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Analysis of Factors Influencing Startup Success in Sweden

Exploration of what factors influence the acquisition or IPO of startups funded by Venture Capital firms in Sweden[1]

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[1] ChatGPT has been used to formulate and explain certain parts of the texts from the sources.

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Abstract

In this thesis, the relationship between venture capital (VC) investments and startup success in Sweden is analysed. The selected startups have operated between 2010 and 2015, and have been funded by VC investments between 2010-2022. As a subgroup of private equity firms (PE), VCs support startups financially and strategically to expand companies.

Logistic and linear regression models have been conducted to analyse cross-sectional data obtained from 238 startups, which received funding from 10 specific VC firms in Sweden, encompassing a total of 256 investments in the selected startups. The key variables examined include the presence of serial founders, founders' educational backgrounds, sectors of the startups, and the nature of the VC firm (governmentally or privately funded). The dependent variable explains the startups' success through an initial public offering or acquisition.

Results indicate that the presence of serial founders significantly increases the likelihood of success, alongside factors such as revenue size and the startup founder's alma mater. Other variables, such as the startup sector and the nature of the VC firm, showed less consistent impact. These findings highlight the importance of experienced entrepreneurs in driving startup success and suggest that future research could incorporate additional variables or a time aspect through panel data to enhance predictive accuracy.

1. **Introduction**

This thesis aims to explain the factors that play a significant role in analysing startup success and venture capital (VC) investments in Sweden. The founders' academic backgrounds, their experience as serial entrepreneurs, and the sectors to which startups belong are key factors that affect startup success in previous research. As implied in Sunesson's (2009) research, academic connections could be a factor that increases shareholder returns for VC companies. Another factor, as suggested by Gompers, Kovner, Lerner, and Scharfstein (2006), is the presence of a serial founder in the startup. They state that most successful entrepreneurs attract more funding due to their previous experience. What sector the startup belongs to is also a factor to consider because specific sectors possess more growth potential than others. Zider (1998) suggests that the startups in the sectors that possess more potential become more attractive to investors.

VC investments provide several additional benefits apart from the financial aspect which influences the startups' routes of expansion. VCs help startups with management, industry connections, and strategic guidance, as emphasised by Hsu's (2014) and Press's (2018) research. Nevertheless, not all VC-backed companies succeed, and startup failure occurs frequently, which is the inability to return invested capital to stakeholders, according to Eisenmann (2021). The aim in this thesis is to understand what drives successful outcomes for the selected startups, where success implies shareholder returns through initial public offerings (IPO) and acquisitions. The central question in this thesis is: What factors lead to IPOs and acquisitions of VC-funded startups in Sweden?

2. **Background**

VC is a form of funding aimed at startup firms with growth potential, it is a subgroup of private equity (PE) and it distinguishes itself in a few ways. The funding type often occurs in stages from a pre-seed to late stage financing rounds where the aim is to develop the startup companies' products and scale operations, guiding the company to the market through an IPO or a sale of the company.

2.1 **Venture Capital**

VC investments are formed to finance startups that show potential for exponential growth. Investments are often made in exchange for equity and an active role in the startups' governance. They represent an important infusion of capital at an early stage in the lifecycle of a startup firm (Zider, 1998).

Venture capitalists are typically part of firms or entities that collect investments from various sources. The sources can vary but often include governmental entities and institutional investors, as well as wealthy individuals. VCs bet on the future success of the startups they invest in with returns realised through an IPO or a sale of the company (Metrick & Yasuda, 2011). Unlike traditional loans that require immediate repayment.

In order for the startups to take part in the venture capital process, an examination is conducted to assess the viability, market potential, and founders of the startup. Afterwards, the startup is presented with a term sheet that outlines the amount of capital to be invested, the subsequent equity stake and the basic terms and conditions. This phase outlines the expectations on both sides and sets the startup's valuation.

A reputable VC firm's involvement can significantly enhance a startup's credibility, which attracts further investments and opens doors to strategic opportunities. VCs provide startups with access to extensive networks of potential partners, customers, and industry experts. VCs offer mentorship and operational guidance by leveraging their expertise to steer startups toward exponential growth and scalability.

An insertion of capital can help startups to grow from early development phases into rapid expansion, and sometimes market dominance. By scaling operations, entering new markets, substantial hiring, and more research and development activities.

2.2 **Venture Capital in Sweden**

Sweden has rapidly emerged as one of the major European hubs for both the growth of VC firms and startups. VC-backed companies experience considerable growth effects with higher revenue growth rates compared to average small-cap companies that are not backed by VC-firms according to the Swedish Private Equity & Venture Capital Association's (SVCA, 2022) report of the economic footprint of Swedish VC and PE. Intuitively, the overall financial results for the portfolio firms improves when VCs invest in the firm. From a national standpoint, the SVCA-report shows that PE and VC investments have increased the GDP in Sweden by 3.5-4.7% permanently.

Moreover, Sweden's technology sector has garnered significant attention in recent years, with several specialised niches developing within the industry. Press suggests in Larsson's publication "The Rise and Development of Fintech" (2018) that the number of deals in the FinTech industry has increased significantly. Major investments in companies such as Klarna and iZettle highlights Sweden's dominance on the Nordic FinTech market.

2.3 **Accelerators**

Startup accelerators ("Accelerators") are specialised programs designed to fast-forward the development and success of ideas for early-stage startups (Cohen, S et al. 2019). The programs enable startups to work intensively on refining their product, strategy, and pitch to prepare for significant scaling or further investment rounds. The time period for the programs typically operate on a cohort basis for a fixed term (usually between three and six months). Providing a supportive framework, combining capital infusion, mentorship, and networking opportunities.

Startup accelerators, founded to address a gap between initial concept development or a minimum viable product (MVP) and market entry, have become essential to the entrepreneurial landscape. Some offer more targeted support and expertise in niche markets

or sectors, with the common objective of accelerating the growth of an idea to a unicorn and beyond.

An important part of the accelerator experience is connecting startups with potential investors, customers, and partners. It gives them a wide range of opportunities to network and gain extended value by offering them a place within a community of like-minded founders (Cohen, 2013).

Partners in the VC firms guide startups through mentorship programs by sharing their extensive experience as entrepreneurs and industry insiders. Advising the startup-entrepreneurs on key areas such as business strategy, product development, and market penetration. The mentorship provides startups with valuable tools and knowledge to guide them through the competitive marketplace. This comprehensive support is a key advantage of startup accelerators.

Accelerators offer the financial support needed to grow these ideas in exchange for equity. Usually, startups relinquish between 5-10% of their equity in the terms of engagement. Getting to this point is in most cases not easy, the selection into an accelerator is a competitive process that assesses the viability of the startup's MVP, the strength of the founding team, and the potential for growth and scalability, ensuring that only the most promising startups are admitted.

2.4 **Seed Table**

Transforming a concept into a viable product or service depends on an early infusion of capital to lay the groundwork for future growth. Startups transition from self-funding to interacting with angel investors, VCs, and accelerators. The first stages of financing for startups are called seed rounds.

In the early stages, funding is required to build the base stack of product development, market research, building a team and initial market entry efforts. The capital raised during this phase is generally lower than in later financing rounds, reflecting the higher risk associated with early-stage investments. The rounds are often divided into three stages: pre-seed, seed, and late, as suggested in Metrick's and Yasuda's report (2011). Investors in seed rounds typically

seek evidence of a startup's potential: a strong team, a viable business model, and a clear market opportunity.

The process of seeking funding asks the founders to present pitch decks, business plans and prototypes to share their vision and demonstrate their potential. It is then up to the investors to gather if an investment could be justified with the potential downside in mind. During the continued negotiations, the valuation and the percentage of equity are of utmost importance. Equity is a delicate question as large shareholding by founders sparks further insensitivity to grow the company. During this process, it also has to keep future rounds in mind and avoid the possibility of overly diluting its ownership stake.

When taking on the first round of capital as a startup, startups are not just looking out to gain as much money as possible, they are looking for a vote of confidence in the startup's team and vision. The investor's credibility sets the grounds for upcoming rounds and future growth prospects. Attracting a highly valued round with highly credible investors lends credibility in attracting further attention from the investment community and potential customers.

Touched upon before, seed investors as accelerators, angel investors and VCs bring valuable industry insights, mentorship and networking opportunities. Highly regarded by startups and could be a determinator in which company is allowed to invest. Since they can act as advisors, offering strategic guidance and helping navigate the initial challenges of starting a business. It is deemed crucial to pick the right one, in setting the trajectory of the startup.

2.5 **Crowdfunding**

Crowdfunding has become an important method for funding ventures across different sectors, including commercial, artistic, and cultural projects. It allows founders to gather financial support from many individuals online, bypassing traditional financial institutions. Schwienbacher and Larralde (2010) describe crowdfunding as “an open call, essentially through the Internet, for the provision of financial resources either in the form of donation or in exchange for some form of reward and/or voting rights in order to support initiatives for specific purposes.” However, this definition may not cover all forms of crowdfunding, such as internet-based peer-to-peer lending (Lin and Viswanathan, 2013).

Mollick (2014) highlights crowdfunding's role in funding a wide range of projects, from small-scale events to significant entrepreneurial projects. Crowdfunded projects often aim to raise a modest amount of capital, typically under $1,000, often funded by friends and family. Nevertheless, crowdfunding is increasingly seen as a source of seed capital for entrepreneurs (Schwienbacher and Larralde, 2010).

Crowdfunding serves many purposes; raising capital, demonstrating product demand, marketing, and creating ecosystems of complementary products. The relationship between funders and founders varies. Ranging from patronage models, where funders act as philanthropists, to reward-based models, where funders receive early access to products, and investor models, where funders gain equity stakes or profit shares.

3. **Previous research**

The impact of venture capital on startup growth has been extensively studied in previous literature globally. By comparing US findings with Swedish data, some key factors could be uncovered that affect the Swedish VC and startup landscape differently. Hsu's (2014) research focuses on what entrepreneurs sacrifice for VC affiliation, emphasising that VC investments are crucial in shaping startup trajectories by providing financial resources, strategic guidance, access to networks, and market credibility. Hsu also explores the complexities of shared VC backing, highlighting the potential risks of favouritism and conflict of interest yet acknowledging the significant benefits of strategic alliances, innovation spillovers, and improved startup performance.

Kaplan and Stromberg (2003) analyse the pivotal roles of control, cash flow rights, and their dynamic impact on the relationship between entrepreneurs and investors. Their findings indicate that control rights are contingent upon startup performance, which in turn influences the balance of power.

González-Uribe (2020) investigates the dynamics of innovation resource exchange within VC portfolios, revealing enhanced exchanges post-VC investment. VCs' strategic positioning, not only as financiers but also as enablers of innovation synergy, highlights their potential to achieve higher innovation returns within their portfolios and their role in improving the value of investments.

There are multiple aspects to consider when analysing the success of startups backed by VC that go beyond merely the financial aspects. While traditional views often revolve around success being caused by external factors such as general market growth or other similar conditions, research by Gompers, Kovner, Lerner and Scharfstein (2006) challenges this view and highlights the importance of skill, experience, and strategic partnerships for entrepreneurs. They suggest that venture capital firms that strategically focus on serial entrepreneurs yield higher returns, indicating a selective allocation strategy's effectiveness.

Serial founders, entrepreneurs who have started prior businesses, serve as a predictor of future success (Gompers et al., 2006). This emphasises the accumulation of certain skills and understandings achieved by previous ventures, aligning with Schumpeter's idea of entrepreneurs being similar to innovators rather than being risk carriers. Additionally, the impact of VC firms is profound for entrepreneurs who lack experience, because they provide resources such as guidance, industry connections and support in management. All features that are vital for entrepreneurs to make their startups grow.

Similarly, Hochberg, Ljunqvist, and Lu (2006) find that the added value of top-tier VC firms decreases when entrepreneurs have a proven success record. This implies that for skilled entrepreneurs, the advantages of VC are substitutive rather than complementary, as previous successes serve as a public signal of quality, reducing the need for VC firms' typical value-added services. Sorensen (2007) and Kaplan and Schoar (2005) further demonstrate that experienced VC firms significantly boost the likelihood of venture successes, extending beyond mere capital provision.

In "Why Startups Fail," Eisenmann (2021) defines failure not merely as ceasing operations but as failing to return invested capital to stakeholders, particularly early investors. The author categorises failure into three scenarios: "False Starts", where companies rush to market without adequate market validation; "Speed Traps", where rapid scaling depletes resources and leads to mismanagement; and "Help Wanted", highlighting the challenges of acquiring the right talent during critical growth phases.

Press suggests in Larsson's publication (2018) that venture capital has been fundamental to the success of Sweden's fintech industry, providing not only financial support but also

helping shape the strategic development of startups. This support has enabled these companies to scale operations, foster continuous innovation, and expand internationally. Moreover, Fraser-Sampson (2007) notes that venture capital firms typically target businesses in high-growth industries such as IT, telecom, life sciences, biotech, and cleantech. Sorenson and Stuart (1999) add that these firms often prefer syndicated investments, which involve collaborating with other venture capitalists to mitigate financial and operational risks. This strategy of co-investing allows them to distribute the risks and benefits associated with high-growth potential investments.

Sunesson's (2009) research underscores the crucial role that academic networks play in the venture capital sector, particularly how shared educational backgrounds between entrepreneurs and venture capitalists can substantially increase the chances of successful partnerships. His study indicates that these connections improve the likelihood of forming partnerships by 57% and raise the likelihood that the investment will result in an IPO or acquisition increase by 42%.

4. **Methodology**

In this thesis, several regressions have been performed by using cross-sectional data acquired to investigate the dynamics between VC investments and startup success in Sweden. The regressions that were computed capture the cross-sectional differences among startups through various variables.

4.1 **Data Collection**

The financial and numerical data obtained for the portfolio companies originates from multiple sources including Orbis, Retriever Business, Value8, Capital IQ, and Bloomberg. The qualitative data was gathered from these sources as well as from platforms such as Crunchbase, Dealroom, and LinkedIn. The data for this thesis originates from a diverse array of sources, including both sources that require membership as well as sources that are open to the public.

The focus was to analyse startups that had operations between 2010 and 2015 and that received funding from VC firms between the years 2010 and 2022. The selected VC firms are *Almi Invest, Bonnier Capital, EQT Ventures, Verdane, Kinnevik, Creandum, Inventure,*

Northzone, Zenith Venture Capital and *Industrifonden*. Financial data was collected for each startup, including revenue, equity capital, and short-term and long-term liabilities to get an overview over the startups. The qualitative data collected for the companies was the presence of serial founders, if the founder attended one of the top-tier universities in the world (with focus on bachelor's degree), what sector each startup belongs to and if the VC firm is government sponsored. Regression models were conducted to analyse cross-sectional data obtained from 238 startups which received funding from the selected VC firms. In total, the VC firms made 256 investments in the selected startups.

4.2 **Encoding the variables**

4.2.1 **Independent variables**

Sonesson's (2009) method was used to encode the explanatory variables *SerialFounder* and *University*. The data was primarily collected from LinkedIn, Crunchbase, and Retriever Business to determine if the company founders had started previous companies and whether they attended a top-tier global university or not. Moreover, dummy variables were introduced with this information where 1 would represent if the founder is serial and if the founder has attended any of the global top 100 universities, 0 represents the opposite. The variables *Government*, *Sector* and *Revenue* were encoded in a similar fashion. *Government* equals 1 if the VC firm is governmental and 0 if not, *Sector* is 1 when the company belongs to the computer software industry, and 0 otherwise (due to most of the selected startups being in the computer software industry), and *Revenue* equals 1 if the company has a revenue over 100 million Swedish crowns (100,000,000 SEK).

When encoding dummy variables of the VC firms for the linear OLS regressions (ordinary least squares), the VC firm with the highest number of occurrences was left out which makes one of the VC firms take on the value 0. One category is left out to prevent multicollinearity, also known as a "dummy variable trap". Moreover, the reference category should have a large number of observations to provide a steady baseline category. Each VC firm represents the investor of a startup, for each invested company, that VC firm will have a dummy encoded 1, while all else holds a value of zero. In table 2, Verdane was left out as the reference category, and in table 4 Almi Invest was left out. The VC-firm dummy variables are represented by the names of the VC firms in the regressions. Lastly, dummy variables for the universities were

made in the exact same way as the VC firms, which can be found in table 5 and 6 in appendix.

4.2.2 **Dependent variable**

The dependent variable in all regressions is *IPO/Acquisition*, and has consistently served as the dependent variable throughout the analysis. The variable is a dummy variable, where a value of 1 indicates that the portfolio company has undergone an IPO or been acquired by a VC firm. This variable has been commonly utilised in past venture capital research. For instance, Gompers and Lerner, as well as Hochberg, Ljungqvist, and Lu, have defined their variables in this manner. The variable *IPO/Acquisition* helps identify the key factors influencing shareholder returns following an IPO or acquisition among the selected companies. The data for the dependent variable was collected from Bloomberg and Orbis by searching for the chosen companies and their M&A Deals in the database.

4.3 **Regression model**

Due to the dependent variable being a dummy variable, linear regressions are generally not the ordinary regression model to utilise since the dependent variable is categorical and binary. Instead, one needs to implement another regression model called logit or logistic regression. However, linear regressions have been conducted as well to complement the logit regressions in this thesis. The basic formula for the cross-sectional logistic model is presented below.

$$P(IPO/Acquisition = k|X) = \frac{e^{\hat{Y}}}{1+e^{\hat{Y}}}$$

$$\hat{Y} = (\beta_0 + \beta_1 \cdot Government + \beta_2 \cdot Revenue + \beta_3 \cdot SerialFounder + \\ + \beta_4 \cdot University + \beta_5 \cdot Sector + \epsilon)$$

Where $P(IPO/Acquisition = k|X)$ represents the probability of the dependent variable taking on the value k, given the explanatory variables X. Whereas $k = 0$ represents the event of no IPO or acquisition and $k = 1$ represents the event of an IPO or acquisition. The beta values (□) are the coefficients estimated in the model, and ϵ represent the error term. In the model, the beta values represent the log-odds of the baseline category ($P(IPO/Acquisition = 0)$), when all other explanatory variables are equal to zero.

Each coefficient in the logit regressions represents the change in log-odds of the dependent variable for a single unit change in the corresponding independent variable while all other variables are held constant. In this model, each unit increase in one of the explanatory variables corresponds to an increase or decrease in the log-odds of the dependent variable *IPO/Acquisition*. This trend remains consistent across all independent variables included in the logit regressions However, log-odds are complicated to analyse in logistic regressions because they are not as intuitive as probabilities. This makes the direct interpretation of log-odds challenging due to their nonlinear relationship with probabilities. To simplify the interpretation, the logistic function to convert log-odds back into probabilities is employed under the (%)-column in all logistic regressions in appendix. The probabilities map linear combinations of the explanatory variables to a probability between 0 and 1. The formula for the conversion is presented below.

$$probability = \frac{exp(logit)}{1+exp(logit)}$$

The logit model is utilised in this thesis due to the nature of the model where the logistic cumulative distribution is analysed. Another model that could be used is the probit model, which analyses the cumulative distribution function of the standard normal. The logit model presents changes in the log-odds, while the probit model represents changes in standard deviations. However, logit is often preferred over probit if there are many dummy variables in the dataset, especially if the dependent variable is a dummy variable. Furthermore, linear regressions through OLS are employed which estimates the linear probability model. This model interprets the coefficients as changes in the probability of the dependent variable being 1. It serves as a valuable complementary analysis tool to the logistic regressions, while the logit models are more precise due to the dependent variable being a categorical and binary variable.

5. **Results**

5.1 **Cross-Sectional Data Regressions**

In the analysis of cross-sectional data, the regressions were solely run during the year 2022. This enables an investigation of the relationships between variables without accounting for changes over time. The primary goal of these regressions is to determine the effect of various

explanatory variables on the likelihood of a firm being acquired or undergoing an IPO, with the dependent variable being *IPO/Acquisition*.

The various regressions employed had different numbers of observations. The first regressions, presented in tables 1 and 2 in the appendix, only includes the startups that were not backed by Almi Ventures and Industrifonden. This is because Almi Ventures and Industrifonden are governmentally funded VC firms that account for approximately 67% of all the investments in the selected startups.

The first regression performed, presented in table 1 in the appendix, was a regression with the formula given in section 3.3, but without the variable *Government*, because none of the governmentally funded VC firms were included in these regressions. The interpretation of the probabilities in Table 1 can be exemplified as follows: when all other variables are held constant, if a company's revenue exceeds 100 million SEK (Swedish crowns), indicated by the dummy variable *Revenue* being 1, the probability of that company being acquired or going through an IPO is 78.3%. The variables *University* and *Revenue* in table 1 are significant, and the others show no significance in their p-values. The non-significant variables show that they may not significantly impact *IPO/Acquisition*. The model fit of table 1 is moderately adequate with a Pseudo R-squared of 0.181 which suggests that the model only explains a moderate portion of the total variation. The adjusted R-squared is the same as Pseudo R-squared but adjusted for the number of explanatory variables in the model, in table 1 the adjusted R-squared equals 0.085. The low adjusted R-squared in table 1 can be explained by the fact that there are quite few observations to perform a logit regression with the dataset.

In table 2, two linear regressions were performed, one without and one with all the dummy variables for the VC firms. Some of these variables showed significance while others did not. *Bonnier* had a p-value higher than 0.05 but lower than 0.1, showing some significance. The only variable of the VC firms that showed a p-value below 0.05 was *Inventure*. In addition to this, the dummy variables *University* and *Revenue* had significant p-values in both regressions, while *SerialFounder* had a somewhat significant p-value in the second regression below 0.10. All other variables had non-significant p-values which suggests that they may not have a significant impact on the dependent variable *IPO/Acquisition* while all other variables are held constant. The R-squared metrics were improved in the regressions in table 2 with a

R-squared of 0.206 without the VC firms included and 0.281 when adding the VC firms. The adjusted R-squared went from 0.165 in the first regression to 0.168 in the second.

In table 3 and 4, the entire dataset was analysed with all of the startups, including those backed by Almi Invest and Industrifonden. In all regressions, the most significant variables were *SerialFounder* and *Revenue*. When adding the variables for the VC firms in the OLS regression, none of the firm variables showed significance except for *Inventure* which had a significant p-value of exactly 0.05. The Pseudo R-squared in table 3 is relatively low and equals 0.052 with an adjusted R-squared of 0.014. The R-squared in table 4 is also low, 0.063 without the VC firms and 0.088 without them, and with an adjusted R-squared of 0.045 and 0.039 respectively. This indicates that the fit of the model is not the best and that there is potential for improvement in the dataset.

Tables 5 and 6 present regressions conducted on a subset of the dataset comprising founders exclusively from the largest schools in Sweden. In both the logit and OLS regressions, the predictors with a p-value under 0.05 were the variables for the *University of Gothenburg*, *KTH Royal Institute of Technology*, and Linköping University, while *Revenue* was the only other variable with a p-value under 0.05. The pseudo R-squared in the logit model and the R-squared in the OLS are very low for these models and equal 0.136, while the adjusted R-squared is a negative of -0.021. The linear model of the regression shows an R-squared of 0.15, and the adjusted R-squared equals 0.076.

5.2 **Descriptive Data**

The descriptive statistics of the dataset provides detail into the general differences between governmental funded investment firms as opposed to private. By highlighting key metrics such as means, standard errors, and correlations it also simplifies and summarises the dataset, which makes it easier to interpret and understand.

Focusing only on universities reveals that governmentally funded VC firms have a broader scope, encompassing a diverse array of Swedish universities and leading international institutions. The descriptive data, in section 7.1 of appendix, indicates that in about half of the cases, there is a presence of serial founders. Previous research suggests that either the founder

does not require the status of a private firm or government-funded firms strategically invest in serial founders with the assumption that they offer the highest value.

5.3 **Analysis and Discussion**

The results showed that serial founders were expected to significantly impact the selected startups' success probabilities. Prior literature has shown that serial founders have a higher likelihood of succeeding. The descriptive statistics in this thesis indicate that half of the selected companies in the full dataset had serial founders, which might explain why VCs selectively choose serial founders, believing they can achieve better success rates. It could also suggest that the dataset includes investments from top-tier VCs in Sweden. These VCs can be more selective due to the inherent value they see in these types of founders. The data might also indicate that the dataset fails to include previous startups by serial founders due to other selection criteria. The full dataset, presented in table 3 and 4, indicates that *Revenue* is the most significant variable. It is the primary predictor in explaining why a company has gone to market in either fashion, as it has the highest significance in the tests. It increases the probability of "success" by 78.3% in the small dataset presented in table 1 and 2, and 74.3% in the large dataset presented in table 3 and 4. The variable *Revenue*, as a significant factor in this thesis's analysis, is crucial because companies need to be of a certain size to look attractive as IPO and acquisition candidates. Apart from *Revenue*, the variable for serial founders was the most significant factor in the large dataset, reinforcing the thesis. In the logit regression, serial founders appear to increase the likelihood of a company undergoing an IPO or being acquired by 34.8%, as presented in table 3.

The small dataset, presented in table 1 and 2, is the dataset with the best model fit of all regressions, which is concluded by observing the R-squared values in both the logistic and linear model (OLS). These regressions suggest that the variable *University* has a significant effect on the dependent variable in the regressions. It does not really explain a large portion of the acquisition or IPO of a startup by looking at the probability, 17.5%, but it is a significant variable through all regressions in table 1 and 2. This might suggest that the occurrence of an IPO or acquisition is higher when the founder has a top-tier educational background, exclusively when the VC firm backing the startup is non-governmental in its nature. When the VC firms are included in the regressions, the variable for serial founders becomes significant as well, with a p-value below 0.10, which emphasises the thesis further.

Earlier studies on the effects of social networks and shared academic backgrounds indicated that these factors would increase the probability of a successful startup. The hypothesis was that schools in Stockholm would have a higher probability of success due to their location proximity to potential customers and venture capital firms. Due to their historical success with startups like Spotify, Klarna, Truecaller, and iZettle, the analysis also considered that the Stockholm School of Economics and KTH Royal Institute of Technology would have the highest probability of success. The results of this thesis do not entirely support this. Instead the results emphasise backgrounds from KTH Royal Institute of Technology, University of Gothenburg and Linköping University. This might be attributed to most startups in our research being related to computer software, which might require a founder's prior understanding of the subject. This suggests that outsourcing R&D in early-stage startups might not be suitable for success.

The descriptive statistics of the dataset show that only 39.1% of the investments are specified as investments in startups that belong to the “Computer Software”-industry, provided by the variable *Sector*. This shows some issues with the encoding and specification of what a “Computer Software” startup is. In this thesis, companies whose primary operations are related to providing computer software solutions for mobile devices or desktops are generalised as Computer Software companies. Future research could explore a more specific dataset of subgroups within sectors to enhance the definition of fintech, medtech, etc. Given the number of observations in this report, such a regression would likely not yield significant results. The findings of this thesis on the sectors of startups explain which companies succeed. Intuitively and historically, this aligns with the increase in IPOs of technology-focused companies over the last decade.

Capital requirements in the technology sector have decreased, especially for SaaS startups, during the time span considered in this thesis. Factors such as maturing technology, the availability of open-source resources, and the improvement of artificial intelligence can explain this decline. Within the technology industry, there are subcategories in all major sectors. Decreased costs due to improved data storage solutions and efficient financial and management systems are notable aspects. The focus is shifting towards computing for AI models, as the cost of computation is still high. Similar to the introduction of the internet and

Cisco's lead role as a supplier of network equipment in the mid-1990s, which eventually led to increased competition and price reductions over time.

This thesis's preliminary hypothesis envisioned that the significance of venture capital firms would be high, based on the idea that VC firms that do not create positive value for shareholders over time do not remain attractive to investors. The aim was to take a broader perspective over time to allow startups to grow into IPO and acquisition candidates. Hence, selected firms have therefore been active during that period, potentially excluding companies that existed between 2010-2022 but did not have continuing operations as of the end of 2022. This could reflect a potential flaw in this thesis's selection of firms. By including VC firms that have made investments but failed to return value would have provided significant insight into the role of venture capital firms. Representing a potential avenue for further research in the developing field of VC in Sweden.

5.4 **Future Research**

This thesis provides a descriptive deep dive into the factors affecting the probability of a VC-backed startup achieving an IPO or acquisition in Sweden. A comparison is conducted between the Swedish and the US VC market by investigating whether the same conditions in the American VC landscape produce similar outcomes in Sweden. It would be valuable for further research to explore the significant factors identified in this thesis. For instance, as implied by Sunesson (2009), American startups show increased success depending on the founders' educational background. Therefore, future studies in Sweden could explore the impact of startup accelerators and alumni networks associated with specific universities and educational institutions.

Furthermore, it would be interesting to examine how the choice of bachelor's and academic degrees affects the ability to attract venture capital and achieve success. For example, can a non-technical degree form a tech startup, or are the obstacles too significant? It could provide valuable insights exploring this by looking at the benefits of diverse academic backgrounds versus shared backgrounds in a startup team.

Exploring what backgrounds that favour startup success in general could be worthwhile as well. Can the optimal path be to drop out of school, work in consulting to gain broad

knowledge, have industry-specific experience, or succeed without any prior experience? It could be beneficial to have little or no knowledge of specific sectors according to history by offering a new perspective when creating new SaaS solutions. Examples of this include Airbnb in real estate, Uber in taxi services, and DoorDash in food delivery.

With the rise of startup accelerators, one could explore their impact on future investment prospects, talent acquisition, and customer outreach success. For instance, by looking at how VC firms view participation in startup accelerators and how it affects term sheets. Ultimately, how much weight does a startup accelerator carry? Is it merely a trend, a money pit, or something more significant? It may align with previous research that highlights their impact on innovation and status. Moreover, the relationships established with fellow founders from similar or earlier stages could be highly valuable as potential customers, collaborators, and deal connectors, which deserves further investigation.

Crowdfunding has become a more popular way of financing ventures. It could be insightful to explore which sectors utilise this type of financing and how it impacts success or future funding rounds. As both crowdfunding and angel investors typically provide smaller amounts of capital but offer additional benefits, comparing these two could be another area of interest to study. Angel investors often serve as essential advisors and secure equity stakes at lower valuations since they invest in the early stages of startups. On the other hand, crowdfunding provides funding for the initial stages of growth without requiring the startup to give up ownership stakes and allows startups to test the interest of the target market. Thereby, backers contribute money in exchange for the promise of receiving the product or service once it has been launched.

6. **Conclusion**

This thesis provides insights into the VC landscape of Sweden by exploring the dynamics between VC investments and startup success. Some key findings emerged from the results of the regressions, which provide insights into the predictors that impact startup success in Sweden through IPO or acquisition. The results from this thesis emphasise the importance of serial founders, founders' universities and revenue size in startups, which adds to the literature on VC and entrepreneurship in Sweden.

Firstly, the presence of serial founders impacts startup performance by 34.8% when examining the full dataset of this thesis. This result highlights the importance of experience that is brought by serial entrepreneurs. Secondly, the revenue size of the startup is a robust predictor of startup success, indicating that companies with higher revenues attract more investors. This is intuitive, given that companies must reach a certain size threshold to become appealing candidates for IPOs or acquisitions.

Moreover, although the significance of variables such as VC firms and founders' universities varied across different regressions, they provide directions for further research. Future investigation in these factors could offer deeper insights into VC investment strategies and the role of educational background in startup success.

Additional factors influencing VC investment decisions could be examined in future research. Factors that could be explored further are the impact of startup accelerators and alumni networks. Examining whether different academic backgrounds have an impact on VC attraction and startup success could be valuable. Additionally, it could deepen insights into the factors that generate startup success by exploring the optimal backgrounds for serial founders. Lastly, studying the effects of crowdfunding compared to angel investing could offer new perspectives on early-stage venture funding.

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8. **Appendix**

8.1 **Descriptive Statistics**

8.1.1 Descriptive Overview of Independent Variables

	#	Mean	Std. Error
SerialFounder	129	0.504	0.031
University	56	0.219	0.026
IPO/ Acquisition	80	0.313	0.029
Government	76	0.297	0.029
Revenue	65	0.254	0.027
Sector	100	0.391	0.031

8.1.2 Distribution of VC Investments and IPO/Acquisitions

	# Investments	# IPO/ Acquistions	Mean
ZenithVC	6	3	0.500
Verdane	30	12	0.400
Northzone	13	2	0.154
Kinnevik	3	1	0.333
Inventure	4	0	0.000
Industrifonden	65	24	0.369
EQT Ventures	8	1	0.125
Creandum	9	3	0.333
Bonnier	9	2	0.167
Almi Invest	109	29	0.266

8.1.3 Correlation Matrix

	SerialFounder	University	IPO/ Acquisition	Government	Revenue	Sector
SerialFounder	1					
University	0.121	1				
IPO/ Acquisition	-0.093	-0.017	1			
Government	-0.023	-0.063	0.097	1		
Revenue	0.139	0.125	0.188	0.001	1	
Sector	0.206	0.042	-0.059	-0.010	-0.043	1

8.2 **Cross-Sectional Data Regressions**

8.2.1 Table 1

Logit	1	
Independent Variables	p-value	(%)
const	0.648	43.4
SerialFounder	0.190	32.4
University	0.013 **	17.5
Revenue	0.027 **	78.3
Sector	0.253	33.9
Observations	82	
Pseduo R-Squared	0.181	
Adj. R-Squared	0.085	

8.2.2 Table 2

OLS	1	2
Independent Variables	p-value	p-value
const	0.000	0.001
SerialFounder	0.142	0.065 *
University	0.011 **	0.005 ***
Revenue	0.028 **	0.029 **
Sector	0.267 *	0.518
Bonnier		0.562
Creandum		0.463
EQT Ventures		0.688
Inventure		0.152
Kinnevik		0.952
Northzone		0.406
Verdane		0.132
Observations	82	82
R-Squared	0.206	0.281
Adj. R-Squared	0.165	0.168

8.2.3 Table 3

Logit	1	
Independent Variables	p-value	(%)
const	0.046	31.9
SerialFounder	0.034 **	34.8
University	0.198	39.5
Government	0.648	53.9
Revenue	0.002 ***	74.3
Sector	0.639	46.5
Observations	256	
Pseduo R-Squared	0.052	
Adj. R-Squared	0.014	

8.2.4 Table 4

OLS	1	2
Independent Variables	p-value	p-value
const	0.000	0.004
SerialFounder	0.034 **	0.026 **
University	0.203	0.168
Revenue	0.002 ***	0.004 ***
Sector	0.689	0.873
Government	0.636	
Bonnier		0.538
Creandum		0.788
EQT Ventures		0.394
Industrifonden		0.330
Inventure		0.150
Kinnevik		0.831
Northzone		0.650
Verdane		0.686
ZenithVC		0.215
Observations	256	256
R-Squared	0.063	0.088
Adj. R-Squared	0.045	0.039

8.2.5 Table 5

Logit	1	
Independent Variables	p-value	(%)
const	0.864	46.1
SerialFounder	0.309	38.1
Government	0.390	62.2
Revenue	0.016 **	80.7
Sector	0.941	50.8
University of Gothenburg	0.023 **	11.0
KTH Royal Institute of Technology	0.013 **	9.8
Linköping University	0.027 **	9.4
Lund University	0.265	29.3
Stockholm School of Economics	0.271	24.9
Stockholm University	0.351	30.1
Observations	121	
Pseduo R-Squared	0.136	
Adj. R-Squared	-0.021	

8.2.6 Table 6

OLS	1	
Independent Variables	p-value	
const	0.864	
SerialFounder	0.309	
Government	0.390	
Revenue	0.016	**
Sector	0.941	
University of Gothenburg	0.023	**
KTH Royal Institute of Technology	0.013	**
Linköping University	0.027	**
Lund University	0.265	
Stockholm School of Economics	0.271	
Stockholm University	0.351	
Observations	121	
R-Squared	0.136	
Adj. R-Squared	-0.021	