impact of different pre-money valuation expectations is heightened. Then, it would be optimal if it was possible to directly observe the investor behaviour as a response to varying pre-money valuation expectations since this would allow for the investigation of a potential anchoring effect in live market conditions. The advantages of this empirical setting are multifold. To begin with, it ensures that observations and data collected are connected to the complexity of the real world, which in the end is the objective of any scientific research. Furthermore, observing investor behaviour in a real-life setting also ensures that the findings of the study are more certain to be practical and possible to act upon to inform investment strategies and entrepreneurial behaviour in connection to equity issues.

However, creating this ideal empirical setting comes with significant challenges. For instance, it would be difficult to create a controlled environment where a potential anchoring bias can be isolated from other biases and market influences, similar to what has been done in the formation of the experiment in this study. Moreover, creating this ideal setting would also demand a higher level of access and willingness to cooperate from investment professionals, something that could be difficult given the often-demanding nature of these jobs.

Furthermore, in order to understand the magnitude of the potential anchoring bias and the potential qualitative and quantitative impact that different pre-money valuation expectation levels exhibit on investment professionals' assessment of the prospective company and ultimately its pre-money valuation, it would be ideal to test a multitude of different pre-money valuation expectation levels. This would be beneficial since it might

be the case that the potential anchoring bias only has a positive effect within a certain optimal interval of pre-money valuation expectations. For instance, the anchoring bias effect for a company with a communicated pre-money valuation expectation of SEK 100 million might be distinctly positive, while for the same company where the company states a pre-money valuation expectation of SEK 1,000 million, the effect stemming from anchoring bias might be negative due to the pre-money valuation expectation being unreasonable relative to the company's performance. Consequently, in order to fully understand this relationship, it would be optimal to run the experiment for a range of different expected pre-money valuation levels, compared to doing it for only two levels, as has been done in this study.

Anticipated effect from anchoring bias

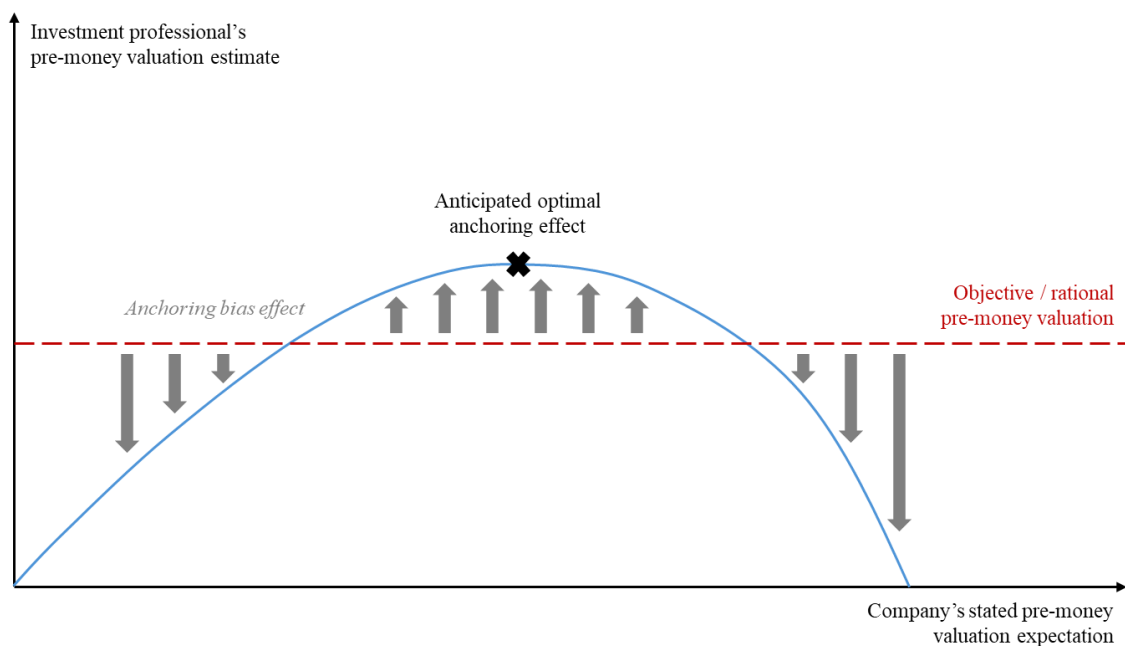


Figure 1. An illustration of the anticipated anchoring bias effect on the pre-money valuation as estimated by investment professionals, in relation to the company's expected pre-money valuation as communicated to the investment professionals in question.

Nonetheless, running the experiment for a multitude of different expected pre-money valuation levels would be very difficult as it would require a very large set of respondents, in order to make sure that the results from the experiments are statistically significant and possess sufficient power. The difficulty of this is further heightened when taking into consideration the limited size of the total population of investment professionals.

Therefore, given the above constraints, an approach has been taken to approximate the ideal empirical setting by creating an experiment that is as close to a real-life investment decision-making process as possible while limiting the number of different pre-money valuation expectation levels to two in order to improve the statistical quality of the results.

5.2. Questionnaire Design – Pre-Pilot Testing

In order to study the potential of the company's own pre-money valuation expectations to induce an anchoring bias in the decision-making process of prospective investment professionals, each test subject at the start of the self-completion questionnaire is introduced to a hypothetical scenario where an early-stage company is pitching a fictional B2B software-as-a-service product to the test subject in his or her role as an investment professional, using an investment presentation. In this hypothetical scenario, the test subject's task is to use the presented investment presentation to assess the attractiveness of the company as a potential investment opportunity and answer a number of questions that measure the test subject's attitude towards the presented company following the investment presentation (see Appendix 11 – The Main Study Questionnaire). In turn, the hypothesis testing is facilitated by randomly assigning the test subjects to one test group out of three different groups in total at the start of the questionnaire, where two of the test groups are acting as treatment groups, and the third is a control group, with each of the three test groups having their own versions of the investment presentation (see Appendix 10 – The Structure of the Main Study Questionnaire).

The investment presentation in question is designed to cover the topics that professional investors consider to be important for their screening processes of investment opportunities, including: (i) revenue growth, (ii) value-add of the product or service, (iii) track record of the management team, and (iv) international scalability (Moritz, Diegel, Block and Fisch, 2021), with revenue growth and the business model of the company being of particular interest to venture capital investors (Block, Fisch, Vismara and Andres, 2019). Subsequently, it has been decided to include the following sections in the investment presentation:

- a) Introduction – including an overview of the company and the management team, as well as a description of the company's business model.
- b) Market overview and growth – covering relevant market trends and a 5-year

market growth forecast until the year 2028, together with a presentation of the company's international expansion plan.

- c) Financial information – containing revenue and EBITDA figures representing the financial development of the company, including actuals up to the end of the financial year 2023, together with a 3-year forecast until the end of the year 2026. The method applied for the construction of the financial information is described in further detail under section 5.5. (see 5.5. Construction of Mock Financials for the Investment Presentations and Determination of the Pre-Money Valuation Levels to Be Used as Treatment Variables in the Main Study), since it is a key fundamental for the subsequently set pre-money valuation level that acts as the treatment variable in each of the two treatment groups.
- d) The opportunity – summarising the fundraising target, together with the expected pre-money valuation, and a plan for the use of proceeds.

Going forward, after having read the investment presentation, the attitude-measuring part of the questionnaire starts, where the attitude of the test subjects toward the presented company is recorded. It has been chosen to use semantic differential measurement techniques, with the application of seven-point bipolar scales (Stoutenborough, 2008) to measure the attitude across a spectrum. When constructing the questionnaire, it has been considered whether to apply five or seven points to the bipolar scales, in line with the recommendation of Maitland (2008) to use five to seven points that are evenly spread across the continuum of the scale when measuring attitudes. On the one hand, a five-point scale would be beneficial by providing a more simplified experience for the test subjects compared to the traditional seven-point scale. On the other hand, a seven-point bipolar scale would introduce more breadth to the attitude spectrum, allowing the test subjects to pinpoint their attitude more accurately, which motivated the choice of applying a seven-point scale.

Subsequently, when constructing the bipolar scales, verbal labels were included for all of the seven points on each scale as it has been observed that data quality tends to be higher when having labels for all points instead of only the extremes of the scale, or other arrangements (Kennedy, 2008). The wording of the labels is made in a way that creates balanced Likert scales with symmetrically balanced bipolar response categories, with

three negative and three positive alternatives around a neutral midpoint (Brill, 2008).

As a result, three attitude-measuring questions are presented to the test subjects.

- i) The first question measures the test subjects' opinion of the presented company as an investment opportunity, asking them to finish the statement "The presented company as an investment opportunity is ..." by selecting one of the seven response alternatives: (a) extremely poor, (b) very poor, (c) somewhat poor, (d) neither good nor poor, (e) somewhat good, (f) very good, or (g) extremely good.
- ii) Next, the test subjects are asked about their opinion on the presented company's likelihood of success, ranking "the success of the presented company" as (a) extremely unlikely, (b) very unlikely, (c) somewhat unlikely, (d) neither likely nor unlikely, (e) somewhat likely, (f) very likely, or (g) extremely likely.
- iii) Finally, the test subjects must state their own likelihood of taking the presented company to the next step in their investment screening process, ranking it as (a) extremely unlikely, (b) very unlikely, (c) somewhat unlikely, (d) neither likely nor unlikely, (e) somewhat likely, (f) very likely, or (g) extremely likely,

Afterward, the question section is concluded by asking the test subjects to imagine that they are forced to make an investment in the presented company (i.e., there is no way for them to decline the investment proposal) and state the pre-money valuation at which they would be willing to invest in such a case.

Once the test subjects have completed their assessment of the investment opportunity, all test subjects are asked to reflect on the presented company's performance in relation to a number of parameters that are generally considered important in the screening process for private equity and venture capital investments (Block et al., 2019; Moritz et al., 2021), using the same balanced seven-point Likert-scale as for the attitude measuring in the preceding question section. Given the reflective nature of this question, it is asked in a separate question block from which the test subjects cannot go back and revise their previous assessment of the investment opportunity, something that could otherwise give

rise to context effect bias (Holyk, 2008). In addition, to avoid any possible influences on the results stemming from biases due to the order in which the parameters are listed, the list order has been randomized (Bishop, 2008).

Finally, the questionnaire is concluded with a block for questions related to demography in order to collect data on the age group, gender, highest level of completed education, and experience of working professionally with investments. The purpose of collecting this data is to use it for the control variables, and in the case of gender, to also study the representativeness of the sample in relation to the overall population of investors in Sweden. In addition, a control question is included asking the test subjects to select the answer option that says “Continue”, to ensure that the test subjects are alert and are paying attention to the questions. Incorrect responses to the control question will result in the exclusion of the test subject’s responses from the sample.

Since the demography questions together with the control question are presented towards the end of the questionnaire, there is a substantial risk of the test subjects exhibiting reduced attention and motivation to complete the questionnaire leading to a deteriorating response quality – so-called respondent fatigue (Ben-Nun, 2008; Bryman and Bell, 2011). In order to minimize the risk of having specific control variables that are false due to the reason that the questions from which the variables are collected are listed towards the end, the order of all the questions in this block including the control question is randomized for every test subject.

Overall, the general structure of the questionnaire is also designed with the minimization of response quality deterioration due to respondent fatigue in mind, with the most important and cognitively demanding part of reading through the investment presentation and making an assessment, put directly at the beginning of the questionnaire to ensure the highest possible attention and motivation for this part of the experiment as advised by Holyk (2008). Furthermore, a forced choice format is used for all the questions, in order to maximize the response rate given the generally small sample size of this study. In addition, no response options as for example “do not know” or “no opinion” have been included to stimulate the test subjects to develop an opinion and avoid outcomes where test subjects do not provide any tangible responses. Nevertheless, it is recognized that choosing to proceed with such a questionnaire format may increase the risk of measurement errors, where respondents are encouraged to answer questions in a way that

does not truly reflect the respondent's opinion and gives rise to erroneous data (Wivagg, 2008). However, this risk of erroneous data is deemed to be low, since the application of seven-point Likert-scales for the attitude measuring questions provides a neutral midpoint that the test subjects can select in case of an absent opinion.

5.3. Pilot Testing of the Questionnaire

5.3.1. Pilot Design

To test and verify that the constructed questionnaire works as intended before sending it out to the sample of investment professionals, a pilot study has been conducted by sending out a pilot version of the questionnaire (see Appendix 13 – The Pilot Test Questionnaire) to a dedicated pilot sample, with the aim of testing that the participants understand the questions and follow the instructions as intended.

The pilot sample was created using convenience and network sampling methods targeted at students studying at the Stockholm School of Economics with an educational background in business or finance to ensure that the pilot participants will at least have some understanding of the research topic in question. Subsequently, a sample of 12 complete responses has been collected for the pilot test. The small sample size was anticipated and given these expectations in combination with a narrow purpose of solely testing the general understanding of the questionnaire's instructions, it was deemed sufficient to only include the control group as the sole test group for the pilot questionnaire (see Appendix 12 – The Structure of the Pilot Test Questionnaire). In other words, no treatment has been applied to the pilot sample.

5.3.2. Insights from the Pilot

Overall, the responses collected during the pilot testing show that the pilot participants understand the instructions in the questionnaire. On average, a pilot participant did spend 8.5 minutes to complete the questionnaire, suggesting that as intended, a proper amount of time and attention has been dedicated to studying the investment presentation.

Table 1. Response duration of pilot participants (no. of seconds)

Count	12
Mean (nr. of seconds)	511
Median (nr. of seconds)	431
Min (nr. of seconds)	86
Max (nr. of seconds)	1,647

A descriptive overview of the duration for pilot participants' responses.

Going forward, responses to question Q4.1:

“If you were forced to make an investment into the presented company at this stage, at what pre-money valuation would you do it?”

highlight a potential response quality issue. By allowing the pilot participants to freely enter the relevant pre-money value, they are enabled to respond with text-based input as has been the case for two pilot participants, thereby making further analysis of the data more difficult as it will require manual cleaning and extraction of the value component itself.

Nevertheless, both of the text-based responses provided valuable insights on the construction of the questionnaire as well as uncovering further issues to be addressed before initiating the main study. Starting with the first text-based response:

“Don’t know how to value a company”

The nature of the above response is problematic since it displays that test subjects have the option to omit one of the most important questions in the questionnaire and leave out the key treatment-dependent variable. This issue suggests that the response provision to question Q4 in the three test groups of the main study must be strictly restricted to a numerical format to avoid having test subjects completely omitting the question.

Continuing to the second pilot participant providing a text-based response, more insights are derived from the following answer:

“Without the opportunity to conduct any analysis to more accurately determine the value of the company, such as a comparable companies analysis and other methods, I’ll have

to defer to my judgement and make an educated guess. As the sales CAGR for the forecast period is actually lower than the CAGR for the corresponding period of actuals, and without knowing whether the forecasted increase in EBITDA will materialize, I would not be comfortable valuing the company at more than SEK 500m, representing roughly 15x 2024 EBITDA. However, given the apparent slowdown in top line-growth, I would preferably like to see an even lower valuation in order to invest a meaningful stake.”

This response is not only very lengthy, making interpretation time-consuming, but the answer is also stated in a manner that makes interpretation difficult and uncertain. For instance, should the pre-money valuation be interpreted as SEK 500m or less than that?

In addition, it is also observed that the instruction of stating the relevant pre-money valuation in SEK is not considered by all pilot participants, creating further data measurement issues. In two instances, the pre-money valuation is given in millions of SEK (“SEK285m” and “110m SEK”). Additionally, in another third case, the response is “380” which in turn can be interpreted as 380 SEK if the pilot participant correctly followed the instructions or alternatively as SEK 380 million, similarly to the two instances mentioned before. Given that one of the prior conclusions from the pilot testing is that the ability to provide text-based input should be completely removed, the risk of receiving ambiguous responses such as “380”, will increase, adding an additional layer of uncertainty to the results. Ideally, this risk should be avoided completely, suggesting the appropriateness of limiting the test subjects of the main questionnaire to only be able to provide values in millions of SEK. Making this limitation also helps with reducing the risk that some participants may enter a faulty number due to the large number of integers existing in large numbers. For instance, the risk of incorrectly entering SEK 100,000,000 is deemed to be larger than entering SEK 100m due to the large number of zeroes.

5.3.3. Changes to the Questionnaire Design Based on Pilot Insights

Based on insights from the pilot test, slight changes were made to the questionnaire in order to improve it for the main study. To begin with, in questions 1 and 5 the word “poor” was changed to “bad” since “bad” can be considered a more accurate antonym to “good” while also being less open to interpretation. Poor could for instance be interpreted as a negative financial situation, something that is less likely to be the case for the word “bad”. Moreover, for question 2 we changed the wording from “How likely do you think

it is that the presented company will succeed?” to “How likely do you think it is that the presented company will succeed in relation to its targets?”, to decrease the ambiguity of what defines success in this case. In question 5, the word “performance” was also removed from the question since some of the parameters can be considered to not be directly related to performance per se, for instance, the quality of the management team.

Furthermore, perhaps the most important change that was made based on the insights from the pilot study was that the instructions for question Q4 were made clearer. To begin with, the instruction to input a value denominated in “SEK million” was added due to the previously mentioned risks and limitations of having the value denominated in SEK. The possibility to input a string value as well as a number with decimals was also removed, with decimals being disabled due to the fact that English-speaking participants use commas as a thousand-separator while Swedish-speaking participants use commas as a decimal delimiter which may create confusion and interpretation issues when analysing the results.

There was also a change made to the presented expected pre-money valuation of the company, as it is deemed more reasonable to apply a valuation multiple to the actual 2023 figures rather than the expected 2024 figures (which is the case for the pilot study) given that year-end 2024 is quite far into the future and projections are therefore less certain. However, given that the valuation expectation is not shown directly in the pilot study since it displays the presentation used for the control group (where a “TBD” statement is used instead) this change is only visible in that the ticket size (size of equity issue) is changed from SEK 130-180 million in the pilot study to SEK 90-140 million in the main study.

5.4. Experiment Design

To test the two hypotheses set out for this thesis, a total of three test groups are used for the experiment, one control group and two treatment groups, one of which each test subject is randomly assigned to (see Appendix 10 – The Structure of the Main Study Questionnaire) in order to facilitate a true experiment that allows efficient comparability of the treatment effects measured in the two treatment groups (Knapp, 2008).

Each of these test groups differs in that they present a different version of the investment presentation, where the treatment variable (being the pre-money valuation stated on pages

2 and 5) differs (for a more elaborated description of how the treatment variable values are determined, see section 5.5. Construction of Mock Financials for the Investment Presentations and Determination of the Pre-Money Valuation Levels to Be Used as Treatment Variables in the Main Study). The placement of the treatment variable on pages 2 and 5 specifically is a deliberate choice made in order to ensure that the test subject gets properly exposed to the treatment variable both at the beginning, when starting to consume the content of the investment presentation (page 1 is a presentation cover with the actual content starting on page 2), as well as toward the end. In this way, the risk of having the test subject missing the treatment variable as she or he skims through the investment presentation, is minimized, laying a good foundation for a proper treatment effect taking place.

In the first test group, the control group, the test subjects are presented with an investment presentation that does not contain any treatment (Peng and Ziskin, 2008), representing a situation where the company has no prior expectations of the company's pre-money valuation, stating it as "to be determined" ("TBD") in the investment presentation (see Appendix 7 – Investment Presentation Stating That the Pre-Money Valuation Is "To Be Determined").

Furthermore, the second test group (treatment group "low valuation") is designed to simulate a situation where the company has a lower pre-money valuation expectation (420 SEKm) relative to the third test group (see Appendix 8 – Investment Presentation Stating a Lower Pre-Money Valuation).

Lastly, the third test group (treatment group "high valuation") presents the same investment presentation but with the pre-money valuation of the company set at 660 SEKm, mimicking a scenario where the company puts forward a pre-money valuation that is higher relative to the second test group. This pre-money valuation expectation is also higher than what could be fairly motivated by the financial information provided in the investment presentation based on valuations of public comparable companies (see Appendix 9 – Investment Presentation Stating a Higher Pre-Money Valuation and section 5.5. Construction of Mock Financials for the Investment Presentations and Determination of the Pre-money Valuation Levels to Be Used as Treatment Variables in the Main Study).

Table 2. The test groups of the experiment

Test group	Treatment variable	Treatment value
Control group	N/A	
Treatment group 1 - "Low valuation"	Expected pre-money valuation	420 SEKm
Treatment group 2 - "High valuation"	Expected pre-money valuation	660 SEKm

An overview of the experiment's three test groups together with the the respective treatment applied in each of the groups.

5.5. Construction of Mock Financials for the Investment Presentations and Determination of the Pre-money Valuation Levels to Be Used as Treatment Variables in the Main Study

For the financial information, a set of comparable companies is used to base the financial figures on. The comparable companies consist of a set of publicly traded Nordic Software-as-a-Service (SaaS) companies (see Appendix 14 – Comparable SaaS Peer Data). This particular set is chosen since the fictional company used for the experiment is also a Nordic SaaS company and these companies therefore have similar business models and customer bases given that they sell a similar type of product in the same geographic region.

In order to base the financial information of the fictional company on this set of comparable companies, financial data regarding these comparable companies is extracted using Capital IQ. While the full set of extracted metrics can be found in Appendix 14, some examples of extracted valuation metrics are EV/EBITDA and EV/Revenue. This data is extracted for multiple years (2021-2026), where 2021-2023 represents actual data and 2024-2026 represents forecasted data (with forecasts made by equity research analysts, aggregated by Capital IQ). Using this extracted data, summary statistics are calculated for each metric and year. The statistics calculated are the maximum value, 75th percentile, median, 25th percentile, and the minimum value. The median was used instead of the average in order to minimise the effect of outlier values.

The extracted data is then used to decide upon the financial information of the fictional company. In doing that, it has been first decided that it would be optimal to use the same set of financial data (i.e., revenue and EBITDA) for all of the different test groups in order

to isolate the effects of changing the treatment variable (i.e. the pre-money valuation expectation). Given that companies and their management are often overly optimistic regarding the future financial development of their companies (Armstrong, Dávila, Foster, Hand, 2007; Invernizzi, Menozzi, Diana, Patton, Viglia, 2017), it is decided to use more aggressive data for the projected periods (i.e., 2024-2026) and less aggressive figures for the actual periods (i.e., 2021-2023). In order to do so while still keeping to the financial data of the set of public comparable companies, it is decided that 2021-2023 should use the median figures of the comparable group while 2024-2026 should use the 75th percentile figures of the comparable group as the 75th percentile figures will be relatively “better” compared to the median figures. For instance, the EBITDA margins and revenue growth will be higher for the 75th percentile compared to the median. The revenue figures are then decided upon so that the revenue growth rate is the same as the median revenue growth rate for 2021-2023 in the comparable company set while for 2024-2026 it has the same revenue growth as the 75th percentile growth rate from the comparable company set. The same is then done for the EBITDA margins.

Furthermore, when deciding upon the pre-money valuation expectation levels that are used as treatment variables, the same methodology is used whereas the 75th percentile 2023A EV/EBITDA is used for the “high valuation” group and the median 2023A EV/EBITDA is used for the “low valuation” group. The reasoning behind this is that the actual financial figures (i.e. 2021-2023) are set by using median figures from the comparable company set, and therefore, a valuation set at the 75th percentile can be considered relatively high in light of these financial figures whereas by using the median EV/EBITDA for the “low valuation” group makes the valuation “low” relative to the “high valuation” group.

Finally, the ticket sizes are chosen so that the post-money ownership stemming from this financing round is of the same size in both two groups. That is, the ticket size is set at a higher level for the “high valuation” group compared to the “low valuation” group in order to make the post-money ownership percentages (almost) the same for these two (approximately 7.5%). The reasoning behind this is that post-money ownership often is important for investors, as it determines the amount of power they have to impact the companies that they invest in and their direction going forward. For the control group, a more complicated situation arises given that the pre-money valuation expectation there is set as “to be determined” (“TBD”) and one would therefore like to also set the ticket size

as up for discussion in order to not provide any frames at all that can potentially bias the test subjects. However, since it is in practice not viable that a company would initiate dialogues with investors and bring forward an investment proposal without having at least an indication of the ticket size on the capital round, the ticket size is set at a range with the bottom end of the range being the ticket size of the “low valuation” group and the upper end being set at the ticket size of the “high valuation” group.

5.6. Variables

Treatment variables:

1. The pre-money valuation of the presented company – a continuous variable measured in terms of millions of Swedish kronor (SEK). For the purpose of the study, two values of the variable are present: 420 SEKm (low anchor treatment) and 660 SEKm (high anchor treatment). In the absence of the treatment, no value is attributed to the variable, leaving it as “to be determined” or “TBD” (control).

Together with the pre-money valuation treatment variable, the ticket size is also different for the three groups in order to mirror the changes to the pre-money valuation and correspond to similar post-money equity ownership across the different test groups.

- a. Where a pre-money valuation of 420 SEKm is used, a ticket size of 90 SEKm is shown, which corresponds to a post-money valuation of 510 SEKm and a post-money equity ownership of approximately 17.6%.
- b. Where a pre-money valuation of 660 SEKm is shown, a ticket size of 140 SEKm is shown, which corresponds to a post-money valuation of 800m and a post-money equity ownership of 17.5%.
- c. For the control group where the pre-money valuation is shown as “to be determined” (“TBD”), the ticket size is simply shown as an indicative figure of 90-140 SEKm.

Control variables:

1. Age group
2. Gender

3. Highest level of completed education
4. Experience of working professionally with investments

Key dependent variables:

1. How good or bad the presented company is perceived as an investment opportunity by the test subjects – ordinal variable scored from -3 (“extremely bad”) to 3 (“extremely good”).
2. The presented company’s likelihood of success in relation to its targets as perceived by the test subjects – ordinal variable scored from -3 (“extremely low”) to 3 (“extremely high”).
3. The likelihood of the presented company being taken to the next step in the test subjects’ investment screening process if it would be a real investment opportunity – ordinal variable scored from -3 (“extremely unlikely”) to 3 (“extremely likely”).
4. The pre-money valuation estimate for the presented company as provided by the test subjects – a continuous variable measured in terms of millions of Swedish kronor (SEK).

Other potentially dependent variables:

Test subjects’ assessment of a set of parameters for the presented company, usually important in screening to investors as identified by Block et al. (2019) and Moritz et al. (2021), in the form of ordinal variables, scored from -3 (“extremely bad”) to 3 (“extremely good”).

1. Revenue growth
2. Product offering
3. Quality of management team
4. International scalability
5. Quality of business model

5.7. Statistical Methods

5.7.1. Sample Size Estimation

Since the data is collected using an online self-completion questionnaire, it is of utmost importance to estimate the required sample size for the control and treatment groups. In order to do so, it has been decided that the sample size will be estimated by looking at the estimated population-wide effect size related to anchoring bias in a similar setting as this thesis aims to capture.

Furthermore, when calculating the effect size, it has been decided, in line with Ellis (2010), that the d-family of effect sizes is the most appropriate for this thesis as the purpose is to investigate if there are any differences between groups.

Looking at relevant prior research to use in estimating the effect size, we begin with the aforementioned study by Kaustia et al. (2008). Since the authors conducted two different experiments with one of the experiments being conducted on financial market professionals and the other being conducted on both investment professionals and students, three effect sizes can be calculated. In the first experiment, investment professionals were divided into two groups and then asked to make predictions on future stock investment returns. One of these groups has access to historical stock returns (the anchor) while the other group has no such access (the control). The result of this experiment shows that the predictions of the two groups differ significantly, and the resulting effect size calculated using Cohen's d amounts to approximately 1.50. In the second experiment, respondents are again asked to predict future stock returns for the average EU countries. However, one group is now given information on historical stock returns for the Swedish stock market during 1980-2000 (which shows annual real returns larger than 20%) while the other group is given information on historical stock returns for the Japanese stock market during 1984-2004 (which shows annual real returns that are smaller than 2%). The results of this experiment also show a statistically significant difference between the treatment groups. For the sample of investment professionals, the group shown historical returns for the Swedish stock market predicts 1.81% higher future returns compared to the other group. This translates into a Cohen's d effect size of approximately 0.57. For the sample of students, the effect is even larger and translates into a Cohen's d of approximately 1.68.

In the second study, also mentioned in the literature overview, Serfas (2011) conducts six experiments with four experiments having enough data provided for the calculation of effect sizes. In these four relevant experiments, students are asked to assess the impact of capital investments, both when it comes to the likelihood that it is completed on time (experiments 1 and 3) and how it impacts future market shares (experiments 2 and 4). The anchor used for the experiments is also introduced in two different ways. In experiments 1 and 2, it is introduced through a random generator while in experiments 3 and 4 it is introduced using a “roll-the-dice” mechanism. In all four experiments, the students are divided into two test groups where one group is exposed to a high anchor, and the other is exposed to a low anchor. The results of these experiments show statistically significant differences between the treatment groups in all four experiments with resulting effect sizes (using Cohen’s *d*) of approximately 1.44, 1.24, 1.76, and 1.46 respectively for experiments 1 through 4.

Finally, in the last study, Meub and Proeger (2016) conducted four experiments with one of these experiments being similar to the experimental design used in this thesis. In this experiment, students are asked to make ten predictions of future values for ten periods going forward. Students are advised to use a given, simple formula when making these predictions since using this formula is the rational strategy for making the predictions. Students are then divided into one anchored group and one control group. The anchored group is given information on the realized value for the prior period while the control group is not given this information. The anchoring effect can then be measured by measuring how much the predictions produced deviate from the optimal prediction (that can be derived using the formula). Through this experiment, the authors find that the anchored group produced less average absolute deviation from the optimal prediction compared to the control group. The anchored group also produced a lower share of optimal predictions compared to the control group. The effect sizes that can be derived from these results amount to approximately 0.28 and 0.60, respectively, using Cohen’s *d*.

Given the retrieved effect sizes from the mentioned studies, the required sample sizes for this thesis have been estimated by utilising the software G*Power (Faul, 2007) and each of the above studies’ effect sizes. As this thesis examines the differences in outcomes for a set of dependent variables between the different groups, it has been chosen to use the statistical test “Means: Difference between two independent means (two groups)” from the “*t*” test family. A two-tail test has been given as input in order to get the necessary

sample size for the proper testing of differences in the dependent variable outcomes between the test groups, both on the upside and downside. For the significance level and power used, it was decided to use a significance level of 0.05 and a power of 0.8 in order to align with the advice of Cohen (1988) that the alpha-to-beta ratio should be 1:4 as the risk of making a Type I error is considered more severe than making a Type II error. Therefore, by using an alpha-to-beta ratio of 1:4, the risk of making a Type I versus a Type II error is well-balanced (Ellis, 2010; Cohen, 1988). Furthermore, according to Noymer (2008), a significance level of 0.05 is also the favoured approach, making the case for a significance level of 0.05 and power of 0.8 even stronger.

Table 3. Estimated sample size requirement for the thesis based on effect sizes observed in comparable studies.

Study	Avg. sample size per test group in study	Total sample size in study	Effect size (Cohen's d)	Implied necessary sample size per thesis test group	Total thesis sample size
Kaustia, Alho & Puttonen (2008)					
Experiment 1 (professionals sample)	38	76	1.504	9	27
Experiment 2 (professionals sample)	36	72	0.572	49	147
Experiment 2 (students sample)	68	135	1.677	7	21
Average, professionals only	37	74	1.038	29	87
Average, all	47	94	1.251	22	65
Serfas (2011)					
Experiment 1 (students sample)	74	148	1.435	9	27
Experiment 2 (students sample)	74	148	1.245	12	36
Experiment 3 (students sample)	58	115	1.763	7	21
Experiment 4 (students sample)	58	115	1.456	9	27
Average	66	132	1.475	9	28
Meub & Proeger (2016)					
Experiment "Basic" (students) - avg. abs. dev.	87	173	0.279	203	609
Experiment "Basic" (students) - share optimal	87	173	0.599	45	135
Average	87	173	0.439	124	372
Average, Kaustia et al. (2008) & Serfas (2011)	58	116	1.379	15	44
Average, all studies	64	128	1.170	39	117

**Sample size calculated using software tool G*Power, aiming for an alpha of 0.05 and a power of 0.80 for the thesis sample.*

An overview of the required sample size estimations for the three test groups of this thesis, based on effect sizes from three existing experimental studies that are comparable to this thesis.

Finally, considering the relevance of the three examined studies, Kaustia et al. (2008) is deemed as the study closest to the execution of this thesis, as its experiments, similarly to this thesis, involved financial market professionals. This fact is important, since the average effect size in comparable student samples in both Kaustia et al. (2008) and Serfas (2011) is higher (see Table 3), suggesting that students are more prone to exhibiting anchoring bias than professionals. In turn, based on the professional samples from Kaustia et al. (2008), the required sample size for this thesis is around 87 respondents (29

respondents per test group). However, if extending the analysis to include the student sample in Kaustia et al. (2008) as well as Serfas (2011) and Meub and Proeger (2016), with the latter being the least comparable study given the notably different experiment methodology, the average effect size instead suggests a total sample size of 117 respondents (39 respondents per test group) as necessary for this thesis.

In conclusion, the required sample size is estimated at between 87 to 117 respondents in total. Yet, it is recognized that there may be a risk of overestimating the effect size as a number of the referred experiments are based on rather small samples and thereby might be underpowered. This would imply that the estimated required sample size might be too small in practice. However, given that this thesis targets a rare population with relatively few individuals in it, gathering a larger sample size to hedge against potential underestimation risks is a substantial challenge. It is for this reason that the sample of investment professionals is complemented with a student sample that is recruited via Prolific, securing at least 100 respondents per test group.

5.7.2. Result Analysis Methods

5.7.2.1. Hypothesis Testing

In order to test the two hypotheses of this thesis, H1 and H2 (see 3. Hypotheses), numerous statistical methods have been applied to test the dependent variables in relation to the introduced treatments (see 5.6 Variables) in both the professional sample and the student sample, with the aim of finding statistically significant relationships at a significance level of at least 5%.

To start with, one-sample Student's t-tests were performed on the sample means of the dependent variables across the test groups to give an indicative confidence interval estimation for the population mean, assuming the normality of the underlying population distributions and with their variance being unknown (Newbold, Carlson and Thorne, 2020).

As the next step, before starting to test the significance of potential differences between the sample results for each of the test groups, the assumption that the underlying population distributions are normal must be tested, in order for appropriate tests to be selected for further hypothesis testing. For this purpose, the one-sample Kolmogorov-

Smirnov test and the Shapiro-Wilk test are applied to each of the dependent variables to test the null hypothesis that they follow a normal population distribution, with the Shapiro-Wilk test being more appropriate for sample sizes below 50 observations and the Kolmogorov-Smirnov test better suiting sample sizes above 50 observations (Mishra, Pandey, Singh, Gupta, Shau and Keshri, 2019).

Given that the investment professionals sample reached 32-43 test subjects per test group (see Table 12 in Appendix 2 – Demographics of the Participants), the Shapiro-Wilk test was used to test for normality in distributions. As a result, Shapiro-Wilk testing concluded in the rejection of the null hypothesis at a 95% confidence level, that the variables follow a normal population distribution for all dependent variables across all test groups, except for the pre-money valuation estimate in the “low valuation” treatment group (see Tables 14 & 15 in Appendix 3 – Normality Testing of Variable Distributions Across Test Groups and Samples).

For the students sample, the test groups reached sizes of 99-104 test subjects (see Table 13 in Appendix 2 – Demographics of the Participants), making the Kolmogorov-Smirnov test more fit for normality testing compared to the Shapiro-Wilk test. Subsequently, the Kolmogorov-Smirnov testing concluded in the rejection of the normal distribution null hypothesis at a 95% confidence level for all variables in the student sample as well (see Tables 16 & 17 in Appendix 3 – Normality Testing of Variable Distributions Across Test Groups and Samples).

Knowing that the dependent variables do not follow a normal population distribution at a 95% confidence level, the Kruskal-Wallis test is chosen for testing the difference in population mean estimates between the three test groups. The Kruskal-Wallis test is deemed to be an appropriate option for this purpose, by being a non-parametric alternative that suits both continuous and ordinal variables, while leaving out the precondition of normality for the underlying population distribution (Newbold et al., 2020). Using the statistical software IBM SPSS Statistics (IBM, n.d.), the Kruskal-Wallis test is performed both to test for statistically significant differences in population means between the three test groups in general, and executing pairwise comparisons in all configurations that are possible for the three test groups.

In addition, for the ordinal dependent variables, the mean difference testing is

complemented using a Jonckheere-Terpstra test for Ordered Alternatives (Jonckheere, 1954). In comparison to the Kruskal-Wallis test, the Jonckheere-Terpstra test is potentially more powerful in one-sided testing of a hypothesis that suggests that outcomes of ordinal variables from different test groups follow a definite ordering which has been defined on an a priori basis.

By applying the above methods to all the dependent variables, both of this thesis' hypotheses, H1 and H2, can be tested.

5.7.2.2. Multiple Linear Regression Modelling

To further study the driving factors behind the obtained estimates for the pre-money valuation through a wider perspective, a multiple linear regression has been run, examining the relationship between the pre-money valuation estimate, the applied treatment, the perception of the company's quality in relation to a set of key parameters, as well as demographic control variables.

The multiple linear regression model is constructed as follows:

$$Y_i = \alpha + \beta t + \gamma_1 x_{1,i} + \gamma_2 x_{2,i} + \gamma_3 x_{3,i} + \gamma_4 x_{4,i} + \gamma_5 x_{5,i} + \delta_1 a_{1,i} + \delta_2 a_{2,i} + \delta_3 a_{3,i} \\ + \delta_4 a_{4,i} + \delta_5 a_{5,i} + \theta_1 g_{1,i} + \theta_2 g_{2,i} + \theta_3 g_{3,i} + \vartheta_1 u_{1,i} + \vartheta_2 u_{2,i} + \vartheta_3 u_{3,i} \\ + \vartheta_4 u_{4,i} + \vartheta_5 u_{5,i} + \vartheta_6 u_{6,i} + \mu_1 e_{1,i} + \mu_2 e_{2,i} + \mu_3 e_{3,i} + \mu_4 e_{4,i} + \varepsilon_i$$

where,

Y_i = the pre-money valuation estimate suggested by the test subjects

α = the intercept of the slope

β = the impact of t_i on the dependent variable

t = the applied treatment variable value in the form of the stated pre-money valuation given in the presented investment presentation

γ_i = the impact of x_i on the dependent variable

x_i = is the assigned quality of the five parameters that are considered important in venture capital and private equity investment-decision making, with

x_1 = perception of revenue growth quality

x_2 = perception of product offering quality

x_3 = perception of management team quality

x_4 = perception of international scalability quality

x_5 = perception of business model quality

δ_i = the impact of a_i on the dependent variable

a_i = a dummy variable representing the age group, with

$a_1 = 1$ if “0-19 years old” and $a_1 = 0$ if otherwise

$a_2 = 1$ if “20-39 years old” and $a_2 = 0$ if otherwise

$a_3 = 1$ if “40-59 years old” and $a_3 = 0$ if otherwise

$a_4 = 1$ if “60-79 years old” and $a_4 = 0$ if otherwise

$a_5 = 1$ if “80+ years old” and $a_5 = 0$ if otherwise

θ_i = the impact of g_i on the dependent variable

g_i = a dummy variable representing the gender, with

$g_1 = 1$ if “Male” and $g_1 = 0$ if otherwise

$g_2 = 1$ if “Female” and $g_2 = 0$ if otherwise

$g_3 = 1$ if “Other / Prefer not to say” and $g_3 = 0$ if otherwise

ϑ_i = the impact of u_i on the dependent variable

u_i = a dummy variable representing the highest completed level of education, with

$u_1 = 1$ if “Primary education” and $u_1 = 0$ if otherwise

$u_2 = 1$ if “Secondary education / High school diploma” and $u_2 = 0$ if otherwise

$u_3 = 1$ if “Post-secondary education” and $u_3 = 0$ if otherwise

$u_4 = 1$ if “Bachelor’s degree” and $u_4 = 0$ if otherwise

$u_5 = 1$ if “Master’s degree” and $u_5 = 0$ if otherwise

$u_6 = 1$ if “Doctoral degree” and $u_6 = 0$ if otherwise

μ_i = the impact of e_i on the dependent variable

e_i = a dummy variable representing the professional experience of working with investments, with

$e_1 = 1$ if “Less than 1 year” and $e_1 = 0$ if otherwise

$e_2 = 1$ if “1-3 years” and $e_2 = 0$ if otherwise

$e_3 = 1$ if “3-5 years” and $e_3 = 0$ if otherwise

$e_4 = 1$ if “More than 5 years” and $e_4 = 0$ if otherwise

ε_1 = the error term

Note that one extraneous dummy variable from each variable type is removed when executing the multiple linear regression model to avoid multicollinearity issues.

6. Results and Analysis

6.1. The Acquired Investment Professionals Sample and Its Representativeness of the Wider Population

In total, 113 participants fully completed the questionnaire distributed to investment professionals, of whom 87 (77%) are men and 25 (22%) are women (see Appendix 2 – Demographics of the Participants). In the assessment of the representativeness of the investment professionals sample, there is very little demographical population data that can be used directly. Instead, a rough approximation of the investment professionals’ population demography can be made by looking at the industry professionals data from Statistics Sweden (2022). According to the available data, “accountants, financial analysts, and fund managers” occupied within the industry classification “financial institutions and insurance companies” and aged 16-64 years, comprise 8,915 individuals, of whom 5,533 (62%) are men and 3,382 (38%) are women. Although constituting a broader category of professionals than the investment professionals targeted by this thesis, the data provides an indication of what the investment

professionals landscape may look like. As follows, the data suggests that the sample in this thesis might be somewhat skewed toward male participants.

Simultaneously, the acquired investment professional sample exhibits a strong skew toward younger professionals, with 88% of the sample being aged 20-39 years in contrast to 45% being aged 16-39 years in the wider population as defined by Statistics Sweden (2022). This skew in the age distribution is most probably a consequence of the application of convenience, network, and snowball sampling methods for this thesis, with most of the 1st degree connections being junior professionals. In addition, it is likely that when the questionnaire was spread further to 2nd and 3rd degree connections, it was other junior colleagues or professional connections that were asked to participate, as more senior professionals are typically less available and harder to reach. Yet, looking at this from another perspective, it is rather common that junior professionals are involved in the early screening of potential investment opportunities (Gompers, Gornall, Kaplan and Strebulaev, 2020), which defends the validity of the sample and the conducted experiment in relation to its aim of simulating real-life investment screening and decision-making processes.

6.2. Experiment Results from the Investment Professionals Sample

Sample distribution of investment professionals' pre-money valuation estimates

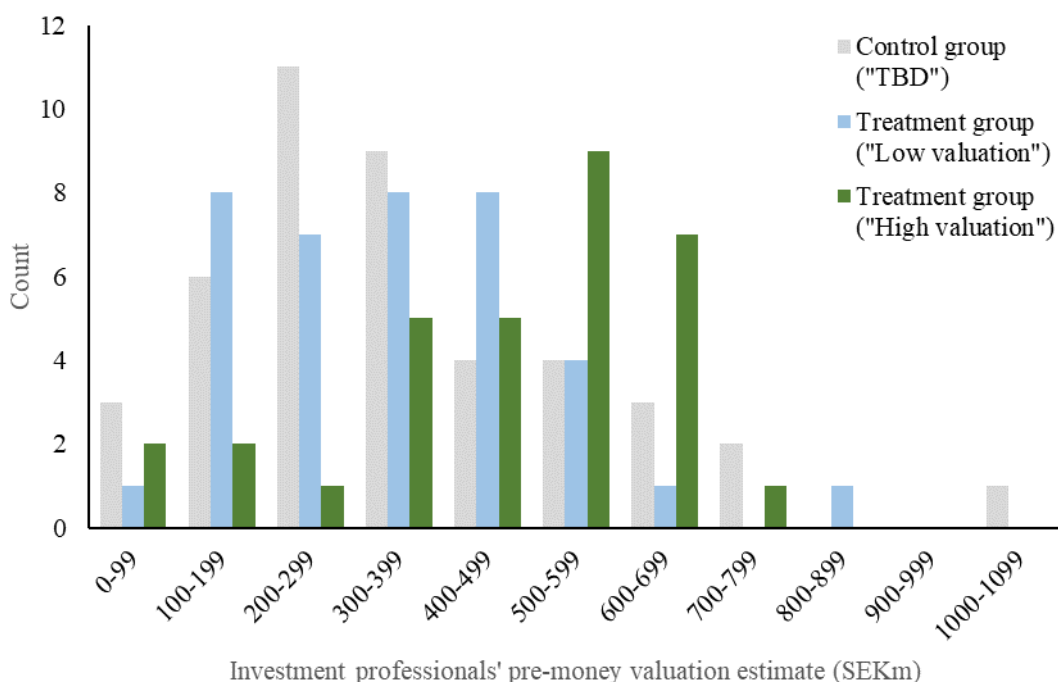


Figure 2. A histogram showing the sample distribution for the investment professionals' pre-money valuation estimates within each of the three test groups.

The results gained from the test groups studying the investment professionals' sample, seem to support the first hypothesis of this thesis (H1), in that investment professionals exhibit an anchoring bias when estimating the pre-money valuation for the presented company. Looking at the sample pre-money estimate distribution for each of the three test groups (see Figure 2), it is observable that the treatment group containing the high pre-money valuation anchor exhibits a left-skewed distribution with a sample mean of 439 SEKm (see Table 4), making it diverge from the treatment group with the "low valuation" (sample mean of 326 SEKm), whose distribution is more aligned with the control group having a sample mean of 342 SEKm. These visual observations are further confirmed using a one-sample Student's t-test (see Table 4) and the Kruskal-Wallis test (see Table 5) at a 5% significance level.

To start with, one-sample Student's t-testing confirms the statistical significance of the observed difference in sample means for the pre-money valuation as estimated by investment professionals in the two treatment groups. For the two groups, the Student's t-test yields 95% confidence intervals for the population mean of 274 – 378 SEKm with the low anchor, and 374 – 503 SEKm with the high anchor, while the control group indeed remains largely aligned with the "low valuation" treatment group having a 95% confidence interval of 279 – 403 SEKm (see Table 4).

Table 4. Investment professionals sample descriptives for dependent variables related to investment assessment, and estimation of population means using one-sample Student's t-tests with 95% confidence intervals.

	Dependent variables related to investment assessment, decision-making, and willingness to invest			
Control	Perceived quality of the company as an investment opportunity (scores -3 to 3)	Perceived probability of the company's success (scores -3 to 3)	Probability of company being taken to next screening step (scores -3 to 3)	Pre-money valuation (SEKm)
Sample mean	0.744	0.186	0.442	341.047
Sample median	1.000	0.000	1.000	300.000
Sample standard deviation	1.002	1.160	1.736	202.175
p-value (two-sided)	<0.001	0.299	0.103	<0.001
95% confidence interval	0.436 - 1.053	-0.171 - 0.543	-0.092 - 0.976	278.826 - 403.267
Treatment "Low valuation"				
Sample mean	1.105	0.395	0.816	326.026
Sample median	1.000	1.000	1.000	350.000
Sample standard deviation	1.110	1.001	1.392	158.037
p-value (two-sided)	<0.001	0.020	<0.001	<0.001
95% confidence interval	0.740 - 1.470	0.066 - 0.724	0.358 - 1.273	274.081 - 377.972
Treatment "High valuation"				
Sample mean	0.813	0.063	0.531	438.750
Sample median	1.000	1.000	1.000	500.000
Sample standard deviation	1.120	1.268	1.814	178.610
p-value (two-sided)	<0.001	0.782	0.108	<0.001
95% confidence interval	0.409 - 1.216	-0.395 - 0.520	-0.123 - 1.185	374.354 - 503.146

An overview over sample descriptives for four dependent variables measuring investment professionals' perception of the investment opportunity as a whole and willingness to invest, including estimation of population means with corresponding 95% confidence intervals using one-sample Student's t-tests across the control and treatment groups.

The difference in the population means for pre-money valuation estimates as implied by the 95% confidence interval is further tested using a Kruskal-Wallis test, which ultimately allows for the rejection of the null hypothesis that the test groups follow the same distribution for the variable, at a p-value of 0.007 (see Table 5). The subsequent Kruskal-Wallis test pairwise comparisons between each pair of test groups, further allow for the rejection of the null hypothesis that the “high valuation” treatment group follows the same distribution as the “low valuation” treatment group (p-value of 0.005) and the control group (p-value of 0.006) respectively when it comes to investment professionals' pre-money valuation estimates (see Table 18 in Appendix 4 – Pairwise Analysis of Distribution Differences For Dependent Variables Across Test Groups in the Investment Professionals Sample). Furthermore, not only do the results suggest that there is a difference between the two treatment groups, but they also suggest a statistically significant relationship (p-value of 0.002) where the pre-money valuation as estimated by investment professionals grows by 0.49 SEKm for each 1 SEKm increase in the company's own pre-money valuation expectation as the applied treatment (95% confidence interval of 0.18 – 0.80 SEKm higher estimate, see Table 26 in Appendix 6 –

Multiple Linear Regression Results). Thereby, the results from the investment professionals sample support hypothesis 1 (H1), in that investment professionals exhibit an anchoring bias and that the high anchor results in a statistically significant increase in their pre-money valuation estimates compared to using a lower anchor or no anchor at all.

Table 5. Analysis of distribution differences for the dependent variables related to investment assessment in the investment professionals sample using Kruskal-Wallis and Jonckheere-Terpstra testing.

	Dependent variables related to investment assessment, decision-making, and willingness to invest			
Hypothesis testing (Kruskal-Wallis test)	Perceived quality of the company as an investment opportunity (scores -3 to 3)	Perceived probability of the company's success (scores -3 to 3)	Probability of company being taken to next screening step (scores -3 to 3)	Pre-money valuation (SEKm)
p-value (two-sided)	0.202	0.631	0.714	0.007
Decision	Retain the null hypothesis	Retain the null hypothesis	Retain the null hypothesis	Reject the null hyp.
Null hypothesis: $\mu_{Control} = \mu_{LowValuation} = \mu_{HighValuation}$				
Alternative hypothesis: $\mu_i \neq \mu_j$ for at least one pair μ_i, μ_j				
Hypothesis testing (Jonckheere-Terpstra test)				
p-value (two-sided)	0.473	0.940	0.648	N/A
Decision	Retain the null hypothesis	Retain the null hypothesis	Retain the null hypothesis	N/A
Null hypothesis: $\mu_{Control} = \mu_{LowValuation} = \mu_{HighValuation}$				
Alternative hypothesis: pop. means differ across test groups and compare sizewise to each other in the same order as sample means				

An overview over the results of Kruskal-Wallis and Jonckheere-Terpstra testing for four dependent variables measuring investment professionals' perception of the investment opportunity as a whole and willingness to invest, including p-values and decision in relation to the null hypothesis that the distribution of each respective variable is the same across all three test groups.

In addition, further considering the results of the multiple linear regression (see Table 26 in Appendix 6 – Multiple Linear Regression Results), two other statistically significant relationships were identified, namely the positive relationship between the investment professional's perception of revenue growth quality and the pre-money valuation estimate for the company in question (+74 SEKm in valuation for each point in perception improvement on the seven-point Likert scale), as well as the perception of the business model quality and the pre-money valuation estimate (+50 SEKm improvement in valuation for each point in perception improvement). Given this, it is interesting for the second hypothesis of this thesis (H2) to understand whether the pre-money valuation increase related to the improvement in perception, together with other potential changes to the perception of the presented company as an investment opportunity, can be linked to the applied treatments, or if they are driven by other factors not covered by the scope of the thesis.

Analysing the results, there are no statistically significant indications of a difference

between the three test groups; neither for any of the five variables measuring the perception of the presented company's quality in relation to various factors including revenue growth and business model (see Table 6), nor the three variables measuring the perceived quality of the company as an investment opportunity, its likelihood of success, and being taken to the next step in the screening process (see Table 5). Neither Kruskal-Wallis nor Jonckheere-Terpstra testing suggests a rejection of the null hypothesis, that the population means of these variables follow the same distribution across the test groups.

Table 6. Analysis of distribution differences for the dependent variables related to company evaluation in the investment professionals sample using Kruskal-Wallis and Jonckheere-Terpstra testing.

	Dependent variables related to evaluation of the presented company's business				
Hypothesis testing (Kruskal-Wallis test)	Perceived quality of revenue growth (scores -3 to 3)	Perceived quality of product offering (scores -3 to 3)	Perceived quality of management team (scores -3 to 3)	Perceived quality of international scalability (scores -3 to 3)	Perceived quality of business model (scores -3 to 3)
p-value (two-sided)	0.471	0.796	0.486	0.983	0.726
Decision	Retain the null hyp.	Retain the null hyp.	Retain the null hyp.	Retain the null hyp.	Retain the null hyp.
Null hypothesis: $\mu_{Control} = \mu_{Low\ Valuation} = \mu_{High\ valuation}$ Alternative hypothesis: $\mu_i \neq \mu_j$ for at least one pair μ_i, μ_j					
Hypothesis testing (Jonckheere-Terpstra test)					
p-value (two-sided)	0.255	0.524	0.260	0.914	0.684
Decision	Retain the null hyp.	Retain the null hyp.	Retain the null hyp.	Retain the null hyp.	Retain the null hyp.
Null hypothesis: $\mu_{Control} = \mu_{Low\ Valuation} = \mu_{High\ valuation}$ hypothesis: population means differ across test groups and compare sizewise to each other in the same order as sample means					

An overview over the results of Kruskal-Wallis and Jonckheere-Terpstra testing for five dependent variables measuring investment professionals' perception of key business performance parameters for the presented company, including p-values and decision in relation to the null hypothesis that the distribution of each respective variable is the same across all three test groups.

Table 7. Investment professionals sample descriptives for dependent variables related to company evaluation and estimation of population means using one-sample Student's t-tests with 95% confidence intervals.

	Dependent variables related to evaluation of the presented company's business				
Variable	Perceived quality of revenue growth (scores -3 to 3)	Perceived quality of product offering (scores -3 to 3)	Perceived quality of management team (scores -3 to 3)	Perceived quality of international scalability (scores -3 to 3)	Perceived quality of business model (scores -3 to 3)
Sample mean	0.930	0.349	1.116	1.140	0.744
Sample median	1.000	1.000	1.000	1.000	1.000
Sample standard deviation	1.183	1.089	1.074	1.226	0.954
p-value (two-sided)	<0.001	0.042	<0.001	<0.001	<0.001
95% confidence interval	0.566 - 1.294	0.014 - 0.684	0.786 - 1.447	0.762 - 1.517	0.451 - 1.038
Treatment "Low valuation"					
Sample mean	1.237	0.368	1.342	1.263	0.737
Sample median	1.000	1.000	2.000	1.000	1.000
Sample standard deviation	0.971	0.998	0.909	1.057	1.178
p-value (two-sided)	<0.001	0.029	<0.001	<0.001	<0.001
95% confidence interval	0.918 - 1.556	0.040 - 0.696	1.043 - 1.641	0.916 - 1.611	0.350 - 1.124
Treatment "High valuation"					
Sample mean	1.156	0.469	1.313	1.156	0.531
Sample median	1.000	1.000	1.000	1.000	1.000
Sample standard deviation	1.221	1.218	1.256	1.273	1.164
p-value (two-sided)	<0.001	0.037	<0.001	<0.001	0.015
95% confidence interval	0.716 - 1.596	0.030 - 0.908	0.860 - 1.765	0.697 - 1.615	0.112 - 0.951

An overview over sample descriptives for five dependent variables measuring investment professionals' perception of key business performance parameters for the presented company, including estimation of population means with corresponding 95% confidence intervals using one-sample Student's t-tests across the control and treatment groups.

Only on a sample level, it can be observed that the sample means in the “low valuation” treatment group indicate a more positive perception of the presented company’s business in relation to all parameters except for the product offering (see Table 7), as well the perception of the company as an investment opportunity (see Table 4), compared to the “high valuation” treatment group. Such indications would be in support of this thesis’ second hypothesis (H2), showing that the higher perceived pre-money valuation as an effect of the anchoring bias, decreases the attractiveness of the company as an investment opportunity everything else equal. However, at this stage, the results are inconclusive and cannot confirm this hypothesis.

6.3. Experiment Results from the Students Sample

Shifting attention to the second sample studied in this thesis, the results from the students sample are analysed in a similar way as the results from the investment professionals above. However, in contrast to the investment professionals, the students that participated in the experiment exhibit a substantially higher variance in terms of estimating the pre-money valuation, than what investment professionals did. The standard deviation for the student sample reaches approximately 18,487 – 22,557 SEKm depending on the test

group (see Table 8) compared to 158 – 202 SEKm for investment professionals (see Table 4), with the students giving notably larger pre-money valuation estimates compared to investment professionals in the same test groups, having sample means that range between 8,210 – 9,469 SEKm compared to 326 – 439 SEKm respectively. This results in notably wide 95% confidence intervals for the population mean of the pre-money valuation estimates, that in large portions overlap between the test groups without showing any significant differences when running a Kruskal-Wallis test (see Table 9). The students sample does not result in any statistically significant relationship between the pre-money estimate and the company's own pre-money valuation expectation as the applied treatment either (see Table 27 in Appendix 6 – Multiple Linear Regression Results). Therefore, the student sample as a whole does not align with the investment professionals sample in supporting the validity of the first hypothesis (H1).

In addition, the multiple linear regression aligns with investment professionals in that it shows a statistically significant (p-value of 0.027) positive relationship between the students' perception of the business model quality and their estimate of the pre-money valuation, with the valuation estimate increasing by 4,764 SEKm (95% confidence interval of 535 – 8,993 SEKm) for each point's improvement in the quality perception).

Table 8. Students sample descriptives for dependent variables related to investment assessment, and estimation of population means using one-sample Student's t-tests with 95% confidence intervals.

	Dependent variables related to investment assessment, decision-making, and willingness to invest			
Control	Perceived quality of the company as an investment opportunity (scores -3 to 3)	Perceived probability of the company's success (scores -3 to 3)	Probability of company being taken to next screening step (scores -3 to 3)	Pre-money valuation (SEKm)
Sample mean	1.175	0.796	0.670	8,590.835
Sample median	1.000	1.000	1.000	90.000
Sample standard deviation	0.747	0.943	1.271	21,097.269
p-value (two-sided)	<0.001	<0.001	<0.001	<0.001
95% confidence interval	1.029 - 1.321	0.612 - 0.980	0.421 - 0.918	4,467 - 12,714
Treatment "Low valuation"				
Sample mean	1.293	0.960	0.919	9,469.313
Sample median	1.000	1.000	1.000	330.000
Sample standard deviation	0.746	0.999	1.104	22,557.086
p-value (two-sided)	<0.001	<0.001	<0.001	<0.001
95% confidence interval	1.144 - 1.442	0.760 - 1.159	0.699 - 1.139	4,970 - 13,968
Treatment "High valuation"				
Sample mean	1.269	0.808	0.798	8,209.577
Sample median	1.000	1.000	1.000	140.000
Sample standard deviation	0.884	1.062	1.325	18,486.565
p-value (two-sided)	<0.001	<0.001	<0.001	<0.001
95% confidence interval	1.097 - 1.441	0.601 - 1.014	0.540 - 1.056	4,614 - 11,805

An overview over sample descriptives for four dependent variables measuring students' perception of the investment opportunity as a whole and willingness to invest, including estimation of population means with corresponding 95% confidence intervals using one-sample Student's t-tests across the control and treatment groups.

Table 9. Analysis of distribution differences for the dependent variables related to investment assessment in the students sample using Kruskal-Wallis and Jonckheere-Terpstra testing.

	Dependent variables related to investment assessment, decision-making, and willingness to invest			
Hypothesis testing (Kruskal-Wallis test)	Perceived quality of the company as an investment opportunity (scores -3 to 3)	Perceived probability of the company's success (scores -3 to 3)	Probability of company being taken to next screening step (scores -3 to 3)	Pre-money valuation (SEKm)
p-value (two-sided)	0.275	0.309	0.376	0.493
Decision	Retain the null hypothesis	Retain the null hypothesis	Retain the null hypothesis	Retain the null hyp.
<i>Null hypothesis: $\mu_{Control} = \mu_{Low Valuation} = \mu_{High valuation}$</i>				
<i>Alternative hypothesis: $\mu_i \neq \mu_j$ for at least one pair μ_i, μ_j</i>				
Hypothesis testing (Jonckheere-Terpstra test)				
p-value (two-sided)	0.120	0.699	0.224	N/A
Decision	Retain the null hypothesis	Retain the null hypothesis	Retain the null hypothesis	N/A
<i>Null hypothesis: $\mu_{Control} = \mu_{Low Valuation} = \mu_{High valuation}$</i>				
<i>Alternative hypothesis: pop. means differ across test groups and compare sizewise to each other in the same order as sample means</i>				

An overview over the results of Kruskal-Wallis and Jonckheere-Terpstra testing for four dependent variables measuring students' perception of the investment opportunity as a whole and willingness to invest, including p-values and decision in relation to the null hypothesis that the distribution of each respective variable is the same across all three test groups.

Going forward considering the second hypothesis (H2), the student sample similarly to the investment professionals sample does not provide any support for the existence of any population-wide significant differences in the perception of the company's business or

the company as an investment opportunity, induced by the application of the treatment. Both Kruskal-Wallis and Jonckheere-Terpstra testing fails to reject the null hypothesis of the same variable distribution across test groups (see Tables 9 & 10). However, as in the investment professionals sample, it is observed on a sample level that the sample means for many of these variables is higher in the “low valuation” treatment group than in the “high valuation treatment group. This applies to the perception of the quality of the company as an investment opportunity, the company’s likelihood of succeeding, and being taken to the next screening step (see Table 8), as well as the quality perception of all of the five business parameters except for the quality of the management team (see Table 11).

Table 10. Analysis of distribution differences for the dependent variables related to company evaluation in the students sample using Kruskal-Wallis and Jonckheere-Terpstra testing.

	Dependent variables related to evaluation of the presented company's business				
Hypothesis testing (Kruskal-Wallis test)	Perceived quality of revenue growth (scores -3 to 3)	Perceived quality of product offering (scores -3 to 3)	Perceived quality of management team (scores -3 to 3)	Perceived quality of international scalability (scores -3 to 3)	Perceived quality of business model (scores -3 to 3)
p-value (two-sided)	0.530	0.199	0.670	0.912	0.813
Decision	Retain the null hyp.	Retain the null hyp.	Retain the null hyp.	Retain the null hyp.	Retain the null hyp.
<i>Null hypothesis: $\mu_{Control} = \mu_{Low Valuation} = \mu_{High valuation}$</i> <i>Alternative hypothesis: $\mu_i \neq \mu_j$ for at least one pair μ_i, μ_j</i>					
Hypothesis testing (Jonckheere-Terpstra test)					
p-value (two-sided)	0.658	0.326	0.487	0.665	0.864
Decision	Retain the null hyp.	Retain the null hyp.	Retain the null hyp.	Retain the null hyp.	Retain the null hyp.
<i>Null hypothesis: $\mu_{Control} = \mu_{Low Valuation} = \mu_{High valuation}$</i> <i>Alternative hypothesis: population means differ across test groups and compare sizewise to each other in the same order as sample means</i>					

An overview over the results of Kruskal-Wallis and Jonckheere-Terpstra testing for five dependent variables measuring measuring students' perception of key business performance parameters for the presented company, including p-values and decision in relation to the null hypothesis that the distribution of each respective variable is the same across all three test groups.

Table 11. Students sample descriptives for dependent variables related to company evaluation and estimation of population means using one-sample Student's t-tests with 95% confidence intervals.

	Dependent variables related to evaluation of the presented company's business				
Control	Perceived quality of revenue growth (scores -3 to 3)	Perceived quality of product offering (scores -3 to 3)	Perceived quality of management team (scores -3 to 3)	Perceived quality of international scalability (scores -3 to 3)	Perceived quality of business model (scores -3 to 3)
Sample mean	1.427	1.155	1.243	1.320	1.223
Sample median	1.000	1.000	1.000	1.000	1.000
Sample standard deviation	0.836	0.947	0.975	1.078	0.917
p-value (two-sided)	<0.001	<0.001	<0.001	<0.001	<0.001
95% confidence interval	1.264 - 1.590	0.970 - 1.340	1.052 - 1.433	1.110 - 1.531	1.044 - 1.403
Treatment "Low valuation"					
Sample mean	1.475	1.374	1.212	1.354	1.283
Sample median	2.000	1.000	1.000	1.000	1.000
Sample standard deviation	0.849	0.864	0.940	1.003	1.021
p-value (two-sided)	<0.001	<0.001	<0.001	<0.001	<0.001
95% confidence interval	1.305 - 1.644	1.201 - 1.546	1.025 - 1.400	1.153 - 1.554	1.079 - 1.486
Treatment "High valuation"					
Sample mean	1.279	1.250	1.279	1.317	1.173
Sample median	1.000	1.000	1.000	2.000	1.000
Sample standard deviation	1.092	1.012	1.056	1.225	1.083
p-value (two-sided)	<0.001	<0.001	<0.001	<0.001	<0.001
95% confidence interval	1.066 - 1.491	1.053 - 1.447	1.073 - 1.484	1.079 - 1.556	0.962 - 1.384

An overview over sample descriptives for five dependent variables measuring students' perception of key business performance parameters for the presented company, including estimation of population means with corresponding 95% confidence intervals using one-sample Student's t-tests across the control and treatment groups.

7. Discussion

7.1. The Implications of the Results

Starting with the results from the professional sample, it can be said that these are in line with the general results from prior research. With the results supporting the acceptance of hypothesis 1 (H1), investment professionals seem to exhibit an anchoring bias when making early-stage assessments of investment opportunities, by anchoring their own pre-money valuation estimates on the value expected by the company in question, if provided with information regarding such expectations. Therefore, building upon the results of the studies that are of the highest importance to this thesis, Kaustia et al. (2008) and Serfas (2011), this thesis suggests that anchoring bias does not only affect financial professionals in their predictions of future stock prices as well as professionals assessing capital investments, but anchoring bias also affects investment professionals assessing financial investments. A practical implication from this assertion is therefore that companies looking to raise equity capital would be better off communicating a “too

high” valuation expectation relative to what they actually believe their company is worth. By doing so, one may increase the probability of attracting investors who are willing to invest in the company at higher valuation levels relative to what management believes the company to be worth.

Furthermore, given that hypothesis 2 (H2) cannot be accepted with the current results, there is little support to the notion that setting a relatively high pre-money valuation expectation, would lead to any negative impact on the company’s attractiveness as an investment opportunity. From this perspective, the company therefore has no incentives to moderate its communication of pre-money valuation expectations, which is indeed in line with the opportunistic behaviour that Christensen et al. (2009) ascribe to entrepreneurs when in negotiations with investors. Although hypothesis 2 (H2) can be rejected, the experiment instead finds that how well received the company’s revenue growth potential and business model are, has a profound impact on the pre-money valuation as well, alongside the anchor. This finding is in essence aligned with the findings of Mortiz et al. (2021) and Block et al. (2019), outlining that venture capital investors find the ability of the company to deliver revenue growth and a good business model as particularly important considerations in their screening processes.

Continuing with the student sample, neither of the hypotheses (H1 and H2) of this thesis is supported given that no anchoring effect is found in the results while the assertion that a high anchor should lead to a negative view of the company as an investment opportunity is not supported by the results. This result therefore stands in stark contrast to the results of, for instance, Kaustia et al. (2008) and Serfas (2011) as both of these studies found support for an anchoring bias among their respective student samples. However, before drawing any such definitive conclusions, it should be noted that the results from the student sample in this thesis diverge substantially from the results of the professional sample. This is not only evident from the very large and in reality unreasonable sample means but also from the very high variance in the responses from the student sample. Such characteristics might instead indicate that rather than the results suggesting conclusions that stand in stark contrast with those of prior research, it might instead be the case that the experiments executed in prior research are more suitable for students than that in this thesis. It is important to consider that the experiment performed in this thesis is constructed with investment professionals in mind, professionals who are used to assessing these types of presentations and analyse the value of the companies

presented. Therefore, an explanation of the conflicting results from the student sample might be that the majority of students represented in the sample have too little experience of company valuation especially in the context of making financial investments, as well as understanding this kind of documentation. Because of this, the results naturally turn irregular with extremely (in relation to the professional sample) high sample means and even higher variances. These effects might be further amplified by the fact that the student sample has been recruited via Prolific, a platform where research participation is awarded with monetary compensation. This can in turn impact the response quality negatively for a study such as this, considering that participants likely lack intrinsic motivation to participate in the study that otherwise demands a relatively large amount of attention and cognitive effort to make the analyses and draw the conclusions necessary for proper company valuations. This said, our analysis is not equipped to identify if it is the difference in statistical power or knowledge that is driving the change in the results between the two experimental samples.

7.2. Are the Results Generalizable?

To begin with, and as mentioned before, there are some risks stemming from the studies used to estimate the required sample size being potentially underpowered. If that is indeed the case, it would suggest that the obtained sample size for the investment professionals sample might be too small. On the one hand, this therefore casts doubt on the generalizability of the results in this thesis. Yet on the other hand, it is also important to note that as discussed above, the results from the professional sample are in large parts aligned with what is suggested by prior similar studies, which speaks in favour of the results' validity. Moreover, the sample of investment professionals is also highly skewed in favour of junior investment professionals, something that may make the results less generalizable given that they may not hold up for senior investment professionals.

7.3. Limitations

7.3.1. Limitations of the Questionnaire

Looking at the professional sample of respondents, a limitation that might impact the results of this thesis is that the respondents often have demanding jobs and therefore limited time to answer questionnaires of the type used for this thesis. This might lead to

a non-ideal situation where some respondents do not answer the questionnaire in a thoughtful manner.

Furthermore, shedding light on the student sample gained through Prolific, a significant limitation is the quality of the responses gained through this platform. This limitation is likely due to business students accessing the survey through the platform having too little knowledge of company valuation in order to make reasonable estimates of the pre-money value of the company, thereby affecting the response quality.

Another limitation of the questionnaire might be that the investment decision-making process is not simulated well enough through the experiment. This is because the decision-making process is in reality more of a high-stakes process given that it often involves large amounts of monetary risk, which is not captured through the experiment of this thesis. This in turn may lead to respondents putting less thought into their responses, making it difficult to truly capture how they act in a real-life investment decision-making process. One way to improve on this limitation would have been to introduce some kind of incentive-based approach so that respondents stand to gain or lose something based on the responses that they provide.

7.3.2. Limitations of the Study in General

To begin with, the first limitation of this study is the sample size of the professional sample. As mentioned before, a sample size estimation has been conducted (see section 5.7.1. Sample Size Estimation) and even though the achieved professional sample size is in line with the requirements put forward by the sample size estimation, there is still a risk that the effect sizes stemming from prior research are overestimated themselves due to potentially underpowered studies. Logically, this would thereby also lead to our estimated sample size being underestimated. By trying to find as many relevant prior studies as possible and including the results from all of these in the sample size estimation, the limitation has been taken into consideration, but the risk of these studies being underpowered still exists and can therefore impact the results of this thesis negatively and should therefore be taken into consideration by the reader.

7.4. Future Research

Given the above-mentioned limitation surrounding the sample size of the professional

sample, an immediate suggestion for future research would be to replicate this study, albeit using a larger professional sample. However, since the population of professionals with the relevant experience is somewhat limited, especially if one is only considering a particular geographic region (e.g. Sweden), a suggestion for future research would also be to include more geographic regions in the study. This would be done in order to increase the size of the population that can be used to attract respondents and thereby also increase the overall sample size of the study, providing more robust results.

Given another of the limitations mentioned above, it could also be a good idea to make the experiment incentive-based in order to add a layer of risk-taking to simulate the financial risk that investment professionals have to adhere to in their decision-making. In addition, an incentive-based experiment structure would also further improve the response quality by motivating respondents to provide more well-thought-out answers and estimates when completing the questionnaire.

8. Conclusions

To conclude, this thesis documents some suggestive evidence that anchoring bias is prevalent among investment professionals. Where a company that communicates a higher valuation expectation, sets an anchor that raises the pre-money valuation level at which investment professionals are still willing to invest. It would therefore be in the interest of entrepreneurs or companies looking to raise equity to deliberately assert a higher valuation expectation (to a certain limit) than what they actually believe the company to be worth. This notion is further supported by the fact that setting such a high valuation expectation does not seem to have any negative impact on the attractiveness of their business from the eyes of an investor. Furthermore, if the company looking to raise money wishes to directly improve the valuation at which they can raise this money, this study suggests that focusing on attaining high revenue growth as well as a high-quality business model is important given that this can effectively improve the valuation.

9. References

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Appendix 1 – A Priori Sample Size Estimation

[1] -- *Power analysis based on Kaustia, Alho & Puttonen (2008): Experiment 1 (professionals sample)*

t tests – Means: Difference between two independent means (two groups)

Analysis: A priori: Compute required sample size

Input:

Tail(s)	=	Two
Effect size d	=	1.504
α err prob	=	0.05
Power (1 – β err prob)	=	0.80
Allocation ratio N2/N1	=	1

Output:

Noncentrality parameter δ	=	3.1904658
Critical t	=	2.1199053
Df	=	16
Sample size group 1	=	9
Sample size group 2	=	9
Total sample size	=	18
Actual power	=	0.8494715

[2] -- *Power analysis based on Kaustia, Alho & Puttonen (2008): Experiment 2 (professionals sample)*

t tests – Means: Difference between two independent means (two groups)

Analysis: A priori: Compute required sample size

Input:

Tail(s)	=	Two
Effect size d	=	0.572
α err prob	=	0.05
Power (1 – β err prob)	=	0.80
Allocation ratio N2/N1	=	1

Output:

Noncentrality parameter δ	=	2.8312556
Critical t	=	1.9849843
Df	=	96
Sample size group 1	=	49
Sample size group 2	=	49
Total sample size	=	98
Actual power	=	0.8003480

[3] -- *Power analysis based on Kaustia, Alho & Puttonen (2008): Experiment 2 (students sample)*

t tests – Means: Difference between two independent means (two groups)

Analysis: A priori: Compute required sample size

Input:

Tail(s)	=	Two
Effect size d	=	1.677
α err prob	=	0.05
Power (1 – β err prob)	=	0.80
Allocation ratio N2/N1	=	1

Output:

Noncentrality parameter δ	=	3.1373797
Critical t	=	2.1788128
Df	=	12
Sample size group 1	=	7
Sample size group 2	=	7
Total sample size	=	14
Actual power	=	0.8209134

[4] -- *Power analysis based on Serfas (2011): Experiment 1 (students sample)*

t tests – Means: Difference between two independent means (two groups)

Analysis: A priori: Compute required sample size

Input:	Tail(s)	=	Two
	Effect size d	=	1.435
	α err prob	=	0.05
	Power (1 – β err prob)	=	0.80
	Allocation ratio N2/N1	=	1
Output:	Noncentrality parameter δ	=	3.0440947
	Critical t	=	2.1199053
	Df	=	16
	Sample size group 1	=	9
	Sample size group 2	=	9
	Total sample size	=	18
	Actual power	=	0.8152245

[5] -- *Power analysis based on Serfas (2011): Experiment 2 (students sample)*

t tests – Means: Difference between two independent means (two groups)

Analysis: A priori: Compute required sample size

Input:	Tail(s)	=	Two
	Effect size d	=	1.245
	α err prob	=	0.05
	Power (1 – β err prob)	=	0.80
	Allocation ratio N2/N1	=	1
Output:	Noncentrality parameter δ	=	3.0496147
	Critical t	=	2.0738731
	Df	=	22
	Sample size group 1	=	12
	Sample size group 2	=	12
	Total sample size	=	24
	Actual power	=	0.8300088

[6] -- *Power analysis based on Serfas (2011): Experiment 3 (students sample)*

t tests – Means: Difference between two independent means (two groups)

Analysis: A priori: Compute required sample size

Input:	Tail(s)	=	Two
	Effect size d	=	1.763
	α err prob	=	0.05
	Power (1 – β err prob)	=	0.80
	Allocation ratio N2/N1	=	1
Output:	Noncentrality parameter δ	=	3.2982710
	Critical t	=	2.1788128
	Df	=	12
	Sample size group 1	=	7
	Sample size group 2	=	7
	Total sample size	=	14
	Actual power	=	0.8566616

[7] -- *Power analysis based on Serfas (2011): Experiment 4 (students sample)*

t tests – Means: Difference between two independent means (two groups)

Analysis: A priori: Compute required sample size

Input:	Tail(s)	=	Two
	Effect size d	=	1.456
	α err prob	=	0.05
	Power (1 – β err prob)	=	0.80
	Allocation ratio N2/N1	=	1
Output:	Noncentrality parameter δ	=	3.0886424
	Critical t	=	2.1199053
	Df	=	16
	Sample size group 1	=	9
	Sample size group 2	=	9
	Total sample size	=	18
	Actual power	=	0.8261272

[8] -- *Power analysis based on Meub & Proeger (2016): Experiment "Basic" (students) – avg. abs. dev.*

t tests – Means: Difference between two independent means (two groups)

Analysis: A priori: Compute required sample size

Input:	Tail(s)	=	Two
	Effect size d	=	0.279
	α err prob	=	0.05
	Power (1 – β err prob)	=	0.80
	Allocation ratio N2/N1	=	1
Output:	Noncentrality parameter δ	=	2.8108471
	Critical t	=	1.9658533
	Df	=	404
	Sample size group 1	=	203
	Sample size group 2	=	203
	Total sample size	=	406
	Actual power	=	0.8007208

[9] -- *Power analysis based on Meub & Proeger (2016): Experiment "Basic" (students) – share optimal*

t tests – Means: Difference between two independent means (two groups)

Analysis: A priori: Compute required sample size

Input:	Tail(s)	=	Two
	Effect size d	=	0.599
	α err prob	=	0.05
	Power (1 – β err prob)	=	0.80
	Allocation ratio N2/N1	=	1
Output:	Noncentrality parameter δ	=	2.8413065
	Critical t	=	1.9872899
	Df	=	88
	Sample size group 1	=	45
	Sample size group 2	=	45
	Total sample size	=	90
	Actual power	=	0.8023958

Appendix 2 – Demographics of the Participants

Table 12: Demographics of the test subjects in the investment professionals sample

Age group	Aggregated		Control		Treatment "Low valuation"		Treatment "High valuation"	
	Count	Proportion (%)	Count	Proportion (%)	Count	Proportion (%)	Count	Proportion (%)
20-39 years old	100	88%	36	84%	35	92%	29	91%
40-59 years old	12	11%	6	14%	3	8%	3	9%
60-79 years old	1	1%	1	2%	0	0%	0	0%
Total	113	100.0%	43	100.0%	38	100.0%	32	100.0%
Gender								
Male	87	77%	34	79%	29	76%	24	75%
Female	25	22%	9	21%	9	24%	7	22%
Other / Prefer not to say	1	1%	0	0%	0	0%	1	3%
Total	113	100.0%	43	100.0%	38	100.0%	32	100.0%
Education level								
Bachelor's degree	53	47%	14	33%	22	58%	17	53%
Master's degree	59	52%	28	65%	16	42%	15	47%
Doctoral degree	1	1%	1	2%	0	0%	0	0%
Total	113	100.0%	43	100.0%	38	100.0%	32	100.0%
Professional experience length								
Less than 1 year	35	31%	13	30%	14	37%	8	25%
1-3 years	54	48%	19	44%	19	50%	16	50%
3-5 years	7	6%	3	7%	1	3%	3	9%
More than 5 years	17	15%	8	19%	4	11%	5	16%
Total	113	100.0%	43	100.0%	38	100.0%	32	100.0%

An overview of the demographic distribution of the investment professionals samples shown per each test group as well as on an aggregated level.

Table 13: Demographics of the test subjects in the students sample

Age group	Aggregated		Control		Treatment "Low valuation"		Treatment "High valuation"	
	Count	Proportion (%)	Count	Proportion (%)	Count	Proportion (%)	Count	Proportion (%)
0-19 years old	22	7%	9	9%	6	6%	7	7%
20-39 years old	239	78%	76	74%	79	80%	84	81%
40-59 years old	41	13%	18	17%	12	12%	11	11%
60-79 years old	4	1%	0	0%	2	2%	2	2%
Total	306	100.0%	103	100.0%	99	100.0%	104	100.0%
Gender								
Male	158	52%	44	43%	60	61%	54	52%
Female	144	47%	57	55%	38	38%	49	47%
Other / Prefer not to say	4	1%	2	2%	1	1%	1	1%
Total	306	100.0%	103	100.0%	99	100.0%	104	100.0%
Education level								
Primary education	1	0%	0	0%	0	0%	1	1%
Secondary education / High School diploma	46	15%	19	18%	13	13%	14	13%
Post-secondary education	47	15%	22	21%	12	12%	13	13%
Bachelor's degree	137	45%	42	41%	49	49%	46	44%
Master's degree	70	23%	18	17%	23	23%	29	28%
Doctoral degree	5	2%	2	2%	2	2%	1	1%
Total	306	100.0%	103	100.0%	99	100.0%	104	100.0%
Professional experience length								
No experience	121	40%	50	49%	36	36%	35	34%
Less than 1 year	59	19%	17	17%	21	21%	21	20%
1-3 years	59	19%	14	14%	18	18%	27	26%
3-5 years	29	9%	10	10%	8	8%	11	11%
More than 5 years	38	12%	12	12%	16	16%	10	10%
Total	306	100.0%	103	100.0%	99	100.0%	104	100.0%

An overview of the demographic distribution of the students sample from Prolific, shown per each test group as well as on an aggregated level.

Appendix 3 – Normality Testing of Variable Distributions Across Test Groups and Samples

Table 14. Normality testing of the distribution for the dependent variables related to investment assessment in the investment professionals sample using the Shapiro-Wilk test.

	Dependent variables related to investment assessment, decision-making, and willingness to invest			
p-values	Perceived quality of the company as an investment opportunity (scores -3 to 3)	Perceived probability of the company's success (scores -3 to 3)	Probability of company being taken to next screening step (scores -3 to 3)	Pre-money valuation (SEKm)
Control	<0.001	<0.001	0.003	0.015
Treatment "Low valuation"	<0.001	<0.001	<0.001	0.108
Treatment "High valuation"	<0.001	<0.001	<0.001	0.047
Decision				
Control	Reject the null hypothesis	Reject the null hypothesis	Reject the null hypothesis	Reject the null hyp.
Treatment "Low valuation"	Reject the null hypothesis	Reject the null hypothesis	Reject the null hypothesis	Retain the null hyp.
Treatment "High valuation"	Reject the null hypothesis	Reject the null hypothesis	Reject the null hypothesis	Reject the null hyp.
<i>Null hypothesis: Variable follows a normal population distribution</i>				
<i>Alternative hypothesis: Variable does not follow a normal population distribution</i>				

An overview over Shapiro-Wilk testing for four dependent variables measuring investment professionals' perception of the investment opportunity as a whole and willingness to invest, including p-values and decision in relation to the null hypothesis that the variables follow a normal distribution.

Table 15. Normality testing of the distribution for the dependent variables related to company evaluation in the investment professionals sample using the Shapiro-Wilk test.

	Dependent variables related to evaluation of the presented company's business				
s	Perceived quality of revenue growth (scores -3 to 3)	Perceived quality of product offering (scores -3 to 3)	Perceived quality of management team (scores -3 to 3)	Perceived quality of international scalability (scores -3 to 3)	Perceived quality of business model (scores -3 to 3)
Control	<0.001	<0.001	<0.001	<0.001	<0.001
Treatment "Low valuation"	<0.001	<0.001	<0.001	0.002	<0.001
Treatment "High valuation"	<0.001	0.004	<0.001	0.002	0.001
n					
Control	Reject the null hyp.	Reject the null hyp.	Reject the null hyp.	Reject the null hyp.	Reject the null hyp.
Treatment "Low valuation"	Reject the null hyp.	Reject the null hyp.	Reject the null hyp.	Reject the null hyp.	Reject the null hyp.
Treatment "High valuation"	Reject the null hyp.	Reject the null hyp.	Reject the null hyp.	Reject the null hyp.	Reject the null hyp.
<i>Null hypothesis: Variable follows a normal population distribution</i>					
<i>Alternative hypothesis: Variable does not follow a normal population distribution</i>					

An overview over Shapiro-Wilk testing for five dependent variables measuring investment professionals' perception of key business performance parameters for the presented company, including p-values and decision in relation to the null hypothesis of a that the variables follow a normal distribution.

Table 16. Normality testing of the distribution for the dependent variables related to investment assessment in the students sample using the Kolmogorov-Smirnov test.

	Dependent variables related to investment assessment, decision-making, and willingness to invest			
p-values	Perceived quality of the company as an investment opportunity (scores -3 to 3)	Perceived probability of the company's success (scores -3 to 3)	Probability of company being taken to next screening step (scores -3 to 3)	Pre-money valuation (SEKm)
Control	<0.001	<0.001	<0.001	<0.001
Treatment "Low valuation"	<0.001	<0.001	<0.001	<0.001
Treatment "High valuation"	<0.001	<0.001	<0.001	<0.001
Decision				
Control	Reject the null hypothesis	Reject the null hypothesis	Reject the null hypothesis	Reject the null hyp.
Treatment "Low valuation"	Reject the null hypothesis	Reject the null hypothesis	Reject the null hypothesis	Reject the null hyp.
Treatment "High valuation"	Reject the null hypothesis	Reject the null hypothesis	Reject the null hypothesis	Reject the null hyp.
<i>Null hypothesis: Variable follows a normal population distribution</i>				
<i>Alternative hypothesis: Variable does not follow a normal population distribution</i>				

An overview over Kolmogorov-Smirnov testing for four dependent variables measuring students' perception of the investment opportunity as a whole and willingness to invest, including p-values and decision in relation to the null hypothesis that the variables follow a normal distribution.

Table 17. Normality testing of the distribution for the dependent variables related to company evaluation in the students sample using the Kolmogorov-Smirnov test.

	Dependent variables related to evaluation of the presented company's business				
	Perceived quality of revenue growth (scores -3 to 3)	Perceived quality of product offering (scores -3 to 3)	Perceived quality of management team (scores -3 to 3)	Perceived quality of international scalability (scores -3 to 3)	Perceived quality of business model (scores -3 to 3)
Control	<0.001	<0.001	<0.001	<0.001	<0.001
Treatment "Low valuation"	<0.001	<0.001	<0.001	<0.001	<0.001
Treatment "High valuation"	<0.001	<0.001	<0.001	<0.001	<0.001
Control	Reject the null hyp.	Reject the null hyp.	Reject the null hyp.	Reject the null hyp.	Reject the null hyp.
Treatment "Low valuation"	Reject the null hyp.	Reject the null hyp.	Reject the null hyp.	Reject the null hyp.	Reject the null hyp.
Treatment "High valuation"	Reject the null hyp.	Reject the null hyp.	Reject the null hyp.	Reject the null hyp.	Reject the null hyp.
<i>Null hypothesis: Variable follows a normal population distribution</i>					
<i>Alternative hypothesis: Variable does not follow a normal population distribution</i>					

An overview over Kolmogorov-Smirnov testing for five dependent variables measuring students' perception of key business performance parameters for the presented company, including p-values and decision in relation to the null hypothesis of a that the variables follow a normal distribution.

Appendix 4 – Pairwise Analysis of Distribution Differences For Dependent Variables Across Test Groups in the Investment Professionals Sample

Table 18. Pairwise analysis of distribution differences for variables related to investment assessment and decision-making in the investment professionals sample, using Kruskal-Wallis testing.

	Perceived quality of the company as an investment opportunity (scores -3 to 3)		
p-value (two sided)	Control	Treatment "Low Valuation"	Treatment "High Valuation"
Control		0.077	0.593
Treatment "Low Valuation"	0.077		0.263
Treatment "High Valuation"	0.593	0.263	
	Perceived probability of the company's success (scores -3 to 3)		
p-value (two sided)	Control	Treatment "Low Valuation"	Treatment "High Valuation"
Control		0.458	0.833
Treatment "Low Valuation"	0.458		0.371
Treatment "High Valuation"	0.833	0.371	
	Probability of company being taken to next screening step (scores -3 to 3)		
p-value (two sided)	Control	Treatment "Low Valuation"	Treatment "High Valuation"
Control		0.412	0.733
Treatment "Low Valuation"	0.412		0.667
Treatment "High Valuation"	0.733	0.667	
	Pre-money valuation (SEKm)		
p-value (two sided)	Control	Treatment "Low Valuation"	Treatment "High Valuation"
Control		0.897	0.006
Treatment "Low Valuation"	0.897		0.005
Treatment "High Valuation"	0.006	0.005	

An overview of the two-sided p-values resulting from pairwise comparisons between the three test groups using Kruskal-Wallis testing, covering testing of the null hypothesis that the distribution of the four dependent variables measuring investment professionals' perception of the investment opportunity as a whole and willingness to invest is the same across all test groups.

Table 19. Pairwise analysis of distribution differences for ordinal variables related to investment assessment and decision-making in the investment professionals sample, using Jonckheere-Terpstra testing.

	Perceived quality of the company as an investment opportunity (scores -3 to 3)		
p-value (two sided)	Control	Treatment "Low Valuation"	Treatment "High Valuation"
Control		0.046	0.271
Treatment "Low Valuation"	0.046		0.118
Treatment "High Valuation"	0.271	0.118	
	Perceived probability of the company's success (scores -3 to 3)		
p-value (two sided)	Control	Treatment "Low Valuation"	Treatment "High Valuation"
Control		0.223	0.406
Treatment "Low Valuation"	0.223		0.192
Treatment "High Valuation"	0.406	0.192	
	Probability of company being taken to next screening step (scores -3 to 3)		
p-value (two sided)	Control	Treatment "Low Valuation"	Treatment "High Valuation"
Control		0.195	0.385
Treatment "Low Valuation"	0.195		0.351
Treatment "High Valuation"	0.385	0.351	

An overview of the two-sided p-values resulting from pairwise comparisons between the three test groups using Jonckheere-Terpstra testing, covering testing of the null hypothesis that the distribution of the four dependent variables measuring investment professionals' perception of the investment opportunity as a whole and willingness to invest is the same across all test groups.

Table 20. Pairwise analysis of distribution differences for variables related to company evaluation in the investment professionals sample, using Kruskal-Wallis testing.

	Perceived quality of the company's revenue growth (scores -3 to 3)		
p-value (two sided)	Control	Treatment "Low Valuation"	Treatment "High Valuation"
Control		0.299	0.295
Treatment "Low Valuation"	0.299		0.956
Treatment "High Valuation"	0.295	0.956	
	Perceived quality of the company's product offering (scores -3 to 3)		
p-value (two sided)	Control	Treatment "Low Valuation"	Treatment "High Valuation"
Control		0.888	0.513
Treatment "Low Valuation"	0.888		0.613
Treatment "High Valuation"	0.513	0.613	
	Perceived quality of the company's management team (scores -3 to 3)		
p-value (two sided)	Control	Treatment "Low Valuation"	Treatment "High Valuation"
Control		0.312	0.301
Treatment "Low Valuation"	0.312		0.945
Treatment "High Valuation"	0.301	0.945	
	Perceived quality of the company's international scalability (scores -3 to 3)		
p-value (two sided)	Control	Treatment "Low Valuation"	Treatment "High Valuation"
Control		0.852	0.931
Treatment "Low Valuation"	0.852		0.929
Treatment "High Valuation"	0.931	0.929	
	Perceived quality of the company's business model (scores -3 to 3)		
p-value (two sided)	Control	Treatment "Low Valuation"	Treatment "High Valuation"
Control		0.732	0.621
Treatment "Low Valuation"	0.732		0.424
Treatment "High Valuation"	0.621	0.424	

An overview of the two-sided p-values resulting from pairwise comparisons between the three test groups using Kruskal-Wallis testing, covering testing of the null hypothesis that the distribution of the five dependent variables measuring investment professionals' perception of key business performance parameters for the presented company is the same across all test groups.

Table 21. Pairwise analysis of distribution differences for variables related to company evaluation in the investment professionals sample, using Jonckheere-Terpstra testing.

	Perceived quality of the company's revenue growth (scores -3 to 3)		
p-value (two sided)	Control	Treatment "Low Valuation"	Treatment "High Valuation"
Control		0.143	0.157
Treatment "Low Valuation"	0.143		0.463
Treatment "High Valuation"	0.157	0.463	
	Perceived quality of the company's product offering (scores -3 to 3)		
p-value (two sided)	Control	Treatment "Low Valuation"	Treatment "High Valuation"
Control		0.436	0.265
Treatment "Low Valuation"	0.436		0.300
Treatment "High Valuation"	0.265	0.300	
	Perceived quality of the company's management team (scores -3 to 3)		
p-value (two sided)	Control	Treatment "Low Valuation"	Treatment "High Valuation"
Control		0.145	0.166
Treatment "Low Valuation"	0.145		0.452
Treatment "High Valuation"	0.166	0.452	
	Perceived quality of the company's international scalability (scores -3 to 3)		
p-value (two sided)	Control	Treatment "Low Valuation"	Treatment "High Valuation"
Control		0.425	0.467
Treatment "Low Valuation"	0.425		0.466
Treatment "High Valuation"	0.467	0.466	
	Perceived quality of the company's business model (scores -3 to 3)		
p-value (two sided)	Control	Treatment "Low Valuation"	Treatment "High Valuation"
Control		0.364	0.307
Treatment "Low Valuation"	0.364		0.216
Treatment "High Valuation"	0.307	0.216	

An overview of the two-sided p-values resulting from pairwise comparisons between the three test groups using Jonckheere-Terpstra testing, covering testing of the null hypothesis that the distribution of the five dependent variables measuring investment professionals' perception of key business performance parameters for the presented company is the same across all test groups.

Appendix 5 – Pairwise Analysis of Distribution Differences For Dependent Variables Across Test Groups in the Students Sample

Table 22. Pairwise analysis of distribution differences for variables related to investment assessment and decision-making in the students sample, using Kruskal-Wallis testing.

	Perceived quality of the company as an investment opportunity (scores -3 to 3)		
p-value (two sided)	Control	Treatment "Low Valuation"	Treatment "High Valuation"
Control		0.259	0.121
Treatment "Low Valuation"	0.259		0.684
Treatment "High Valuation"	0.121	0.684	
	Perceived probability of the company's success (scores -3 to 3)		
p-value (two sided)	Control	Treatment "Low Valuation"	Treatment "High Valuation"
Control		0.139	0.698
Treatment "Low Valuation"	0.139		0.272
Treatment "High Valuation"	0.698	0.272	
	Probability of company being taken to next screening step (scores -3 to 3)		
p-value (two sided)	Control	Treatment "Low Valuation"	Treatment "High Valuation"
Control		0.227	0.226
Treatment "Low Valuation"	0.227		0.991
Treatment "High Valuation"	0.226	0.991	
	Pre-money valuation (SEKm)		
p-value (two sided)	Control	Treatment "Low Valuation"	Treatment "High Valuation"
Control		0.239	0.469
Treatment "Low Valuation"	0.239		0.643
Treatment "High Valuation"	0.469	0.643	

An overview of the two-sided p-values resulting from pairwise comparisons between the three test groups using Kruskal-Wallis testing, covering testing of the null hypothesis that the distribution of the four dependent variables measuring students' perception of the investment opportunity as a whole and willingness to invest is the same across all test groups.

Table 23. Pairwise analysis of distribution differences for ordinal variables related to investment assessment and decision-making in the students sample, using Jonckheere-Terpstra testing.

	Perceived quality of the company as an investment opportunity (scores -3 to 3)		
p-value (two sided)	Control	Treatment "Low Valuation"	Treatment "High Valuation"
Control		0.127	0.061
Treatment "Low Valuation"	0.127		0.340
Treatment "High Valuation"	0.061	0.340	
	Perceived probability of the company's success (scores -3 to 3)		
p-value (two sided)	Control	Treatment "Low Valuation"	Treatment "High Valuation"
Control		0.068	0.352
Treatment "Low Valuation"	0.068		0.139
Treatment "High Valuation"	0.352	0.139	
	Probability of company being taken to next screening step (scores -3 to 3)		
p-value (two sided)	Control	Treatment "Low Valuation"	Treatment "High Valuation"
Control		0.110	0.116
Treatment "Low Valuation"	0.110		0.449
Treatment "High Valuation"	0.116	0.499	

An overview of the two-sided p-values resulting from pairwise comparisons between the three test groups using Jonckheere-Terpstra testing, covering testing of the null hypothesis that the distribution of the four dependent variables measuring students' perception of the investment opportunity as a whole and willingness to invest is the same across all test groups.

Table 24. Pairwise analysis of distribution differences for variables related to company evaluation in the students sample, using Kruskal-Wallis testing.

	Perceived quality of the company's revenue growth (scores -3 to 3)		
p-value (two sided)	Control	Treatment "Low Valuation"	Treatment "High Valuation"
Control		0.504	0.648
Treatment "Low Valuation"	0.504		0.262
Treatment "High Valuation"	0.648	0.262	
	Perceived quality of the company's product offering (scores -3 to 3)		
p-value (two sided)	Control	Treatment "Low Valuation"	Treatment "High Valuation"
Control		0.073	0.327
Treatment "Low Valuation"	0.073		0.408
Treatment "High Valuation"	0.327	0.408	
	Perceived quality of the company's management team (scores -3 to 3)		
p-value (two sided)	Control	Treatment "Low Valuation"	Treatment "High Valuation"
Control		0.866	0.497
Treatment "Low Valuation"	0.866		0.400
Treatment "High Valuation"	0.497	0.400	
	Perceived quality of the company's international scalability (scores -3 to 3)		
p-value (two sided)	Control	Treatment "Low Valuation"	Treatment "High Valuation"
Control		0.862	0.670
Treatment "Low Valuation"	0.862		0.804
Treatment "High Valuation"	0.670	0.804	
	Perceived quality of the company's business model (scores -3 to 3)		
p-value (two sided)	Control	Treatment "Low Valuation"	Treatment "High Valuation"
Control		0.534	0.866
Treatment "Low Valuation"	0.534		0.648
Treatment "High Valuation"	0.866	0.648	

An overview of the two-sided p-values resulting from pairwise comparisons between the three test groups using Kruskal-Wallis testing, covering testing of the null hypothesis that the distribution of the five dependent variables measuring students' perception of key business performance parameters for the presented company is the same across all test groups.

Table 25. Pairwise analysis of distribution differences for variables related to company evaluation in the investment professionals sample, using Jonckheere-Terpstra testing.

	Perceived quality of the company's revenue growth (scores -3 to 3)		
p-value (two sided)	Control	Treatment "Low Valuation"	Treatment "High Valuation"
Control		0.239	0.313
Treatment "Low Valuation"	0.239		0.139
Treatment "High Valuation"	0.313	0.139	
	Perceived quality of the company's product offering (scores -3 to 3)		
p-value (two sided)	Control	Treatment "Low Valuation"	Treatment "High Valuation"
Control		0.035	0.167
Treatment "Low Valuation"	0.035		0.209
Treatment "High Valuation"	0.167	0.209	
	Perceived quality of the company's management team (scores -3 to 3)		
p-value (two sided)	Control	Treatment "Low Valuation"	Treatment "High Valuation"
Control		0.444	0.257
Treatment "Low Valuation"	0.444		0.192
Treatment "High Valuation"	0.257	0.192	
	Perceived quality of the company's international scalability (scores -3 to 3)		
p-value (two sided)	Control	Treatment "Low Valuation"	Treatment "High Valuation"
Control		0.426	0.340
Treatment "Low Valuation"	0.426		0.397
Treatment "High Valuation"	0.340	0.397	
	Perceived quality of the company's business model (scores -3 to 3)		
p-value (two sided)	Control	Treatment "Low Valuation"	Treatment "High Valuation"
Control		0.264	0.437
Treatment "Low Valuation"	0.264		0.328
Treatment "High Valuation"	0.437	0.328	

An overview of the two-sided p-values resulting from pairwise comparisons between the three test groups using Jonckheere-Terpstra testing, covering testing of the null hypothesis that the distribution of the five dependent variables measuring students' perception of key business performance parameters for the presented company is the same across all test groups.

Appendix 6 – Multiple Linear Regression Results

Table 26. Multiple linear regression of the investment professionals sample's pre-money valuation estimate

Predictors (independent variables)	Investment professionals' pre-money valuation estimate in SEK m (Y_i)	
	Coefficient estimates	95% confidence interval
Intercept (α)	123.979	-245.185 - 493.144
Applied treatment pre-money value in SEK m (t)	0.489	0.183 - 0.795
Perception of revenue growth quality (x_1)	74.050	36.684 - 111.415
Perception of product offering quality (x_2)	-4.061	-57.166 - 49.043
Perception of management team quality (x_3)	25.269	-16.667 - 67.206
Perception of international scalability quality (x_4)	-20.409	-61.527 - 20.710
Perception of business model quality (x_5)	49.783	6.724 - 92.842
Dummy - Age group: 20-39 years (a_2)	13.826	-160.738 - 188.391
Dummy - Gender: Male (g_1)	-172.176	-513.559 - 169.207
Dummy - Gender: Female (g_2)	-171.456	-522.121 - 179.208
Dummy - Highest completed education: Bachelor's degree (u_4)	25.968	-52.377 - 104.313
Dummy - Professional work experience with investments: Less than 1 year (e_1)	-20.722	-172.755 - 131.311
Dummy - Professional work experience with investments: 1-3 years (e_2)	23.951	-121.972 - 169.874
Dummy - Professional work experience with investments: 3-5 years (e_3)	61.398	-144.596 - 267.391
Observations	70	
R^2 / R^2 adjusted	0.435 / 0.304	

A regression table for the investment professionals' pre-money valuation estimate (dependent variable) predicted by a set of independent variables, including the applied treatment of the suggested pre-money valuation in the company presentation, as well as the perception of the company's performance in relation to a number of key parameters, and demographics.

Table 27. Multiple linear regression of the students sample's pre-money valuation estimate

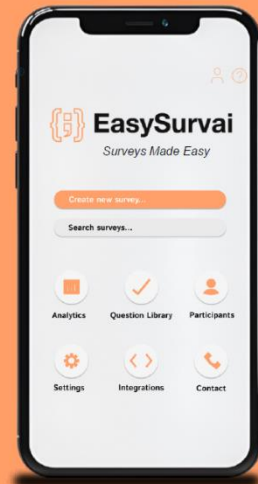
Predictors (independent variables)	Students' pre-money valuation estimate in SEKm (Y_i)		
	Coefficient estimates	95% confidence interval	p-value
Intercept (α)	22630.562	-32,815 - 78,076	0.422
Applied treatment pre-money value in SEKm (i)	1.408	-22.7 - 25.5	0.908
Perception of revenue growth quality (x_1)	-1857.641	-5,920 - 2,205	0.368
Perception of product offering quality (x_2)	-1810.979	-5,864 - 2,242	0.379
Perception of management team quality (x_3)	1473.504	-2,156 - 5,103	0.424
Perception of international scalability quality (x_4)	419.337	-2,629 - 3,468	0.786
Perception of business model quality (x_5)	4764.054	535 - 8,993	0.027
Dummy - Age group: 20-39 years (a_2)	-7642.12	-20,726 - 5,442	0.251
Dummy - Age group: 40-59 years (a_3)	-16397.367	-32,902 - 107	0.051
Dummy - Age group: 60-79 years (a_4)	-14409.392	-40,171 - 11,352	0.271
Dummy - Gender: Male (g_1)	-3682.289	-32,666 - 25,301	0.802
Dummy - Gender: Female (g_2)	-7793.446	-36,961 - 21,374	0.599
Dummy - Highest completed education: Secondary education / High school diploma (u_2)	-7772.174	-49,604 - 34,060	0.714
Dummy - Highest completed education: Post-secondary education (u_3)	-3490.116	-45,338 - 38,358	0.869
Dummy - Highest completed education: Bachelor's degree (u_4)	-5471.107	-46,766 - 35,824	0.794
Dummy - Highest completed education: Master's degree (u_5)	-3419.583	-45,052 - 38,203	0.871
Dummy - Highest completed education: Doctoral degree (u_6)	22979.246	-25,420 - 71,378	0.350
Dummy - Professional work experience with investments: Less than 1 year (e_1)	2953.354	-5,041 - 10,948	0.467
Dummy - Professional work experience with investments: 1-3 years (e_2)	-5922.056	-13,899 - 2,055	0.145
Dummy - Professional work experience with investments: 3-5 years (e_3)	-5363.908	-16,231 - 5,503	0.331
Dummy - Professional work experience with investments: More than 5 years (e_4)	12222.306	868 - 23,576	0.035
Observations	203		
R^2 / R^2 adjusted	0.128 / 0.032		

A regression table for the students' pre-money valuation estimate (dependent variable) predicted by a set of independent variables, including the applied treatment of the suggested pre-money valuation in the company presentation, as well as the perception of the company's performance in relation to a number of key parameters, and demographics.

Appendix 7 – Investment Presentation Stating That the Pre-Money Valuation Is "To Be Determined"



Investment Teaser
March 2024



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INTRODUCTION

Company Overview



Founded: 2015
HQ: Linköping, Sweden
Total FTE's: 62
Industry: Software
Pre-money valuation: TBD

Management Team



Jakob Hamrén
Chief Executive Officer

accenture



Ana Vargas
Chief Financial Officer

SEB



Elisabeth Lind
Chief Technology Officer

Kahoot!



Karl Söderlund
Chief Sales Officer

pipedrive



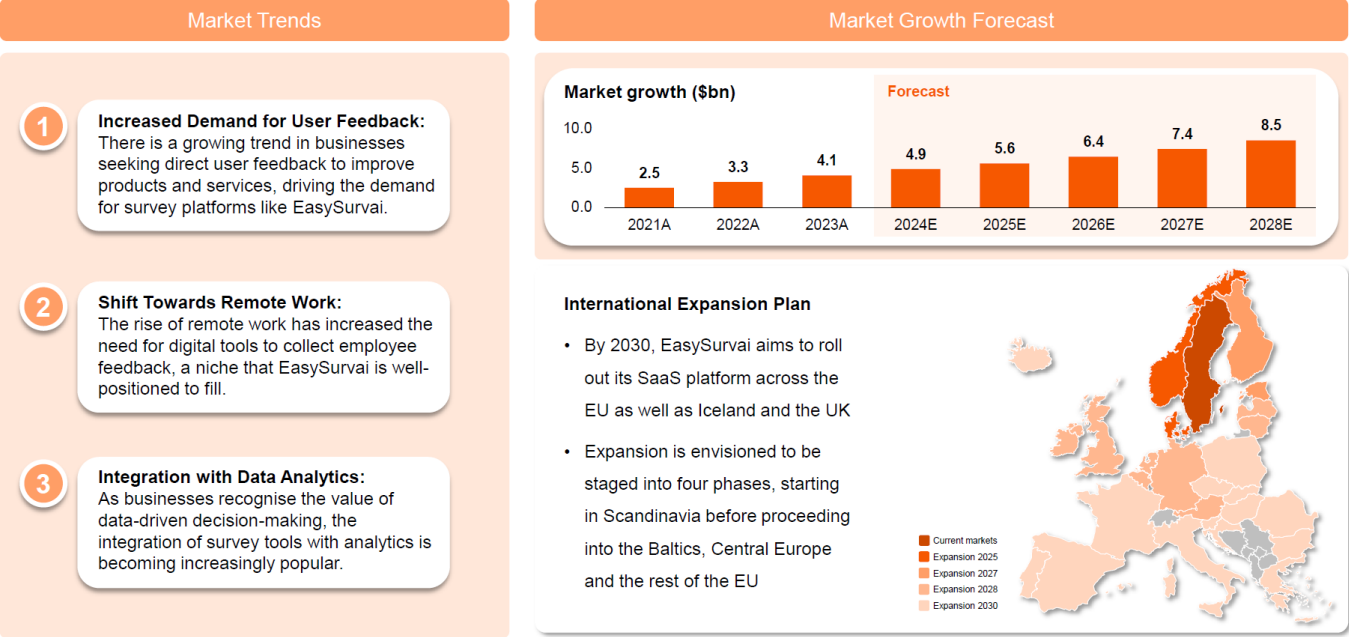
Business Model

- **EasySurvai** is a market-leading **SaaS platform** designed to make survey creation, distribution, and analysis **accessible** to businesses of all sizes. The platform enables users to **quickly design customized surveys** with a **drag-and-drop interface**, distribute them across multiple channels (email, social media, websites), and **analyse responses in real-time** through intuitive dashboards.
- Businesses can **customize surveys** to reflect their branding and integrate seamlessly with their existing CRM and data analysis tools for a **cohesive workflow**. Proprietary **AI** is used to automatically categorize open-ended responses and sentiment, giving businesses rich, **qualitative insights without manual effort**.
- EasySurvai serves a **wide array of industries** including retail, healthcare, education, and technology, with a strong customer retention rate indicative of the platform's value (**110% NRR**).
- The platform is offered through **multiple subscription levels** to cater to the diverse needs of customers, ranging from **small businesses to large enterprises**.

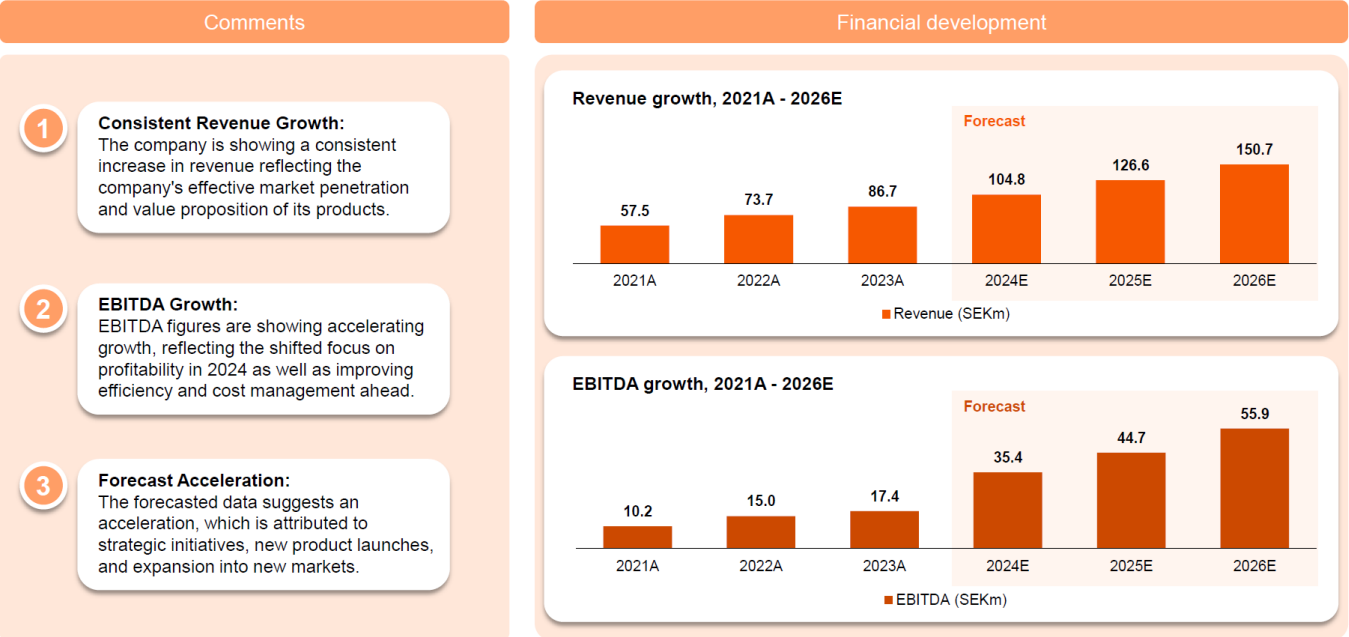
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EasySurvai

MARKET OVERVIEW AND GROWTH



FINANCIALS



THE OPPORTUNITY

Fundraising

Fundraise

EasySurvai is looking to raise SEK 90-140 million in primary growth capital at a pre-money valuation that is to be agreed on with the investors, to capitalise on its leading position in a rapidly growing market

Use of proceeds

The raised funds will primarily be used for the international expansion plan as well as to further develop the product offering

90-140 SEKm

Fundraising opportunity

TBD

Pre-money valuation

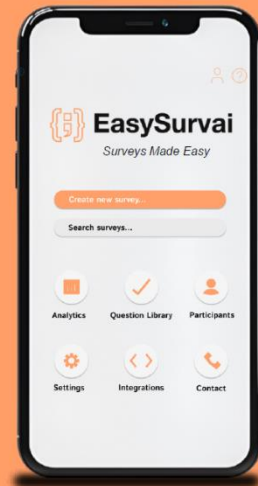
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 **EasySurvai**

Appendix 8 – Investment Presentation Stating a Lower Pre-Money Valuation



Investment Teaser
March 2024



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INTRODUCTION

Company Overview



Founded: 2015
HQ: Linköping, Sweden
Total FTE's: 62
Industry: Software
Pre-money valuation: 420 SEKm

Management Team



Jakob Hamrén
Chief Executive Officer

accenture



Ana Vargas
Chief Financial Officer

SEB



Elisabeth Lind
Chief Technology Officer

Kahoot!



Karl Söderlund
Chief Sales Officer

pipedrive



Business Model

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EasySurvai

MARKET OVERVIEW AND GROWTH

Market Trends

1

Increased Demand for User Feedback:
There is a growing trend in businesses seeking direct user feedback to improve products and services, driving the demand for survey platforms like EasySurvai.

2

Shift Towards Remote Work:
The rise of remote work has increased the need for digital tools to collect employee feedback, a niche that EasySurvai is well-positioned to fill.

3

Integration with Data Analytics:
As businesses recognise the value of data-driven decision-making, the integration of survey tools with analytics is becoming increasingly popular.

Market Growth Forecast

Market growth (\$bn)

Forecast

2021A	2.5	2022A	3.3	2023A	4.1	2024E	4.9	2025E	5.6	2026E	6.4	2027E	7.4	2028E	8.5
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International Expansion Plan

- By 2030, EasySurvai aims to roll out its SaaS platform across the EU as well as Iceland and the UK
- Expansion is envisioned to be staged into four phases, starting in Scandinavia before proceeding into the Baltics, Central Europe and the rest of the EU

Current markets

Expansion 2025

Expansion 2027

Expansion 2028

Expansion 2030

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Comments

1

Consistent Revenue Growth:
The company is showing a consistent increase in revenue reflecting the company's effective market penetration and value proposition of its products.

2

EBITDA Growth:
EBITDA figures are showing accelerating growth, reflecting the shifted focus on profitability in 2024 as well as improving efficiency and cost management ahead.

3

Forecast Acceleration:
The forecasted data suggests an acceleration, which is attributed to strategic initiatives, new product launches, and expansion into new markets.

Financial development

Revenue growth, 2021A - 2026E

Forecast

2021A	57.5	2022A	73.7	2023A	86.7	2024E	104.8	2025E	126.6	2026E	150.7
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Revenue (SEKm)

EBITDA growth, 2021A - 2026E

Forecast

2021A	10.2	2022A	15.0	2023A	17.4	2024E	35.4	2025E	44.7	2026E	55.9
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EBITDA (SEKm)

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THE OPPORTUNITY

Fundraising

Fundraise

EasySurvai is looking to raise SEK 90 million in primary growth capital at the pre-money valuation of 420 SEKm, to capitalise on its leading position in a rapidly growing market

Use of proceeds

The raised funds will primarily be used for the international expansion plan as well as to further develop the product offering

90 SEKm

Fundraising opportunity

420 SEKm

Pre-money valuation

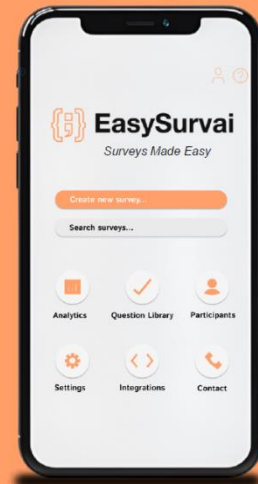
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 **EasySurvai**

Appendix 9 – Investment Presentation Stating a Higher Pre-Money Valuation



Investment Teaser
March 2024



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INTRODUCTION

Company Overview



Founded: 2015
HQ: Linköping, Sweden
Total FTE's: 62
Industry: Software
Pre-money valuation: 660 SEKm

Management Team



Jakob Hamrén
Chief Executive Officer



Ana Vargas
Chief Financial Officer



Elisabeth Lind
Chief Technology Officer



Karl Söderlund
Chief Sales Officer



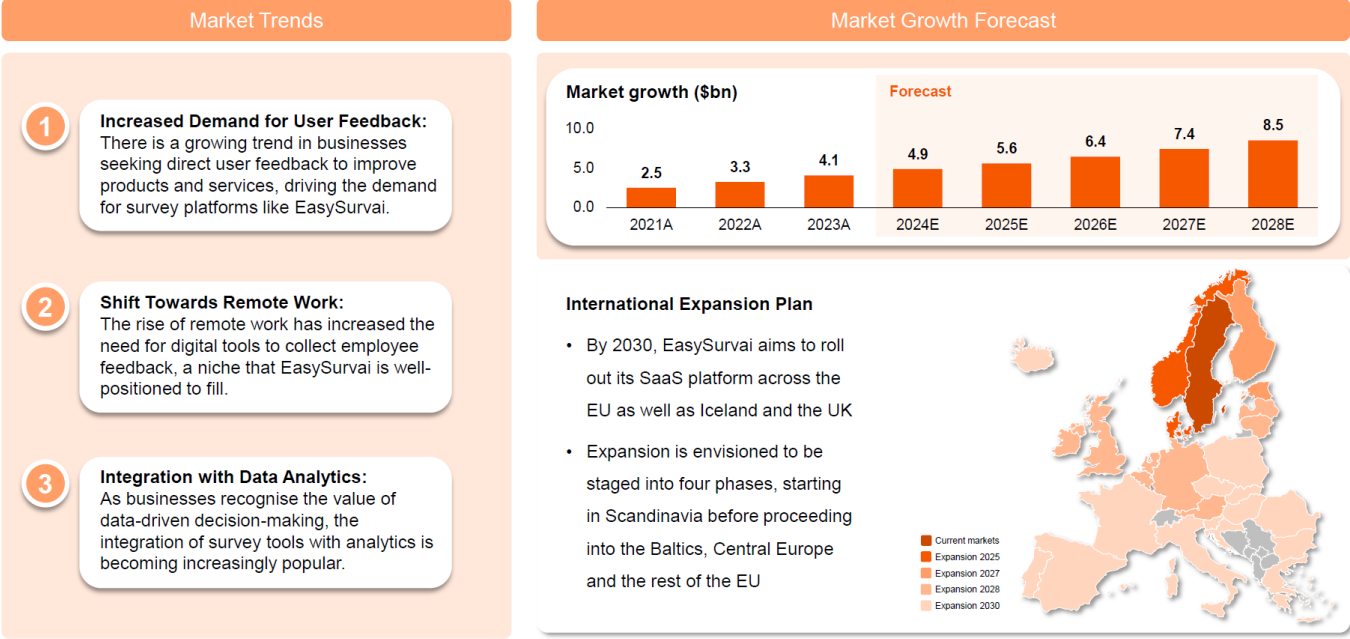
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 **EasySurvai**

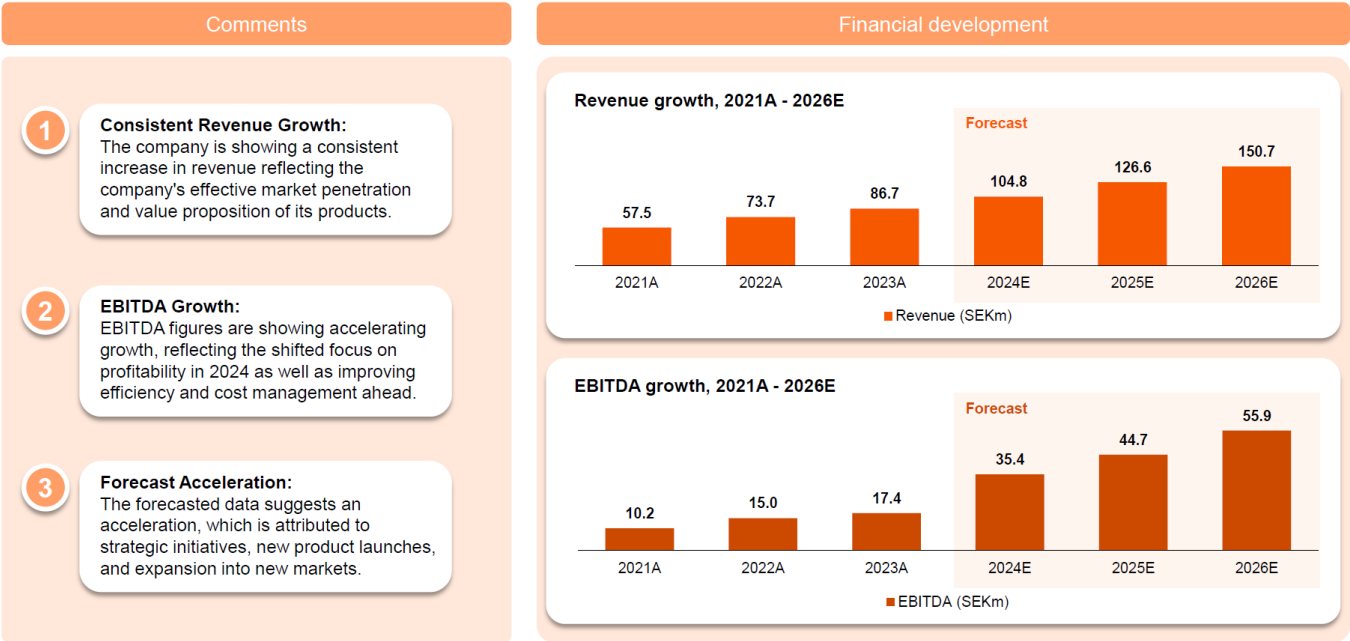
MARKET OVERVIEW AND GROWTH



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EasySurvai

FINANCIALS



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EasySurvai

THE OPPORTUNITY

Fundraising

Fundraise

EasySurvai is looking to raise SEK 140 million in primary growth capital at the pre-money valuation of 660 SEKm, to capitalise on its leading position in a rapidly growing market

Use of proceeds

The raised funds will primarily be used for the international expansion plan as well as to further develop the product offering

140 SEKm

Fundraising opportunity

660 SEKm

Pre-money valuation

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 **EasySurvai**

Appendix 10 – The Structure of the Main Study Questionnaire

The figure below illustrates the structure of the self-completion questionnaire used in the main study. In the beginning, test subjects are allocated to either the control group or any of the two treatment groups on a random basis, followed by two blocks with follow-up questions that are common for all the three test groups.

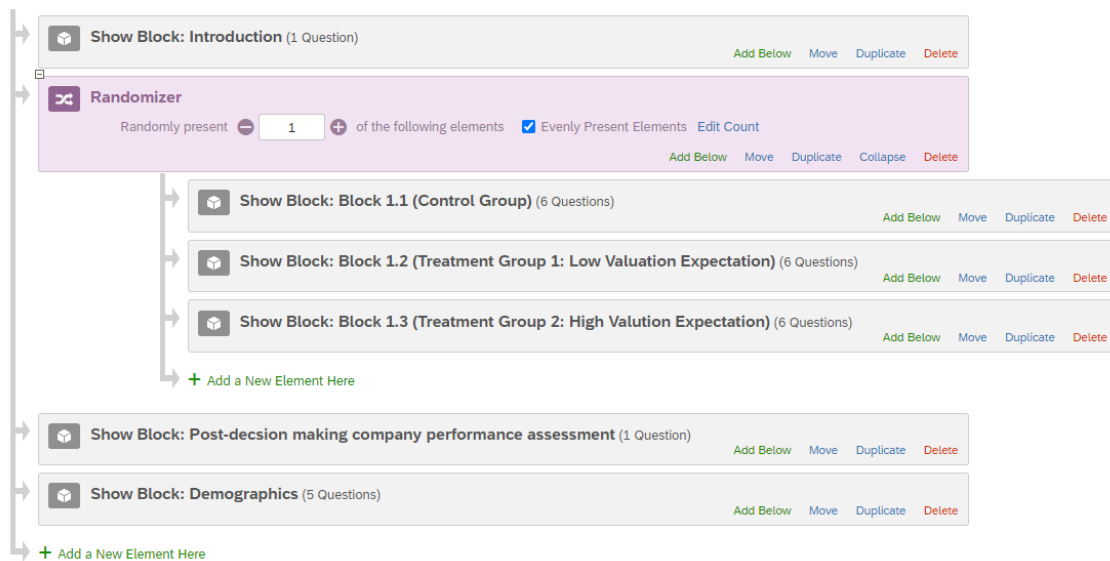


Figure 3: The structure of the self-completion questionnaire used in the main study to conduct the experiment.

Appendix 11 – The Main Study Questionnaire

Start of Block: Introduction

Intro Dear Participant,

Thank you very much for taking the time to participate in this survey. Your input is incredibly valuable to our research and will contribute significantly to the success of our thesis. To show our appreciation for your contribution, we pledge to donate 10 SEK to Barncancerfonden for each complete response that we get.

We want to assure you that all responses you provide are completely anonymous and will be treated with the utmost confidentiality. There is no way for any answers to be traced back to you personally.

If you have any questions regarding the study, feel free to contact us on 24735@student.hhs.se or 24737@student.hhs.se.

Your honest and thoughtful responses are greatly appreciated. Thank you once again for your valuable contribution!

Best regards,
Alfred Holmberg and Richard Haimov

End of Block: Introduction

Start of Block: Block 1.1 (Control Group)

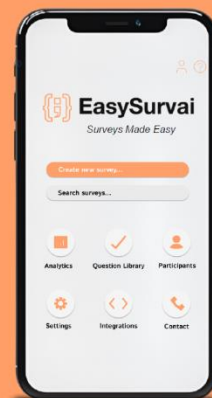
Instructions Assume a hypothetical scenario where you are approached by an entrepreneur pitching a company to you using an investment teaser that you will find in the next section. Your task is to read through the investment teaser thoroughly with the aim of assessing the attractiveness of the investment opportunity. After having read the investment teaser, you will be asked a couple of questions about your attitude towards the presented company and your willingness to proceed with the opportunity.

IF USING A PHONE, YOU CAN ZOOM IN OR TURN TO A HORIZONTAL POSITION TO EASIER READ THE MATERIAL.



Investment Teaser
March 2024

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INTRODUCTION

Company Overview



Founded: 2015
HQ: Linköping, Sweden
Total FTE's: 62
Industry: Software
Pre-money valuation: TBD

Management Team



Jakob Hamrén
Chief Executive Officer

accenture

liu



Ana Vargas
Chief Financial Officer

SEB

liu



Elisabeth Lind
Chief Technology Officer

Kahoot!

kth



Karl Söderlund
Chief Sales Officer

pipedrive

liu

Business Model

- **EasySurvai** is a market-leading **SaaS platform** designed to make survey creation, distribution, and analysis **accessible** to businesses of all sizes. The platform enables users to **quickly design customized surveys** with a **drag-and-drop interface**, distribute them across multiple channels (email, social media, websites), and **analyse responses in real-time** through intuitive dashboards.
- Businesses can **customize surveys** to reflect their branding and integrate seamlessly with their existing CRM and data analysis tools for a **cohesive workflow**. Proprietary **AI** is used to automatically categorize open-ended responses and sentiment, giving businesses rich, **qualitative insights without manual effort**.
- EasySurvai serves a **wide array of industries** including retail, healthcare, education, and technology, with a strong customer retention rate indicative of the platform's value (**110% NRR**).
- The platform is offered through **multiple subscription levels** to cater to the diverse needs of customers, ranging from **small businesses to large enterprises**.

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MARKET OVERVIEW AND GROWTH

Market Trends

1

Increased Demand for User Feedback:
There is a growing trend in businesses seeking direct user feedback to improve products and services, driving the demand for survey platforms like EasySurvai.

2

Shift Towards Remote Work:
The rise of remote work has increased the need for digital tools to collect employee feedback, a niche that EasySurvai is well-positioned to fill.

3

Integration with Data Analytics:
As businesses recognise the value of data-driven decision-making, the integration of survey tools with analytics is becoming increasingly popular.

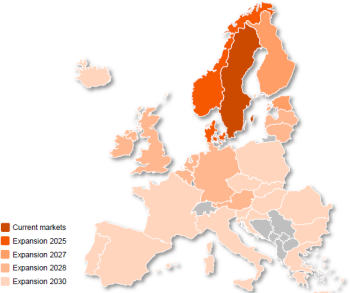
Market Growth Forecast

Market growth (\$bn)

Year	2021A	2022A	2023A	2024E	2025E	2026E	2027E	2028E
Growth (\$bn)	2.5	3.3	4.1	4.9	5.6	6.4	7.4	8.5

International Expansion Plan

- By 2030, EasySurvai aims to roll out its SaaS platform across the EU as well as Iceland and the UK
- Expansion is envisioned to be staged into four phases, starting in Scandinavia before proceeding into the Baltics, Central Europe and the rest of the EU



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FINANCIALS

Comments

1

Consistent Revenue Growth:
The company is showing a consistent increase in revenue reflecting the company's effective market penetration and value proposition of its products.

2

EBITDA Growth:
EBITDA figures are showing accelerating growth, reflecting the shifted focus on profitability in 2024 as well as improving efficiency and cost management ahead.

3

Forecast Acceleration:
The forecasted data suggests an acceleration, which is attributed to strategic initiatives, new product launches, and expansion into new markets.

Financial development

Revenue growth, 2021A - 2026E

Year	2021A	2022A	2023A	2024E	2025E	2026E
Revenue (SEKm)	57.5	73.7	86.7	104.8	126.6	150.7

EBITDA growth, 2021A - 2026E

Year	2021A	2022A	2023A	2024E	2025E	2026E
EBITDA (SEKm)	10.2	15.0	17.4	35.4	44.7	55.9

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THE OPPORTUNITY

Fundraising

Fundraise
EasySurvai is looking to raise SEK 90-140 million in primary growth capital at a pre-money valuation that is to be agreed on with the investors, to capitalise on its leading position in a rapidly growing market

Use of proceeds
The raised funds will primarily be used for the international expansion plan as well as to further develop the product offering

90-140 SEKm

Fundraising opportunity

TBD

Pre-money valuation

Q1.1 What do you think about the presented company as an investment opportunity?

	Extremely bad	Very bad	Somewhat bad	Neither good nor bad	Somewhat good	Very good	Extremely good
The presented company as an investment opportunity is ...	☐	☐	☐	☐	☐	☐	☐

Q2.1 How likely do you think it is that the presented company will succeed in relation to its targets?

	Extremely low	Very low	Somewhat low	Neither high nor low	Somewhat high	Very high	Extremely high
The likelihood of success for the presented company is ...	☐	☐	☐	☐	☐	☐	☐

Q3.1 How likely is it that you would take the presented company to the next step in your investment screening process?

	Extremely unlikely	Very unlikely	Somewhat unlikely	Neither likely nor unlikely	Somewhat likely	Very likely	Extremely likely
Me taking the presented company to the next screening step is ...	☐	☐	☐	☐	☐	☐	☐

Q4.1 If you were forced to make an investment into the presented company at this stage, at what pre-money valuation would you do it?

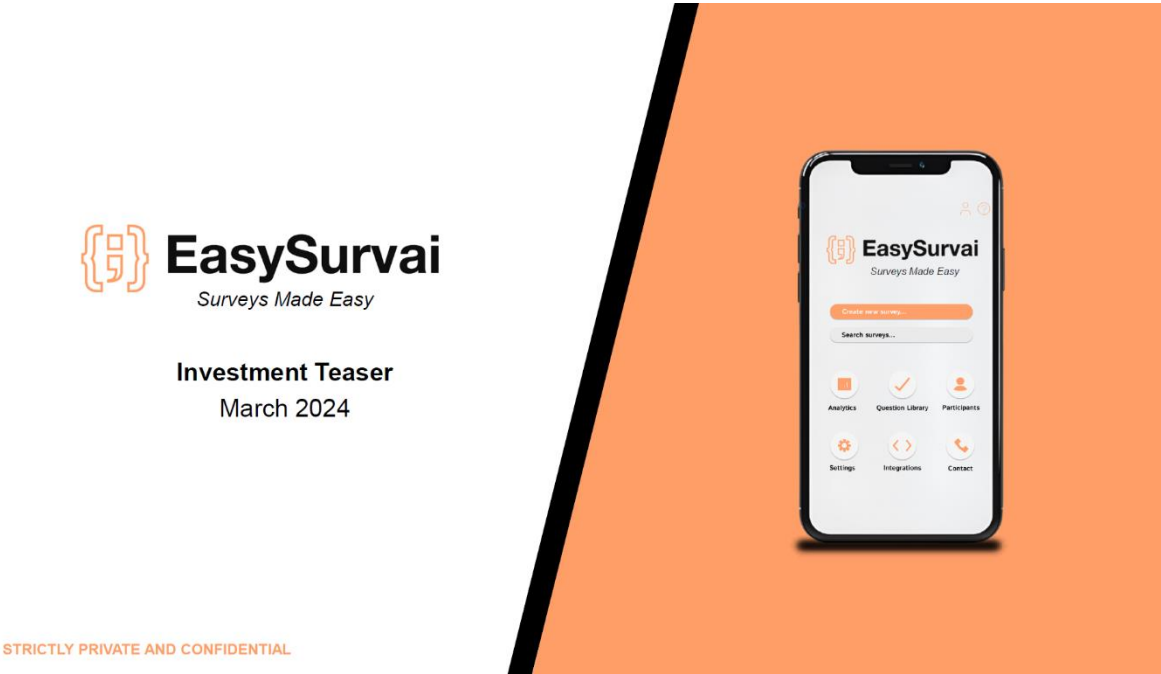
STATE YOUR ANSWER IN MILLIONS OF SEK WITHOUT ANY DECIMALS! Enter the full amount and **do not include any text** such as "million" or "SEK".

End of Block: Block 1.1 (Control Group)

Start of Block: Block 1.2 (Treatment Group 1: Low Valuation Expectation)

Instructions Assume a hypothetical scenario where you are approached by an entrepreneur pitching a company to you using an investment teaser that you will find in the next section. Your task is to read through the investment teaser thoroughly with the aim of assessing the attractiveness of the investment opportunity. After having read the investment teaser, you will be asked a couple of questions about your attitude towards the presented company and your willingness to proceed with the opportunity.

IF USING A PHONE, YOU CAN ZOOM IN OR TURN TO A HORIZONTAL POSITION TO EASIER READ THE MATERIAL.



INTRODUCTION

Company Overview



Founded: 2015
HQ: Linköping, Sweden
Total FTE's: 62
Industry: Software
Pre-money valuation: 420 SEKm

Management Team



Jakob Hamrén
Chief Executive Officer





Ana Vargas
Chief Financial Officer





Elisabeth Lind
Chief Technology Officer





Karl Söderlund
Chief Sales Officer



Business Model

- **EasySurvai** is a market-leading **SaaS platform** designed to make survey creation, distribution, and analysis **accessible** to businesses of all sizes. The platform enables users to **quickly design customized surveys** with a **drag-and-drop interface**, distribute them across multiple channels (email, social media, websites), and **analyse responses in real-time** through intuitive dashboards.
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MARKET OVERVIEW AND GROWTH

Market Trends

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3

Integration with Data Analytics:
As businesses recognise the value of data-driven decision-making, the integration of survey tools with analytics is becoming increasingly popular.

Market Growth Forecast

Market growth (\$bn)

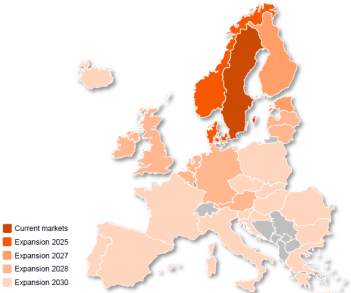
Year	2021A	2022A	2023A	2024E	2025E	2026E	2027E	2028E
Growth (\$bn)	2.5	3.3	4.1	4.9	5.6	6.4	7.4	8.5

Forecast

Year	2024E	2025E	2026E	2027E	2028E
Growth (\$bn)	4.9	5.6	6.4	7.4	8.5

International Expansion Plan

- By 2030, EasySurvai aims to roll out its SaaS platform across the EU as well as Iceland and the UK
- Expansion is envisioned to be staged into four phases, starting in Scandinavia before proceeding into the Baltics, Central Europe and the rest of the EU



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FINANCIALS

Comments

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EBITDA Growth:
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3

Forecast Acceleration:
The forecasted data suggests an acceleration, which is attributed to strategic initiatives, new product launches, and expansion into new markets.

Financial development

Revenue growth, 2021A - 2026E

Year	2021A	2022A	2023A	2024E	2025E	2026E
Revenue (SEKm)	57.5	73.7	86.7	104.8	126.6	150.7

EBITDA growth, 2021A - 2026E

Year	2021A	2022A	2023A	2024E	2025E	2026E
EBITDA (SEKm)	10.2	15.0	17.4	35.4	44.7	55.9

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THE OPPORTUNITY

Fundraising

Fundraise
EasySurvai is looking to raise SEK 90 million in primary growth capital at the pre-money valuation of 420 SEKm, to capitalise on its leading position in a rapidly growing market

Use of proceeds
The raised funds will primarily be used for the international expansion plan as well as to further develop the product offering

90 SEKm
Fundraising opportunity

420 SEKm
Pre-money valuation

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Q1.2 What do you think about the presented company as an investment opportunity?

	Extremely bad	Very bad	Somewhat bad	Neither good nor bad	Somewhat good	Very good	Extremely good
The presented company as an investment opportunity is ...	☐	☐	☐	☐	☐	☐	☐

Q2.2 How likely do you think it is that the presented company will succeed in relation to its targets?

	Extremely low	Very low	Somewhat low	Neither high nor low	Somewhat high	Very high	Extremely high
The likelihood of success for the presented company is ...	☐	☐	☐	☐	☐	☐	☐

Q3.2 How likely is it that you would take the presented company to the next step in your investment screening process?

	Extremely unlikely	Very unlikely	Somewhat unlikely	Neither likely nor unlikely	Somewhat likely	Very likely	Extremely likely
Me taking the presented company to the next screening step is ...	☐	☐	☐	☐	☐	☐	☐

Q4.2 If you were forced to make an investment into the presented company at this stage, at what pre-money valuation would you do it?

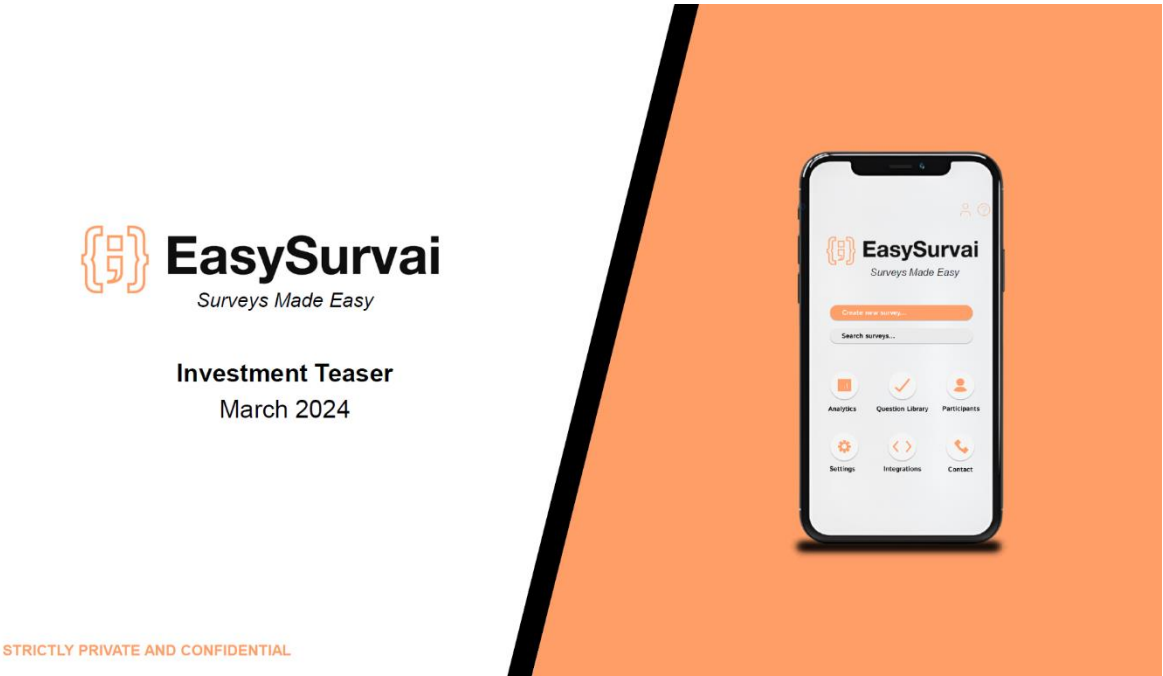
STATE YOUR ANSWER IN MILLIONS OF SEK WITHOUT ANY DECIMALS! Enter the full amount and **do not include any text** such as "million" or "SEK".

End of Block: Block 1.2 (Treatment Group 1: Low Valuation Expectation)

Start of Block: Block 1.3 (Treatment Group 2: High Valution Expectation)

Instructions Assume a hypothetical scenario where you are approached by an entrepreneur pitching a company to you using an investment teaser that you will find in the next section. Your task is to read through the investment teaser thoroughly with the aim of assessing the attractiveness of the investment opportunity. After having read the investment teaser, you will be asked a couple of questions about your attitude towards the presented company and your willingness to proceed with the opportunity.

IF USING A PHONE, YOU CAN ZOOM IN OR TURN TO A HORIZONTAL POSITION TO EASIER READ THE MATERIAL.



INTRODUCTION

Company Overview



Founded: 2015
HQ: Linköping, Sweden
Total FTE's: 62
Industry: Software
Pre-money valuation: 660 SEKm

Management Team



Jakob Hamrén
Chief Executive Officer





Ana Vargas
Chief Financial Officer





Elisabeth Lind
Chief Technology Officer





Karl Söderlund
Chief Sales Officer



Business Model

- **EasySurvai** is a market-leading **SaaS platform** designed to make survey creation, distribution, and analysis **accessible** to businesses of all sizes. The platform enables users to **quickly design customized surveys** with a **drag-and-drop interface**, distribute them across multiple channels (email, social media, websites), and **analyse responses in real-time** through intuitive dashboards.
- Businesses can **customize surveys** to reflect their branding and integrate seamlessly with their existing CRM and data analysis tools for a **cohesive workflow**. Proprietary **AI** is used to automatically categorize open-ended responses and sentiment, giving businesses rich, **qualitative insights without manual effort**.
- EasySurvai serves a **wide array of industries** including retail, healthcare, education, and technology, with a strong customer retention rate indicative of the platform's value (**110% NRR**).
- The platform is offered through **multiple subscription levels** to cater to the diverse needs of customers, ranging from **small businesses to large enterprises**.

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MARKET OVERVIEW AND GROWTH

Market Trends

1

Increased Demand for User Feedback:
There is a growing trend in businesses seeking direct user feedback to improve products and services, driving the demand for survey platforms like EasySurvai.

2

Shift Towards Remote Work:
The rise of remote work has increased the need for digital tools to collect employee feedback, a niche that EasySurvai is well-positioned to fill.

3

Integration with Data Analytics:
As businesses recognise the value of data-driven decision-making, the integration of survey tools with analytics is becoming increasingly popular.

Market Growth Forecast

Market growth (\$bn)

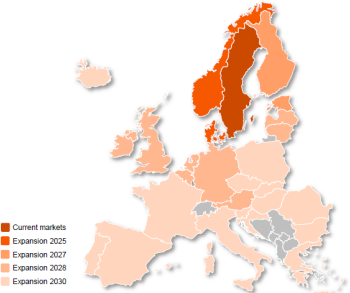
Year	2021A	2022A	2023A	2024E	2025E	2026E	2027E	2028E
Growth (\$bn)	2.5	3.3	4.1	4.9	5.6	6.4	7.4	8.5

Forecast

Year	2024E	2025E	2026E	2027E	2028E
Growth (\$bn)	4.9	5.6	6.4	7.4	8.5

International Expansion Plan

- By 2030, EasySurvai aims to roll out its SaaS platform across the EU as well as Iceland and the UK
- Expansion is envisioned to be staged into four phases, starting in Scandinavia before proceeding into the Baltics, Central Europe and the rest of the EU



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FINANCIALS

Comments

1

Consistent Revenue Growth:
The company is showing a consistent increase in revenue reflecting the company's effective market penetration and value proposition of its products.

2

EBITDA Growth:
EBITDA figures are showing accelerating growth, reflecting the shifted focus on profitability in 2024 as well as improving efficiency and cost management ahead.

3

Forecast Acceleration:
The forecasted data suggests an acceleration, which is attributed to strategic initiatives, new product launches, and expansion into new markets.

Financial development

Revenue growth, 2021A - 2026E

Year	2021A	2022A	2023A	2024E	2025E	2026E
Revenue (SEKm)	57.5	73.7	86.7	104.8	126.6	150.7

EBITDA growth, 2021A - 2026E

Year	2021A	2022A	2023A	2024E	2025E	2026E
EBITDA (SEKm)	10.2	15.0	17.4	35.4	44.7	55.9

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THE OPPORTUNITY

Fundraising

Fundraise
EasySurvai is looking to raise SEK 140 million in primary growth capital at the pre-money valuation of 660 SEKm, to capitalise on its leading position in a rapidly growing market

Use of proceeds
The raised funds will primarily be used for the international expansion plan as well as to further develop the product offering

140 SEKm
Fundraising opportunity

660 SEKm
Pre-money valuation

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Q1.3 What do you think about the presented company as an investment opportunity?

	Extremely bad	Very bad	Somewhat bad	Neither good nor bad	Somewhat good	Very good	Extremely good
The presented company as an investment opportunity is ...	☐	☐	☐	☐	☐	☐	☐

Q2.3 How likely do you think it is that the presented company will succeed in relation to its targets?

	Extremely low	Very low	Somewhat low	Neither high nor low	Somewhat high	Very high	Extremely high
The likelihood of success for the presented company is ...	☐	☐	☐	☐	☐	☐	☐

Q3.3 How likely is it that you would take the presented company to the next step in your investment screening process?

	Extremely unlikely	Very unlikely	Somewhat unlikely	Neither likely nor unlikely	Somewhat likely	Very likely	Extremely likely
Me taking the presented company to the next screening step is ...	☐	☐	☐	☐	☐	☐	☐

Q4.3 If you were forced to make an investment into the presented company at this stage, at what pre-money valuation would you do it?

STATE YOUR ANSWER IN MILLIONS OF SEK WITHOUT ANY DECIMALS! Enter the full amount and **do not include any text** such as "million" or "SEK".

End of Block: Block 1.3 (Treatment Group 2: High Valuation Expectation)

Start of Block: Post-decision making company performance assessment

Q5 What do you think about the presented company in relation to the following parameters?

	Extremely bad	Very bad	Somewhat bad	Neither good nor bad	Somewhat good	Very good	Extremely good
nRevenue growth	☐	☐	☐	☐	☐	☐	☐
Product offering	☐	☐	☐	☐	☐	☐	☐
Quality of management team	☐	☐	☐	☐	☐	☐	☐
International scalability	☐	☐	☐	☐	☐	☐	☐
Quality of business model	☐	☐	☐	☐	☐	☐	☐

End of Block: Post-decision making company performance assessment

Start of Block: Demographics

Q6 Please select your age group.

- ☐ 0-19 years old
 - ☐ 20-39 years old
 - ☐ 40-59 years old
 - ☐ 60-79 years old
 - ☐ 80+ years old
-

Q7 What is your gender?

- ☐ Male
 - ☐ Female
 - ☐ Other / Prefer not to say
-

Q8 What is the highest level of education you have completed?

- ☐ Primary education
 - ☐ Secondary education / High school diploma
 - ☐ Post-secondary education
 - ☐ Bachelor's degree
 - ☐ Master's degree
 - ☐ Doctoral degree
-

Q9 How long experience do you have working professionally with investments?

- ☐ Less than 1 year
 - ☐ 1-3 years
 - ☐ 3-5 years
 - ☐ More than 5 years
-

Q-CONTROL If you see this question, please select "Continue" as your response option.

- ☐ Continue
- ☐ Proceed
- ☐ Go forward

End of Block: Demographics

Appendix 12 – The Structure of the Pilot Test Questionnaire

The figure below illustrates the structure of the self-completion questionnaire used in the pilot test. In contrast to the questionnaire used in the main study, the pilot questionnaire does not allocate the pilot participants between several different test groups, instead only presenting the control case, followed by the same two blocks of follow-up questions that are included in the main study questionnaire.

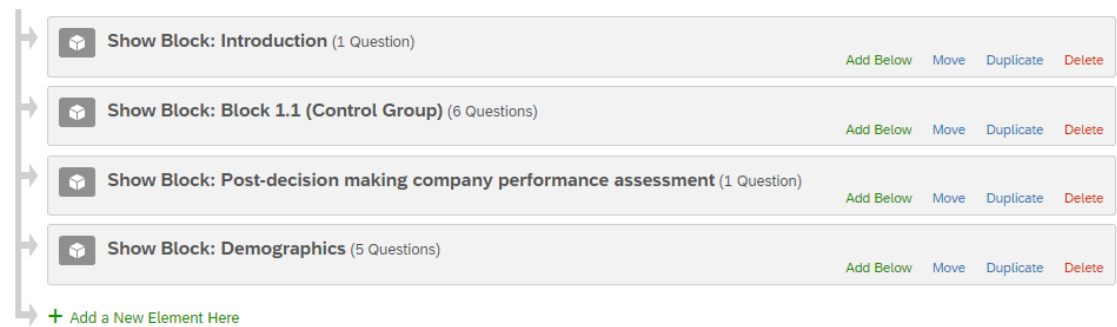


Figure 4: The structure of the self-completion questionnaire used in the pilot test to verify the questionnaire designed for the main study.

Appendix 13 – The Pilot Test Questionnaire

Start of Block: Introduction

Dear Participant,

Thank you very much for taking the time to participate in this survey. Your input is incredibly valuable to our research and will contribute significantly to the success of our thesis. We want to assure you that all responses you provide are completely anonymous and will be treated with the utmost confidentiality. There is no way for any answers to be traced back to you personally.

If you have any question regarding the study, feel free to contact us on 24735@student.hhs.se or 24737@student.hhs.se.

Your honest and thoughtful responses are greatly appreciated. Thank you once again for your valuable contribution!

Best regards,

Alfred Holmberg and Richard Haimov

End of Block: Introduction

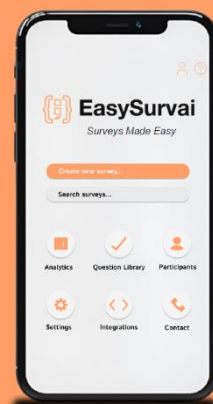
Start of Block: Block 1.1 (Control Group)

Assume a hypothetical scenario where you are approached by an entrepreneur pitching a company to you using an investment teaser that you will find in the next section. Your task is to read through the investment teaser thoroughly with the aim of assessing the attractiveness of the investment opportunity. After having read the investment teaser, you will be asked a couple of questions about your attitude towards the presented company and your willingness to proceed with the opportunity. Read the company presentations thoroughly and choose ONE of the two firms to invest 10,000 SEK into, and answer the subsequent questions



Investment Teaser
March 2024

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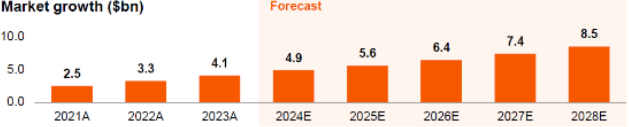
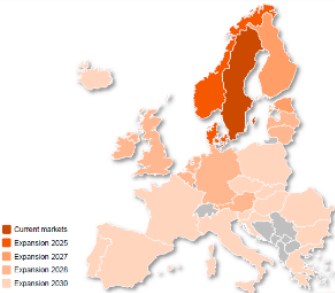
INTRODUCTION

Company Overview	Business Model
 Founded: 2015 HQ: Linköping, Sweden Total FTE's: 62 Industry: Software Pre-money valuation: TBD	• EasySurvai is a market-leading SaaS platform designed to make survey creation, distribution, and analysis accessible to businesses of all sizes. The platform enables users to quickly design customized surveys with a drag-and-drop interface, distribute them across multiple channels (email, social media, websites), and analyse responses in real-time through intuitive dashboards. • Businesses can customize surveys to reflect their branding and integrate seamlessly with their existing CRM and data analysis tools for a cohesive workflow. Proprietary AI is used to automatically categorize open-ended responses and sentiment, giving businesses rich, qualitative insights without manual effort. • EasySurvai serves a wide array of industries including retail, healthcare, education, and technology, with a strong customer retention rate indicative of the platform's value (110% NRR). • The platform is offered through multiple subscription levels to cater to the diverse needs of customers, ranging from small businesses to large enterprises.
Management Team	
 Jakob Hamrén Chief Executive Officer 	
 Ana Vargas Chief Financial Officer 	
 Elisabeth Lind Chief Technology Officer 	
 Karl Söderlund Chief Sales Officer 	

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 **EasySurvai**

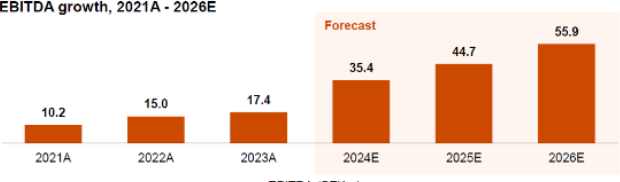
MARKET OVERVIEW AND GROWTH

Market Trends	Market Growth Forecast																		
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Year	Market growth (\$bn)																		
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2027E	7.4																		
2028E	8.5																		

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 **EasySurvai**

FINANCIALS

Comments	Financial development																												
Consistent Revenue Growth: The company is showing a consistent increase in revenue reflecting the company's effective market penetration and value proposition of its products. EBITDA Growth: EBITDA figures are showing accelerating growth, reflecting the shifted focus on profitability in 2024 as well as improving efficiency and cost management ahead. Forecast Acceleration: The forecasted data suggests an acceleration, which is attributed to strategic initiatives, new product launches, and expansion into new markets.	Revenue growth, 2021A - 2026E <table><thead><tr><th>Year</th><th>Revenue (SEKm)</th></tr></thead><tbody><tr><td>2021A</td><td>57.5</td></tr><tr><td>2022A</td><td>73.7</td></tr><tr><td>2023A</td><td>86.7</td></tr><tr><td>2024E</td><td>104.8</td></tr><tr><td>2025E</td><td>126.6</td></tr><tr><td>2026E</td><td>150.7</td></tr></tbody></table> EBITDA growth, 2021A - 2026E <table><thead><tr><th>Year</th><th>EBITDA (SEKm)</th></tr></thead><tbody><tr><td>2021A</td><td>10.2</td></tr><tr><td>2022A</td><td>15.0</td></tr><tr><td>2023A</td><td>17.4</td></tr><tr><td>2024E</td><td>35.4</td></tr><tr><td>2025E</td><td>44.7</td></tr><tr><td>2026E</td><td>55.9</td></tr></tbody></table>	Year	Revenue (SEKm)	2021A	57.5	2022A	73.7	2023A	86.7	2024E	104.8	2025E	126.6	2026E	150.7	Year	EBITDA (SEKm)	2021A	10.2	2022A	15.0	2023A	17.4	2024E	35.4	2025E	44.7	2026E	55.9
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STRICTLY PRIVATE AND CONFIDENTIAL

 **EasySurvai**

THE OPPORTUNITY

Fundraising

Fundraise
EasySurvai is looking to raise SEK 130-180 million in primary growth capital at a pre-money valuation that is to be agreed on with the investors, to capitalise on its leading position in a rapidly growing market

Use of proceeds
The raised funds will primarily be used for the international expansion plan as well as to further develop the product offering

130-180 SEKm
Fundraising opportunity

TBD
Pre-money valuation

STRICTLY PRIVATE AND CONFIDENTIAL



Q1.1 What do you think about the presented company as an investment opportunity?

	Extremely poor	Very poor	Somewhat poor	Neither good nor poor	Somewhat good	Very good	Extremely good
The presented company as an investment opportunity is ...	☐	☐	☐	☐	☐	☐	☐

Q2.1 How likely do you think it is that the presented company will succeed?

	Extremely unlikely	Very unlikely	Somewhat unlikely	Neither likely nor unlikely	Somewhat likely	Very likely	Extremely likely
The success of the presented company is ...	☐	☐	☐	☐	☐	☐	☐

Q3.1 How likely is it that you would take the presented company to the next step in your investment screening process?

	Extremely unlikely	Very unlikely	Somewhat unlikely	Neither likely nor unlikely	Somewhat likely	Very likely	Extremely likely
Me taking the presented company to the next screening step is ...	☐	☐	☐	☐	☐	☐	☐

Q4.1 If you were forced to make an investment into the presented company at this stage, at what pre-money valuation would you do it?

STATE YOUR ANSWER IN SEK.

End of Block: Block 1.1 (Control Group)

Start of Block: Post-decision-making company performance assessment

Q5 What do you think about the presented company's performance in relation to the following parameters?

	Extremely poor	Very poor	Somewhat poor	Neither good nor poor	Somewhat good	Very good	Extremely good
Revenue growth	☐	☐	☐	☐	☐	☐	☐
Product offering	☐	☐	☐	☐	☐	☐	☐
Quality of management team	☐	☐	☐	☐	☐	☐	☐
International scalability	☐	☐	☐	☐	☐	☐	☐
Quality of business model	☐	☐	☐	☐	☐	☐	☐

End of Block: Post-decision making company performance assessment

Start of Block: Demographics

Q6 Please select your age group.

- ☐ 0-19 years old
 - ☐ 20-39 years old
 - ☐ 40-59 years old
 - ☐ 60-79 years old
 - ☐ 80+ years old
-

Q7 What is your gender?

- ☐ Male
 - ☐ Female
 - ☐ Other / Prefer not to say
-

Q8 What is the highest level of education you have completed?

- ☐ Primary education
 - ☐ Secondary education / High school diploma
 - ☐ Post-secondary education
 - ☐ Bachelor's degree
 - ☐ Master's degree
 - ☐ Doctoral degree
-

Q9 How long experience do you have working professionally with investments?

- ☐ Less than 1 year
 - ☐ 1-3 years
 - ☐ 3-5 years
 - ☐ More than 5 years
-

Q-CONTROL If you see this question, please select "Continue" as your response option.

- ☐ Continue
- ☐ Proceed
- ☐ Go forward

End of Block: Demographics

Appendix 14 – Comparable SaaS Peer Data

Table 28. Valuation statistics for public comparable companies

Valuation Statistics (2024-03-22)		Capitalisation		Enterprise Value				Enterprise Value				Revenue					
Company Name	Currency	Equity Value	Enterp Value	2023A	2024E	2025E	2026E	2023A	2024E	2025E	2026E	2021A	2022A	2023A	2024E	2025E	2026E
4C Group AB	SEK	663	663	2.0 x	1.6 x	1.4 x	1.2 x	23.2 x	8.7 x	5.7 x	4.0 x	261.2	331.3	332.1	405.0	483.0	563.0
Admicom Oyj	EUR	209	203	5.9 x	5.7 x	5.2 x	4.7 x	12.3 x	16.5 x	14.5 x	12.3 x	24.9	31.6	34.3	35.6	38.9	43.0
Byggfakta Group Nordic HoldCo AB	SEK	10,087	13,001	4.9 x	4.5 x	4.3 x	3.8 x	15.3 x	13.1 x	12.0 x	10.2 x	1,606.0	2,291.8	2,673.0	2,881.2	3,055.5	3,417.0
Carasent ASA	NOK	849	525	2.2 x	1.9 x	1.7 x	1.5 x	39.4 x	12.4 x	8.1 x	6.4 x	137.1	195.3	244.0	272.3	314.5	357.5
Checkin.Com Group AB	SEK	1,005	984	8.0 x	5.5 x	3.6 x	2.4 x	45.0 x	19.3 x	10.1 x	6.5 x	55.5	96.3	122.8	180.0	276.0	407.0
Efecte Oy	EUR	97	96	3.9 x	3.5 x	3.1 x	2.7 x	574.6 x	48.0 x	26.7 x	18.3 x	17.8	21.6	24.7	27.3	30.9	34.9
Fompipe Software AB	SEK	1,545	1,543	2.9 x	2.8 x	2.5 x	2.3 x	14.7 x	11.1 x	8.8 x	7.5 x	473.2	485.1	525.2	549.4	607.8	661.6
Fortnox AB	SEK	48,548	48,180	29.3 x	23.1 x	18.5 x	15.1 x	68.9 x	43.9 x	34.5 x	27.9 x	931.9	1,276.0	1,642.0	2,085.7	2,601.3	3,187.3
LeadDesk Oy	EUR	42	47	1.6 x	1.5 x	1.4 x	1.2 x	38.4 x	10.9 x	8.9 x	7.5 x	24.6	28.1	29.4	31.6	34.5	37.8
Lemonsoft Oyj	EUR	111	113	4.3 x	3.8 x	3.6 x	3.4 x	13.7 x	12.8 x	11.9 x	11.0 x	17.2	22.6	26.3	29.3	31.1	33.1
Lime Technologies AB	SEK	4,583	4,722	8.2 x	6.7 x	5.9 x	5.1 x	32.1 x	22.3 x	19.4 x	16.3 x	403.8	490.4	577.1	706.5	802.0	917.7
Nordhealth AS	NOK	2,174	1,917	4.5 x	3.8 x	3.1 x	N/A	Neg	53.7 x	18.0 x	N/A	235.1	359.6	426.5	510.4	609.0	N/A
Oneflow AB	SEK	971	884	6.5 x	6.1 x	4.1 x	2.9 x	Neg	Neg	441.9 x	15.0 x	62.0	96.7	136.6	144.0	214.0	306.0
Physitrack PLC	SEK	211	245	1.4 x	1.2 x	1.0 x	0.8 x	33.4 x	4.5 x	2.9 x	2.3 x	88.7	142.1	172.3	201.0	247.6	304.3
Qt Group Oyj	EUR	1,892	1,879	10.4 x	8.5 x	7.0 x	5.9 x	32.1 x	25.8 x	20.7 x	16.5 x	121.1	155.3	180.7	220.5	269.8	320.9
SmartCraft ASA	NOK	4,224	4,048	10.1 x	8.7 x	7.6 x	N/A	24.5 x	20.0 x	17.0 x	N/A	270.8	333.4	401.7	465.0	534.0	N/A
Upsales Technology AB	SEK	741	688	4.5 x	4.2 x	3.6 x	3.1 x	16.1 x	16.0 x	15.0 x	12.5 x	100.7	135.9	152.1	164.0	192.0	223.0
Vitec Software Group AB	SEK	20,363	22,448	8.1 x	6.8 x	5.9 x	5.1 x	20.3 x	16.7 x	14.2 x	12.2 x	1,571.3	1,978.2	2,777.6	3,281.8	3,803.1	4,381.3
Value ASA	NOK	4,172	4,565	3.1 x	2.7 x	2.3 x	2.0 x	17.2 x	11.9 x	8.8 x	7.3 x	1,039.1	1,219.5	1,463.0	1,702.8	1,981.1	2,281.0
Maximum	N/A	48,548	48,180	29.3 x	23.1 x	18.5 x	15.1 x	574.6 x	53.7 x	441.9 x	27.9 x	1,606.0	2,291.8	2,777.6	3,281.8	3,803.1	4,381.3
75th Percentile	N/A	4,198	4,307	8.0 x	6.4 x	5.6 x	4.7 x	38.4 x	21.7 x	18.7 x	15.0 x	438.5	487.8	551.2	627.9	705.5	817.7
Median	N/A	1,005	984	4.5 x	4.2 x	3.6 x	2.9 x	24.5 x	16.2 x	14.2 x	11.0 x	137.1	195.3	244.0	272.3	314.5	357.5
25th Percentile	N/A	437	385	3.0 x	2.7 x	2.4 x	2.0 x	16.1 x	12.0 x	8.8 x	7.3 x	58.7	96.5	129.7	154.0	203.0	223.0
Minimum	N/A	42	47	1.4 x	1.2 x	1.0 x	0.8 x	12.3 x	4.5 x	2.9 x	2.3 x	17.2	21.6	24.7	27.3	30.9	33.1

Note: All figures in million except for valuation multiples

SEK/EUR	11.41
SEK/NOK	0.98

EBITDA						EBITDA Margin (%)						Revenue Growth					
2021A	2022A	2023A	2024E	2025E	2026E	2021A	2022A	2023A	2024E	2025E	2026E	2021A	2022A	2023A	2024E	2025E	2026E
46.3	27.4	28.5	76.0	116.0	164.0	17.7%	8.3%	8.6%	18.8%	24.0%	29.1%	N/A	26.8%	0.2%	22.0%	19.3%	16.6%
11.9	16.3	16.6	12.3	14.0	16.5	47.7%	51.6%	48.2%	34.7%	36.0%	38.4%	N/A	27.2%	8.6%	3.6%	9.4%	10.6%
342.1	476.1	848.0	993.0	1,081.9	1,274.0	21.3%	20.8%	31.7%	34.5%	35.4%	37.3%	N/A	42.7%	16.6%	7.8%	6.1%	11.8%
16.3	43.6	13.3	42.4	65.2	82.0	11.9%	22.3%	5.5%	15.6%	20.7%	22.9%	N/A	42.4%	25.0%	11.6%	15.5%	13.7%
-2.5	2.4	21.9	51.0	97.0	151.0	-4.6%	2.5%	17.8%	28.3%	35.1%	37.1%	N/A	73.6%	27.6%	46.5%	53.3%	47.5%
0.5	-0.5	0.2	2.0	3.6	5.3	3.0%	-2.3%	0.7%	7.3%	11.7%	15.0%	N/A	21.6%	14.3%	10.4%	13.2%	15.0%
89.5	22.4	105.2	138.8	174.9	206.7	18.9%	4.6%	20.0%	25.3%	28.8%	31.2%	N/A	2.5%	8.3%	4.6%	10.6%	8.9%
329.0	492.0	699.0	1,097.6	1,397.6	1,725.9	35.3%	38.6%	42.6%	52.6%	53.7%	54.1%	N/A	36.9%	28.7%	27.0%	24.7%	22.5%
1.2	0.7	1.2	4.3	5.3	6.3	4.9%	2.6%	4.2%	13.6%	15.4%	16.7%	N/A	14.3%	4.5%	7.6%	9.2%	9.6%
4.9	8.5	8.2	8.8	9.4	10.3	28.6%	37.6%	31.2%	29.9%	30.4%	31.0%	N/A	30.9%	16.8%	11.2%	6.0%	6.4%
83.8	99.5	147.1	211.9	243.7	289.0	20.8%	20.3%	25.5%	30.0%	30.4%	31.5%	N/A	21.4%	17.7%	22.4%	13.5%	14.4%
-2.6	-69.2	-51.3	35.7	106.5	N/A	-1.1%	-19.2%	-12.0%	7.0%	17.5%	N/A	N/A	53.0%	18.6%	19.7%	19.3%	N/A
-29.7	-64.7	-96.6	-29.0	2.0	59.0	-47.9%	-66.9%	-70.7%	-20.1%	0.9%	19.3%	N/A	56.0%	41.3%	5.4%	48.6%	43.0%
12.1	15.2	7.3	54.5	84.0	106.7	13.6%	10.7%	4.3%	27.1%	33.9%	35.1%	N/A	60.1%	21.3%	16.6%	23.2%	22.9%
33.5	45.5	58.5	72.9	90.7	113.7	27.7%	29.3%	32.4%	33.1%	33.6%	35.4%	N/A	28.2%	16.4%	22.0%	22.4%	19.0%
71.8	121.3	165.4	202.2	237.9	N/A	26.5%	36.4%	41.2%	43.5%	44.6%	N/A	N/A	23.1%	20.5%	15.8%	14.9%	N/A
14.3	30.0	42.6	43.0	46.0	55.0	14.2%	22.1%	28.0%	26.2%	24.0%	24.7%	N/A	34.9%	12.0%	7.8%	17.1%	16.1%
448.9	571.8	1,103.6	1,341.0	1,582.0	1,843.5	28.6%	28.9%	39.7%	40.9%	41.6%	42.1%	N/A	25.9%	40.4%	18.2%	15.9%	15.2%
46.2	62.9	266.0	384.8	518.7	621.8	4.4%	5.2%	18.2%	22.6%	26.2%	27.3%	N/A	17.4%	20.0%	16.4%	16.3%	15.1%
448.9	571.8	1,103.6	1,341.0	1,582.0	1,843.5	47.7%	51.6%	48.2%	52.6%	53.7%	54.1%	N/A	73.6%	41.3%	46.5%	53.3%	47.5%
77.8	81.2	156.3	207.1	240.8	289.0	27.1%	29.1%	32.0%	33.8%	35.3%	37.1%	N/A	42.5%	23.1%	20.8%	20.8%	19.0%
16.3	27.4	28.5	54.5	97.0	113.7	17.7%	20.3%	20.0%	27.1%	30.4%	31.2%	N/A	28.2%	17.7%	15.8%	15.9%	15.1%
3.1	5.4	7.8	24.0	30.0	55.0	4.7%	3.6%	4.9%	17.2%	22.3%	24.7%	N/A	22.4%	13.1%	7.8%	11.9%	11.8%
-29.7	-69.2	-96.6	-29.0	2.0	5.3	-47.9%	-66.9%	-70.7%	-20.1%	0.9%	15.0%	N/A	2.5%	0.2%	3.6%	6.0%	6.4%

Table 29. Construction of financials used in investment teaser presentation

	2021A	2022A	2023A	2024E	2025E	2026E
EV/EBITDA 75th Percentile:	N/A	N/A	38.4	21.7	18.7	15.0
EV/EBITDA Median:	N/A	N/A	24.5	16.2	14.2	11.0
Pre-money valuation (75th Percentile / "High Anchor"):	N/A	N/A	666.4	768.7	834.9	837.5
Pre-money valuation (Median / "Low Anchor"):	N/A	N/A	425.2	574.6	633.9	614.5
EBITDA Margin Used:	17.7%	20.3%	20.0%	33.8%	35.3%	37.1%
Revenue Growth Used:	N/A	28.2%	17.7%	20.8%	20.8%	19.0%
EBITDA	10.2	15.0	17.4	35.4	44.7	55.9
Revenue	57.5	73.7	86.7	104.8	126.6	150.7