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SCHOOL OF BUSINESS, ECONOMICS AND LAW

Master thesis in knowledge-based entrepreneurship

**Entrepreneurial behaviour after financing:
Angel investment, crowdfunding and ICOs**

Adam Chasourakis and Thomas Lundgren

Supervisor: Astrid Heidemann Lassen and Ryan Rumble

Course coordinator: Olof Zaring

Abstract

Entrepreneurial behaviour and traits are treated as concepts that have almost a static effect on choices and firm performance. The literature in the field of entrepreneurship suggests that such traits have a strong connection with success, performance and the business itself. A firm has different life cycle stages, with receiving its first external financing being of great importance. Receiving external financing may have a big impact on the entrepreneur as a person, especially when young and inexperienced entrepreneurs are concerned, affecting psychological traits such as confidence, risk propensity, and more. This thesis examines and shows that entrepreneurial behaviour does change during the financing moment. Different types of financing (ICO, angel investing, crowdfunding), as well as the financing itself, were shown to have an impact on the entrepreneurial behaviour. Thus, as several other studies suggest that entrepreneurial behaviour affects performance, the financing will have an impact on expected future performance.

Keywords: entrepreneurial behaviour, crowdfunding, initial coin offering, angel investors, confidence, risk propensity, conscientiousness, openness to experience

Foreword

The following text in the foreword section is a reflection on how the experience of writing our master thesis was.

To begin with, we want to describe the nature of our teamwork. We have worked together before in different projects during these two years in our program and have developed a functional way to collaborate. Although the norm is to divide the work in student's projects, we have always found it more effective, efficient and even fun to work together on the same topics instead of dividing the work. Thus, since the first day we decided to work on our thesis together, we have been meeting every day in the university and did so until the very end.

The first two months of writing our thesis was difficult, we didn't know exactly how to formulate our research questions, how to gather and analyse our data and in general how to approach the literature and methodology. Eventually, with the help of our supervisors, we managed to have a clearer picture on what we wanted to research and how to proceed.

We faced many challenges during those months of working on our thesis, but the main two challenges had to do with the literature review and the collection of our empirical data. In the very early stages of researching of the existing literature, we realised that there wasn't any previous research on how behaviour and psychological traits are affected by financing. This was a both positive and negative surprise to us. Positive in the sense that we have identified a literature gap that we wanted to do our research upon and negative because we couldn't find much previous research to back our research on. The second big challenge was finding our interviewees. We were looking for start-ups that had specific financing types and we had therefore to look outside Sweden as well. Including the fact that it took a lot of effort to find companies that fitted our criteria, it was also a challenge to come in contact with the founders and convince them to be part of our project.

Lastly, we want to mention what we have learned through this experience. We discussed about it and concluded that working on our thesis gave us a lot of tools and knowledge on how to conduct an academic research as well as how to effectively plan and structure a case that seems like a mountain of work in the beginning. We believe that this knowledge and experience will help us in the future to plan, execute and solve problems and situations that need effective and professional approach.

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1 Introduction

1.1 Background

Entrepreneurial behaviour is a well-established field within entrepreneurial theory; how entrepreneurial behaviour affects ventures as well as factors that affect entrepreneurial behaviour and as a result performance. Studies have been done to evaluate how different personal characteristics affect performance like openness to experience and conscientiousness (Zhao et al. 2010). There is however no literature on how entrepreneurial behaviour is affected at the moment of financing, or other important moments in a firm's life cycle. Since obtaining financing changes the dynamics and the stage a firm goes through, it follows that it is probable that the entrepreneur's feelings toward their respective firms changes. Financing could cause an entrepreneur to feel that goals are achieved, and good times are ahead - or that the obtained financing fosters a pressing need to perform in relation to new expectations. Regardless of which behavioural changes occur, they can have significant implications for the future of the firm, based on existing theory on entrepreneurial behaviour and its effect on performance. In this thesis, a model for the entrepreneur's behaviour is created based on the literature review and through analytic induction of the results. The aim is to examine how the change to entrepreneurial behaviour is affected at the moment of financing, which as a result affects performance, as shown in Figure 1. This means that while the choice of financing method is an expression of entrepreneurial behaviour, that choice is not the behaviour of study since the subsequent behavioural changes as a result of that choice cannot change the financing method once it has been chosen.



Figure 1: Entrepreneurial causation proposition

Further, financing is known to bring benefits to performance that are not connected to entrepreneurial behaviour. For instance, buffer capital provides a host of performance related benefits not directly connected to entrepreneurial behaviour, like enabling capital intensive strategies and surviving periods of low performance. This behoves that effects to performance from financing grounded in theory is accounted for as much as possible in the

analysis. There are also differences and similarities between the financing types that could lead to different behavioural outcomes.

Different financing sources have different implications and outcomes for both investors and entrepreneurs. This study focuses on three financing methods available to early stage firms. These three are angel investors, crowdfunding (specifically focused on the equity type) and initial coin offerings (ICOs). Angel investors tend to bring important expertise into early stage startups, but their role as a guide can make them question the entrepreneur's decisions, which can in the worst case break apart their relation (Collewaert, 2012). Crowdfunding and ICOs on the other hand are two new methods that emerged from the widespread use of Internet and the phenomenon of cryptocurrencies. The main aspect of these methods which differentiate them from angel investors is that they are funded by many investors rather than a few informal investors. ICOs are different from crowdfunds in that they are unbound by platforms and the investment structure is customizable, providing different incentives and implications in between different ICOs.

This thesis thus covers two interesting, coalescing topics: How is the entrepreneurial behaviour affected at the moment of financing, and do different financing types with their different implications affect entrepreneurs differently? These questions are delved into through a qualitative study with six interviews, with two interviews each financing method. The results from these studies are then evaluated through analytic induction. As there is limited previous research done on how the entrepreneurial behaviour is affected at the financing moment, this thesis provides insights into a new field of research into entrepreneurial behaviour.

2 Theory

2.1 Early stage financing

In this chapter, financing options are discussed. Quite a few of the options are in reality not available for an early stage company. Early stage companies usually need to find multiple sources of financing. The founder's equity comes from their own financial resources, and some may obtain further finance from their personal networks. Beyond that, governmental start-up funds or loans may be applicable; these can cover some of the costs. However, to be able to grow from an early stage, or funnel finance, into a costly research project for a new concept, entrepreneurs will typically have to find external funding. In exchange for that funding, they will have to yield equity stakes in the firm, giving up ownership over a portion of the firm (Morrissette, 2007). The equity investments are the investor types of focus in this thesis, but other finance sources are also briefly discussed to explain their role, including equity investments normally unavailable to early stage companies.

Small and medium businesses have since the 90s been seen as a main source of economic growth in most economic developed countries. When established businesses are concerned, there are many various reasons that can explain the failure and discontinuation of the venture. Reasons can be such as use of an improper business model, lack of a mission and strategic vision, poor product offerings, no differentiation or the inability to adapt to a new social/technological/economic environment. But when it comes to the reasons why new entrepreneurial ventures don't ever get the chance to develop, or pass beyond the stage of being an early stage company, this is largely a matter of financing being absent (Manchanda, 2014). At such early stages, businesses require access to external capital sources to achieve the first milestones such as building a prototype, enact marketing campaigns or expand the business. Therefore a big proportion of businesses cannot make it beyond early stages of business development, because they do not have access to external capital (Bachler and Guild, 1996). Entrepreneurial ventures that are in the early stage usually have different financial needs when compared to established businesses. The business still suffers from liability of newness and the early stage is usually characterised by needs in capital that will be used for the product development, applications for patents and trademarks, market analysis, creating prototypes and setting up business partner relationships. Usually at this point, businesses that are still in the early stage, have not started with any operational and commercial processes and the main focus is on how and where to turn to find the required

capital needed to transform the business idea into a successful commercial company (Bachler and Guild, 1996).

A common characteristic of the ventures that are in the early stage just mentioned is the lack of tangible resources. Typically, business concepts in this stage begin their adventure with the entrepreneur's idea and confidence on it, the team and finally business model if it exists. With only such intangible assets, the entrepreneurs seek to find external capital in various formal financial institutions but because of the lack of tangible collateral, many financial institutions (especially lending institutions such as banks) do not want to take the risk to finance a venture without assets or a commercial history or brand. The next choice that comes to an entrepreneur's mind is seeking venture capital; however, unfortunately the majority of venture capitalists are only willing to invest in ventures in a later stage of development, thus not in the early phase (Roberts, 1991).

Financing methods that fit with the early stage of ventures were the main focus in this study; these are angel investors, crowdfunding, and as of 2017, initial coin offerings (ICO).

2.2 Early stage financing options

2.2.1 Angel Investors

Angel investors are sometimes called informal investors. The definition of angel investors is that they are wealthy individuals that offer funds for an early stage company (Morrissette, 2007). Angel investors themselves tend to exhibit behavioural traits that shape their availability to prospect entrepreneurs. They tend to invest in their domains of experience, known as industry angels, which means that they invest in what they know and have a network within. In doing so, they provide an important source of knowledge and expertise for the entrepreneur they fund, and they tend to be involved with the project either through meeting with the entrepreneur on a regular basis or working there. Angels are also not just a phenomenon limited to entrepreneurial clusters or densely urbanized areas; they exist everywhere. Their investment criteria's are based upon the perceived qualities of the entrepreneur and their idea. Entrepreneurs are sourced by the angel's contacts and business associates. Angels also tend to invest geographically closer, statistics presented show that the majority of angels tend to invest within a radius of 50 miles, despite a portion of studied angels claiming to have no geographic limitations (Morrissette, 2007). The typical investment

amount from an angel investor on an early stage is between 25000\$-250000\$ with an average of 50000\$-75000\$. When it comes to the investment process, angels tend to invest as a group, finding their prospect entrepreneurs together through their networks. This is due to the traditional angel investing way of using networks. Angels will recommend and discuss prospect companies to invest with other angels in their network, minimizing risk and increasing sources of expertise for the entrepreneur. There are lots of different types of angels, such as lead dogs, who bring other angels into the company; dark angels, who want to take over the company; archangels, which refers to the most experienced angels with a lot of investments under their belt. These are just a few examples of many (Morrissette, 2007).

This description of investment angels may be changing with new platforms brought by the Internet; e.g. sites matching angels with entrepreneurs have emerged, potentially lowering geographical and networking barriers. However, looking at the largest angel investor network online it is clear that steps have been taken to maintain traditional features of angel investing. Angelsden.com was created in 2007, according to the website due to the founder's dissatisfaction with how hard it was to find early financing for early stage companies. They noted that the most successful companies not only benefited from the funding provided, but just as much the expertise and connections the investor brought to the table. Thus, before opening up an early stage company to angel investment on their website, a lead investor is required to ensure that part of the angel investor bargain is fulfilled. Prior to this, a selection process is added on by the site. The site notes that "Only a few of the hundreds of businesses we talk to each month get chosen to pitch. They must have inspiring teams, scalable business models and valuations that make sense. Many come recommended by the network of accelerators, incubators and investors built up since 2007." Measures are taken to build relations with investors, which for instance includes that new investors are contacted upon registration to learn about them (Angelsden.com Latest retrieved 6 March, 2018). This clearly shows, that despite being taken to the web, the angel investing network conducted online this far maintains the advantages and disadvantages of angel investing compared to crowdfunding and ICOs.

The entrepreneur's choice of angel investing as a source of finance is likely to affect the behavioural dynamics of a venture. Collewaert (2012) states that angel investors are likely to see it as their role to probe their entrepreneurial partners and question the venture, to help the entrepreneur formalize a vision and plans for the firm. While potentially beneficial, this may

also have consequences to the self-confidence and commitment of the entrepreneur. Distrust between the partners may result in the entrepreneur feeling discouraged, which could result in a negative outcome for the venture. The entrepreneur is likely to feel to a strong sense of commitment and ownership over the firm based on emotional attachment, to a point which investors might not. Criticism or disagreements over which direction the firm should take can, because of the different perspectives, result in decreased commitment from the entrepreneur's side. In extreme cases, the founder may begin to feel that the angel investors are working against them. Different perspectives on the discussions held may thus result in very negative effects for the founder-investor relationship and the firm as a whole (Collewaert, 2012).

2.2.2 Crowdfunding

With crowdfunding, the possibility of obtaining financing online has become possible. With a plethora of platforms, many different types of crowdfunding have emerged, of which many share common features. Many platforms have the concept of all-or-nothing; if a crowdfund fails to attract enough finance required, the money attributed to the crowdfund will be refunded to the investors. This forces the entrepreneur to make a careful consideration into how much financing is actually required. A too high crowdfund goal is unlikely to be reached, while a too low goal will not give sufficient funding (Hornuf and Schwienbacher, 2016).

A specific type of crowdfunding relevant to early stage crowdfunds is crowd investing, sometimes referred to as equity based crowdfunding. Before the Internet emerged, the transaction costs were too high for small amounts of money to be sent in return for small amounts of equity. Similarly in the cases of where the crowdfunding seeks financing without financial incentives, known as donation crowdfunding, or reward crowdfunding, in which investors sending a certain amount are given a coupon to be exchanged for the product in the future. There is also loan crowdfunding, to be repaid at a later time. Crowdfunding relies upon mass marketing skills, presentation of an interesting product or service. This means that crowdfunds need to market themselves to the end-users rather than traditional investors, which results in that crowdfunding also functions as a vehicle for market testing and gauging the potential interest (Hornuf and Schwienbacher, 2016).

The inherent differences between angel investors and crowdfunding investors have led to the rise of a new type of platform, MyMicroInvest, trying to merge the two investor types together and have them use their combined knowledge to make informed decisions. The two investor types may be able to gain information and perspectives from each other. The wisdom of the crowd can benefit the angel investors, and the angel investors can provide contracting skills and monitoring abilities to the early stage companies (Hornuf and Schwienbacher, 2016).

There are negative implications for entrepreneurs when it comes to usage of crowdfunding as a financing vehicle. The asymmetry of power and information between the entrepreneur and crowdfunding investors mean that once the crowdfund has succeeded and the capital has been received by the entrepreneur, the investors have very little control over how the funds are used. The crowdfunding investors have plenty of examples to support their wariness of scams. But a crowdfunded venture may also fail due to financial inefficiency with the funds acquired. The money might be used for operational expenses, such as founder wages, rather than being infused to develop the proposed product. Crowd interaction can get heated if a crowdfunding campaign does not deliver on its promises, and as a result there is the risk of global individual defamation. Crowdfunding sites are in that regard similar to stock exchanges; their reputation as a platform is reliant on the quality of the crowdfunds available on their websites, and for better or for worse the owners seek to maintain their sites. Platforms set up rules that dictate which crowdfunding types are allowed, and banish infamous wrongdoers. The platforms filtering of crowdfunds, or lack thereof, shapes the reputation of the platform as a whole (Lehner et al. 2015). A downside with crowdfunding is that crowdfunding investors are prone to groupthink and herd behaviour, providing their funding to ventures because other peers do, which may result in that the best ventures are not funded in favour of popular ones (Hornuf and Schwienbacher, 2016).

Equity based crowdfunding is specific in the sense that it creates a necessity for security based on the legality of the equity yielded by equity crowdfunds. Jurisdictions are changed and adapting to the fact as a response to the emergence of equity based crowdfunding. To function and expand equity crowdfunding across multiple countries requires accordance with the law in all the countries of operation. In the US, the JOBS act has made equity crowdfunding available to non-accredited investors. While laws may vary between states in the US, the laws in Europe forces platforms to adapt to multiple laws, often in different

languages if they wish to operate within multiple European countries. Since this also places limits upon the financial possibilities of entrepreneurs using the platforms, it is possible that founders will begin to seek financing within crowdfunding domains in greater jurisdictions, such as the US, unless smaller congregations of jurisdictions can consolidate to enable multi-lingual crowdfunding sites (Hornuf and Schmitt, 2016). A difference between equity based crowdfunds and ICOs is that the equity yielded by a crowdfunding campaign is highly illiquid until the company is on a securities exchange or bought by another company (Investingzone, latest retrieved 7 March 2018).

2.2.3 Initial coin offerings

In 2008 Satoshi Nakamoto published his famous paper about a purely peer-to-peer version of electronic currency called Bitcoin. The main aspect of his new digital currency system that would in later years become a subject for economic and political debate, is the lack of need for a trusted third-party institution in order for the transactions to take place (Nakamoto, 2008). To create this digital transaction system without the need of a trusted third party, or in other words a decentralized system, the transaction payments are based on a cryptographic coded system. Hence the term cryptocurrency was created. To achieve this, Nakamoto constructed and described in his paper the underlying technology/platform that allows systems such as cryptocurrencies to exist, namely blockchain. Although blockchain technology and cryptocurrencies have existed in a few years, the adoption level has only recently seen a rise. Figure 2 shows the value of Bitcoin in USD in the last year which also shows that the sudden increase and hype around Bitcoin began in the late 2016 creating an increase in its demand and thus an increase in its value (Luther and White, 2014).

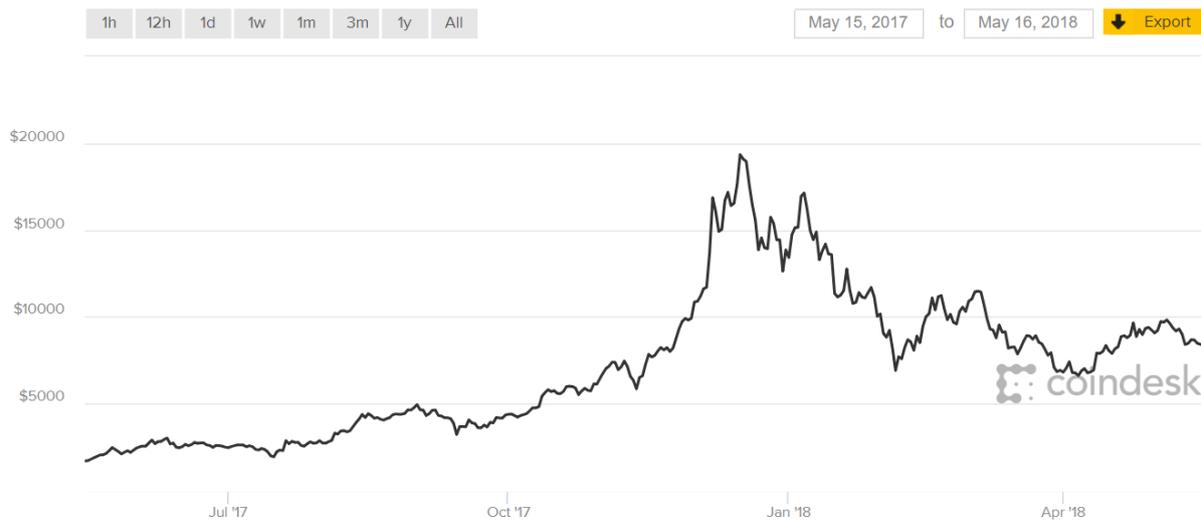
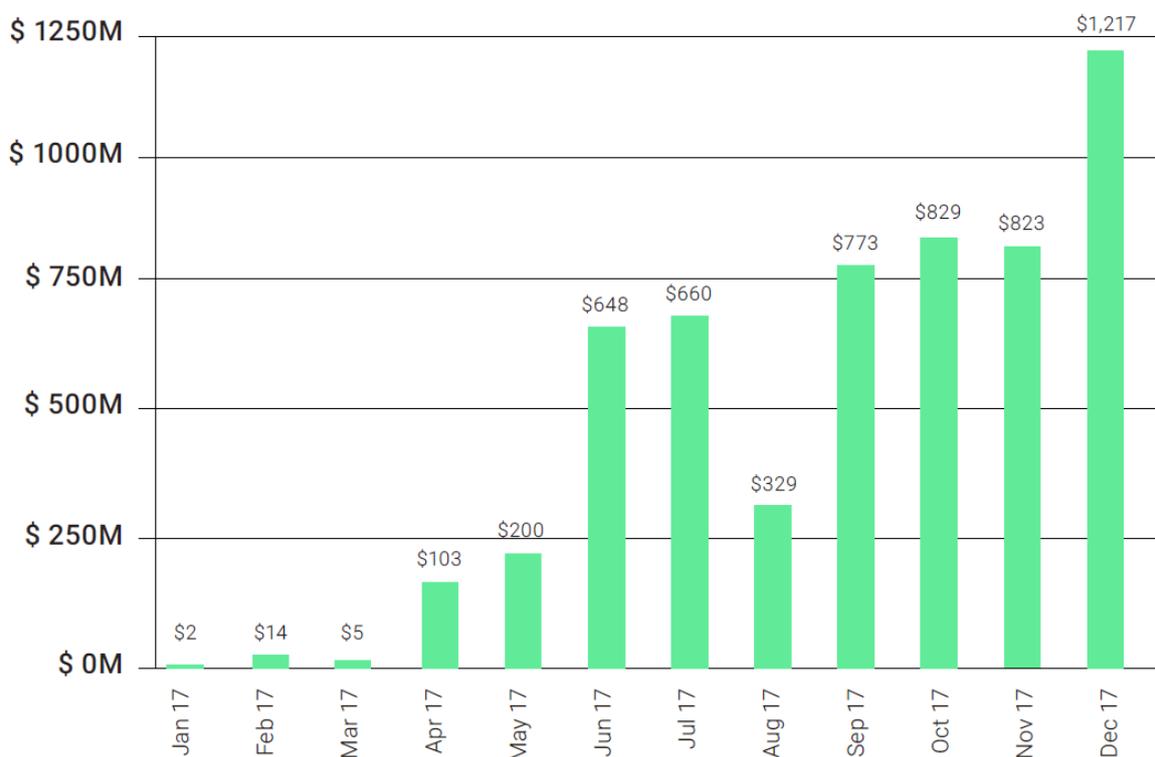


Figure 2: Bitcoin price over the last two years. Source: Coindesk

In 2012 J.R. Willet invented the Initial Coin Offering (ICO) funding method and did the first ICO in 2013 with a publication of his offer called "The Second Bitcoin Whitepaper" where he explained the business model and investing process. The first ICO managed to raise around 5000 Bitcoins from private investors worth about US\$500,000 at the time. As the blockchain technology and its capabilities have become more and more widespread and adopted, a new ecosystem for applications that exploit the tools and utilities of blockchain has emerged, often referred as DAPPs (decentralized applications). With an increased interest in decentralized systems and networks, early stage companies within the DAPPs ecosystem have started to adopt Willet's new and innovative fundraising method which exploded in 2017 (Yadav, 2017). Figure 3 shows the amount of capital raised per month during 2017.

USD Raised by ICOs in 2017 - Monthly Totals



Source: *The state of the token market, a year in review & an outlook for 2018*
A joint production by FabricVentures &TokenData, 2018

Figure 3: USD raised by ICOs

The ICO method is very similar to crowdfunding, both in the aspect that the funds raised are coming from many small sized individual investors, and the fact that many of its projects are being funded in the early phase. The key points that makes ICOs different from crowdfunding are the regulations, the way capital is being raised, and lastly the amount of capital raised (Yadav, 2017). An example showing the difference between crowdfunding and ICOs in capital being raised, is to compare the most successful case in both cases. Paradox Interactive, a video game company, raised \$11.8 million in an equity crowdfunding campaign (Mahmood, 2016) while Tezos, blockchain-based company raised \$232 million (Barzilay, 2017). Although the intention of this paper is not to go deep on the technicalities and functions of an ICO, it is important to mention how the money is being raised. A venture that wants to raise money through an ICO, creates a digital asset called Tokens or Altcoins (coins) which have customisable functionality. Examples of different usability of the tokens and coins include: exclusive product or service use, voting rights, contribution to value-adding chain for the network or market, creation of new products and services, ownership (real or a

proxy of the value) and many more functions. To buy the tokens or altcoins, investors use cryptocurrencies that are mostly common and accepted such as Bitcoin or Ethereum. In that way, ICOs are functioning in a relatively unregulated space which is unbound by national laws or any regulations regarding the economic aspects of the transactions being held. As a result of the low legal requirements and barriers, entrepreneurs can design any token sale model they wish such as having capped-uncapped number of tokens, capped-uncapped capital (Vitalik.ca, 2017). Finally, another important fact of ICOs is that the tokens/coins that were bought in a token crowdsale can be traded immediately on secondary online coin exchanges and investors are not bound in lock-in periods as it is the case in many equity crowdfunding projects. This specific aspect has made ICOs a method that attracts investors who are seeking short term profit. In 2017, token sales became a significant part of the cryptosphere. The following numerical data of ICOs Descriptive Statistics visualizes this phenomenon (Banerjee et. al. 2018):

- USD Raised: 5.59 billion
- Number of ICOs: 913
- Number of successful ICOs: 435
- Average capital raised in USD: 12.7 million

Of the 478 ICOs that were unsuccessful, 131 of those projects did not meet their minimum threshold resulting at a failed coin offering and a refund to the investors. The rest 347 projects did not report any results of their ICO sales and disappeared after a while (Banerjee et. al. 2018). This is one of the negative effects of the fact that ICOs are unregulated, therefore attracting malicious projects who want to take advantage of the hype around the phenomenon.

As shown in the statistics, ICOs are connected with the phenomenon of raising a lot of money for a project that is in its initial phase. As Yadav (2017) puts it, ICOs are considered in the current market the most effective way to raise capital quickly for a project that is in an initial stage. As the scene of ICOs is unregulated and there is no proper due-diligence, projects can start raising capital very early; some of them have succeeded to raise far more capital than they required (Yadav, 2017). This makes the ICO method interesting for this study, which focuses on the entrepreneurial behaviour after receiving early-stage financing.

Another term and procedure regarding ICOs, is the so called pre-ICO or ICO Pre Sale. This is a token sale campaign that occurs before the official ICO, and the cap target is usually lower than of the official ICO. The main reason why companies choose to run a pre-ICO crowdsale is to gather funds that will enable them to create marketing campaigns and advertise their official ICO (Icwatchlist.com/presale, latest retrieved 27/4/2018).

As a final note regarding the ICO phenomenon, 2017 was the year of cryptocurrencies and ICOs. During the collection of empirical data for this thesis, the authors discussed with a CEO having an ICO during the peak of the hype, or as he said: “a silly period for ICO”. This means that during the last months of 2017, the market of cryptocurrencies was very unstable and full of short-term profit seekers.

2.3 Motivations for chosen financing types

The reason why the authors decided to focus this thesis on those three different methods of financing, has mainly to do with two reasons. First, the focus is on companies in the relatively early stage, in order to make comparisons between the findings more valid. All of the respondents are in a relatively early stage, with most being just a few years old, with the eldest firm founded in 2009. The dynamics of a firm at advanced stages is very different from that of an early stage and thus it is probable that the effects to entrepreneurial behaviour would be different. Secondly, due to the early stage focus, a focus on financing methods available to early stage firms is necessitated. Lastly, there are some strong differences and similarities between those three methods that could make the comparison interesting. Differences between the financing types with their different incentive structures and implications could incur different behavioural changes. The basic qualities of the three methods as summarized below.

ICOs

- Uniquely early access to capital (white paper required only)
- Limited competence/feedback, except possible equity votes
- If successful, excessive amounts of capital are possible. “Investor frenzy”
- Requires mass marketing skills
- ICO tokens are from the beginning buyable and sellable on the market

Angel investors

- Early access to capital
- Competence/feedback
- Amount of capital depends on investor willingness
- Requires contacts
- Financing yielded is more likely to incorporate performance driving methods like staged financing

Crowdfunding

- Early access to capital
- Limited Competence/feedback, except possible equity votes
- If successful, excessive amounts of capital are possible. “Investor frenzy”
- Requires mass marketing skills
- Requires passing crowdfunding sites requirements

ICOs have qualities that tangent both the qualities of crowdfunding and angel investors. Based upon these differences, different expectations for the behaviour can be expected in entrepreneurial behaviour based on the result. If an entrepreneur doing an ICO or crowdfund manages to attract a lot of finance, to the point of excessive finance, the entrepreneur may miss important lessons in thriftiness necessary to operate a firm efficiently, which could cause the entrepreneur to use the financing inefficiently. The reputation of a crowdfunding platform functions like a stock exchange: The reputation of the platforms relies upon the quality and success of the firms listed/hosted on the platforms. Crowdfunding platforms thus have incentive to restrict the fund supply so that the investment inflow to crowdfunds does not become so spread that funds are unable to stand out enough to attract enough financing on an individual level. ICOs does not rely upon this platform system with regulating actors above; anyone with the cryptocurrency savvy can launch an ICO and try to attract financing. Crowdfunding platforms themselves usually host features to differentiate them from other crowdfunding platforms, e.g. all-or-nothing, requiring the financing goals to be fulfilled, or the financing is returned to the investors. These different features affect the financing landscape.

Angel investors generally provide important benefits to a firm beyond financing delivered, they are commonly experienced business people in the relevant industry at hand. When an angel investor joins a new firm, the dynamic they bring with them is thus different from firms financed by ICOs and crowdfunds. The angel becomes a person of importance for the firm, usually tasked with coaching and guiding the entrepreneur. The relationship with the angel can change the entrepreneur's perception, if the entrepreneur feels the angel is asking too tough questions when times are troubling the firm.

2.4 Other options for financing

Venture Capital

Venture Capitals will typically not invest until a company is several years old (Morrissette, 2007).

Initial Public Offering

IPO is the traditional stock market method for obtaining financing; however, this is unavailable for early stage companies. This is because stock exchanges have criteria for establishing a firm on their stock exchange. Similar to crowdfunding sites, the quality and reputation of the stock exchange depends upon its ability to present the best companies on the exchange and filter out companies on the path to bankruptcy (Ritter & Welch 2002).

Government Funds

Governmental programmes to encourage entrepreneurial behaviour can sometimes, if applicable, constitute a part of the financing for an early stage company. More so than hosting incubators to match entrepreneurs with investors, governments sometimes offer direct financing or loans directed towards prospect entrepreneurs, and can, if applicable, serve as a finance source. In the UK, the government offers loans up to £25000 with a fixed interest rate of 6%. The loan can have a repayment period over as long as five years but has no early repayment fee (UK government, latest retrieved 2 March 2018).

Debt

Commercial banks will rarely lend capital to start-up companies. However, in addition to the founders own capital, founders will often have to infuse money to the venture via home equity loans and credit card debt (Morrissette, 2007).

FFF

The abbreviation FFF refers to the founder him/herself, family and friends, which will likely constitute an important part of early stage funding for an early stage company (Morrissette, 2007).

Incubators

Incubators are hosted by various institutions with the purpose of enhancing entrepreneurial activity, competitiveness of the local region. Along with networking and expertise provision, these incubators sometimes also have investment schemes into promising early stage companies (Siu W., 2002).

2.5 Entrepreneurial behaviour

Rotefoss & Kolvereid (2005) defines entrepreneurial behaviour as actions that implement a new business. When it comes to entrepreneurial behaviour, there are certain qualities many new entrepreneurs tend to exhibit. Particularly common traits are overconfidence and self-belief in the founder's knowledge (Koellinger et al. 2007). The entrepreneur's cognitive biases is one of the most important factors explaining entrepreneurial behaviour.

Overconfidence and optimism on the founders part helps firm creation, but unfortunately also contributes to firm failure. In addition, cognitive biases shape organisational factors such as propensity to delegate, opportunity orientation and financial orientation. Willingness to trust is linked to optimism, and distrust is linked with a need to control, which means that the founder places an emphasis on financial control and orientation. Trust is correlated with a low perceived outcome risk, while the opposite results in high perceived outcome risk (Gudmundsson et al. 2013). Receiving negative feedback increases probability of the entrepreneur abandoning the venture by about 26 percent as well as reducing the probability of survival by 9 percent (Howell, 2017). When it comes to the study of entrepreneurial theory, there have been criticism over a general selection bias on successful firms and missing data on failed ventures (Gartner et al. 2010). In this study, however, the preferred

cases have a successful financing round, to be able to examine how the entrepreneur's behaviour might change due to the financing acquired.

Entrepreneurial behaviour is linked to personality traits that are connected to nomenclature from the psychology field. The big five personality traits have been examined and compared in a number of cases in a study by Zhao et al. (2010). These five traits are conscientiousness, openness to experience, emotional stability, extraversion, and agreeableness. The study also included risk propensity as a category. The study concluded that some of the personality traits correlate well with entrepreneurial intention, as well as subsequent performance. Of the five personality traits, openness to experience and conscientiousness were the most important factors in determining both intention and performance. Conscientiousness refers to diligence, working hard, self-discipline, and openness to experience refers to appreciation for unusual, new or unconventional ideas as well as creativity, and interest in arts. That means in other words that an entrepreneur that have openness to experience is more likely to go through the process of evaluating new ideas for the firm such as new product, strategy, collaborations and other ideas. Risk propensity resulted in a higher entrepreneurial intention but not in higher performance after becoming entrepreneurs. The performance measurement in Zhao's study was divided into three different categories, these three being performance, growth and profitability. Of the five characteristics, agreeableness seems to have little influence on both intention and performance. Extraversion has some effect but it is quite limited compared to openness to experience, conscientiousness and emotional stability. However, the study also notes that character traits only account for about 10% of the variance in firm performance. Extrovert risk-takers are not necessarily the only successful entrepreneurs and competencies that are associated with certain personality traits, such as social competence, can be practiced and learned (Zhao et al. 2010).

2.6 Performance

The output and survival of a firm is dictated by many factors and have been tested in academic literature. The correlations between factors such as financial capital and the human capital of the founders have been compared to growth and survival. Level of capitalisation contributes to marginal growth and survival. However, it can also provide a lot of other effects. Having extra capital allows the company to have a buffer in case of shocks; time can be bought in tough situations and capital-intensive strategies can be pursued, which increase

competitiveness and barriers to entry. The level of capitalisation thus provides a host of beneficial effects which correlate with performance. Lack of surplus capital can cause a lack of flexibility for the firm and make it susceptible to insolvency issues (Cooper et al. 1994).

A problem connected to performance and financing is adverse selection, in which after financing is obtained, the incentives for the entrepreneur to perform are lowered; as a result, the entrepreneur may not exert as much effort as promised. To combat this problem, angel investors can include covenants and staged financing schemes within their contracts. This is not the case with equity crowdfunds, while crowdfunds sometimes conduct multiple crowdfunding rounds the rounds are not conditional to any success benchmarks connected to the firm. There is an exception to this though, the platform Companisto created a system in which two-thirds of an equity crowdfund is yielded to the founders, while the rest is withheld over a period of six months. The investors can then vote whether to yield the capital to the founders or return it to the investors, which creates an incentive for founders to perform. (Hornuf and Schmitt, 2016). The same problem conceivably exists with ICOs; a lack of financial reward incentive for fulfilling financial and operational objectives. Regarding financial efficiency, thrifty usage of the start-ups resources, there have been observations made to gauge the thriftiness of entrepreneurs. Entrepreneurs who were uncertain about finding financing, and their competition, were more likely to be successful if they planned early in their start-up process (Gartner et al. 2010).

2.7 Literature Gap

Plenty of academic literature exists providing insights into how personal factors exist and affect entrepreneurial behaviour. Certain behavioural traits could be considered prerequisites for a person to even become an entrepreneur, such as behaviours that are linked with entrepreneurial intention. In addition, certain personality traits and associated behaviour are shown to be correlated with an increase in performance or lack thereof.

In spite of all the extensive research done on entrepreneurial behaviour, as far as the authors could find, there is very limited research available on how entrepreneurial behaviour could be affected at the moment of financing or other important events within a firm's life-cycle. Since financing success could alter the feelings and state of mind on the entrepreneur, it follows that entrepreneurial behaviour could change as a result. The authors would argue that there is

both academic and practical relevance to interviewing entrepreneurs and attempting to evaluate potential consequences to performance due to the behavioural change at the moment of financing, or lack thereof. Further understanding about changes to entrepreneurial behaviour connected to financing can provide insights into changes to a firm's performance. If performance went below or above the expectations, changes to behaviour brought by the financing moment could function as an exposition for why the outcome occurred.

2.8 Constructs

Having gone through the process of setting the theoretical background, it is now necessary to extract the constructs that best fit the research topic. These constructs will be the main focus when the authors gather the empirical data needed for the analysis. The constructs chosen are presented below and are divided in three categories. The first and most important categories are change constructs. The constructs that are in this category are variables that can be affected at the moment of financing and have therefore a dynamic nature. The authors want to make it clear here that from now on in this thesis, whenever those constructs are being used, it is about the level of change of the construct after financing. The second category includes the control variables of entrepreneurial experience and emotional stability. The first one was chosen to determine if the change constructs had any relation to the previous entrepreneurial experience and the latter was chosen following Zhao's study (2010) and to check the possible implication this variable may have to the change constructs. Finally, outcome variables is the third category with variables that indicate the overall effectivity and performance rates of the firm.

Change constructs:

- Confidence
- Economic efficiency
- Conscientiousness
- Openness to experience
- Risk propensity

Control variables:

- Emotional stability
- Entrepreneurial experience

Outcome variables:

- Momentum
- Performance

Confidence is used to check for changes to the feelings of confidence for the entrepreneur in their firm. Obtaining financing is a crucial point for many early stage companies and can make or break a firm. It follows that a successful financing round could cause a significant confidence boost, to the point of overconfidence in the firm's future. Economic efficiency refers to efficient usage of the entrepreneur's financial resources, or lack thereof. As a result of the financing moment, a company would thus gain a significant surplus of financial resources in the time ahead of the financing moment, potentially causing inefficient usage of the capital. Conscientiousness refers to the psychological tendency of an individual to work hard. This factor could change when an entrepreneur obtains financing. This could be driven by feelings of external pressure, or from within the entrepreneur. The entrepreneur could also feel more calm and relaxed about the firm, due to the financing obtained, lowering conscientiousness. Openness to experience could also change; financing makes the entrepreneur feel that anything is possible and new ideas can be explored, or a need to focus on the primary goals of the business as a result of financing. External financing may mean that the entrepreneurs risk appetite heightens or lowers, depending on how the entrepreneur feels about the new situation after the financing.

Emotional stability was in this study used as a control variable rather than as a change construct, due to low change expectations but still examined in order to find possible patterns with different levels of worrying and the other factors. Another control factor is experience, previous entrepreneurial experience could mean that changes in the entrepreneurial behaviour are not as high due to having undergone similar experiences before, avoiding entrepreneurial mistakes. The psychological traits agreeableness and extraversion were not included due to not having a high established correlation with neither entrepreneurial performance nor intention (Zhao et al. 2010).

Momentum was an emergent construct added after the first interview, where the respondent described the importance of maintaining momentum as a new company approaches launch

and growth. This is both a performance related phenomenon, growth due to momentum as a result of financing, attention from the public, but also a factor that behoves conscientiousness from the entrepreneur. Performance refers in the analysis to an estimation of the firm's respective performance based on their responses to performance related questions.

Figure 4 below shows how the constructs revolves around the line of reasoning introduced by Figure 1. The type of financing pursued, and the financing in itself constitutes the most important input construct which can induce behavioural implications for the entrepreneurs, due to the immense effect obtaining financing will have for the firm. Previous entrepreneurial experience also adds important background data, potentially affecting which behavioural patterns emerge after financing. Same thing applies for the entrepreneur's general emotional personal traits, if the entrepreneur is prone to worry about things or not etc. The financing moment happens, and the entrepreneurs are probed for answers on how their behaviour changed or did not change. The constructs are used to guide and direct questions on how their entrepreneurial behaviour changed, refer to the interview guide in the appendix. The entrepreneurs are also asked how their overall performance have been.

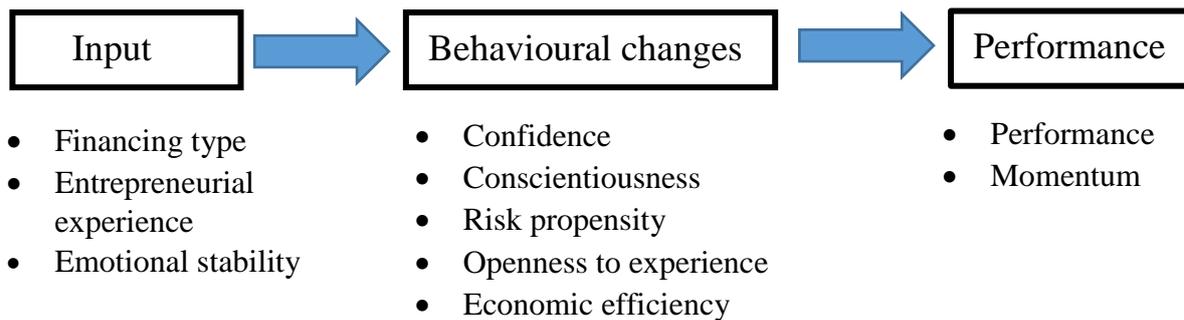


Figure 4: Expansion of Figure 1 with the implementation of the constructs

2.9 Summary

As this chapter brings light to, the method of financing affects the firms, but also potentially affects the behaviour of the entrepreneur. Different financing sources result in different implications for the founders of a firm. Having angel investor to guide the entrepreneur within an early stage company affects both the entrepreneur and most likely, the performance of the firm. With angel investors, the relational dynamics of the founder with the investors are affected. How this will affect the firm depends on both the angels and the founder's behaviour. Early stage companies financing by an ICO or crowdfunding will have no such expertise to guide their financial decisions. The literature does not cover how behaviour is affected at the moment of financing. Thus the goal and question of this thesis is to answer

how the performance of an early stage company is affected by the entrepreneurs change in behaviour; does financing type matter?

In doing so, the goal is also to, with the theory as a groundwork, account for performance lowering or enhancing effects that are direct results related to the financing activity. The theory provides support for that performance is affected in a multitude of beneficial ways by virtue of having excess buffer capital. Expertise and guidance provided by angel investors boost performance and helps manage the phases an early stage venture will pass through, but can also go awry if the relationship fails. However, it is arguable that the moment of financing also provides a vehicle for change to an entrepreneur's behaviour. Emotionally driven changes could cause behavioural changes to the founder and team operating an early venture. With financing success achieved, the entrepreneur and team members may feel strong optimism about the future of the venture, or pressure to perform in relation to new expectations and goals. With an identified literature gap, it becomes an important part of the empirical data to bring insight into how the behaviour is affected at the moment of financing with following potential performance implications as illustrated in Figure 4.

3 Methodology

3.1 Research questions

How does financing type change the entrepreneurial behaviour?

How do changes in the entrepreneurial behaviour related to the financing moment affect the performance?

3.2 Research strategy

To understand the linkage and impact different methods of financing can have on entrepreneurial behaviour, such as economic efficiency, decision making, confidence, and as a result an impact on the overall performance of the venture, a theoretical approach was firstly taken regarding the understanding through literature review of the different aspects of the entrepreneurial behaviour and venture performance. The same approach was taken regarding the understanding for the three different types of financing method that this thesis will examine. Having set up the theoretical framework in which the authors will work within, a method strategy must be chosen that fits in helping answering the research questions. Based on the thesis purpose and the nature of the research questions, a qualitative strategy was chosen. The reason of choosing a qualitative approach was because as Bryman and Bell (2011) mention, a qualitative research method would allow the authors to gather and analyse data that are concerned with words and behaviour rather than numerical data as it is the case with a quantitative research approach. Furthermore, again according to Bryman and Bell (2011), a qualitative research approach will allow the authors to have deeper insights on the behavioural aspects of the participants and allow them to perceive contexts and situations of entrepreneurial behaviour and venture performance in a wider perspective. As such, the epistemological position of this thesis can be described as interpretivist. In a qualitative research with an interpretivist approach the focus is on understanding the social environment through the analysis of the interpretation of the subjects that are participating and analysed in the research. Thus, it is clear that the relationship between theory and research is described by a dynamic bond, meaning that the authors first based their research on existing theory in order to start their research and analysis with the intention to test their hypotheses and further develop the theoretical framework that this thesis was built upon. Finally, the mode of reasoning used in this thesis is best described by an inductive reasoning. As it is mentioned by Bryman and Bell (2011), unlike deductive approach, an inductive approach uses logical

methods and inferences to create and build theories about the world. In other words, generalizable assumptions are formed out of observations and analysis of the empirical data collected.

3.3 Research purpose

A research can have three different purposes or a combination of them. A research can have an explorative, a descriptive or an explanatory purpose. The combination of the research objectives with the level of existing theory prior to the research indicates which type of research is needed (Saunders, 2012).

The objective of this thesis is to research and observe how certain aspects of entrepreneurial behaviour are being affected by different types of fundraising methods and how those changes in behaviour may, or may not, have an effect on the overall performance of the venture. The existing literature doesn't provide enough depth in this linkage between fundraising and behavioural characteristics of entrepreneurs and only some analogies between capital/money and psychological aspects can be found in the literature. Therefore, the purpose of this thesis will have an explorative character where the main objective will be the identification in changes of the psychological aspects of the entrepreneurs. Since the literature can only provide the authors will analogies of the subject in research, there is a need to analyse this existing information and make similar analogies with the conclusions and findings of this research. Due to the fact that this thesis needs an analysis of both existing theories and the findings of the research, this study is of a descriptive and an explorative purpose.

The goal of this study is to obtain first-hand response on how entrepreneur's behaviour is affected by the type of financing they manage to acquire at the early stage of venture creation and development. The proposition here is to find early stage companies that managed to acquire financing through those three different methods: angel investors, initial coin offerings and crowdfunding, and find out if their behaviour changed during and after they received their financing. This will be done by asking interview respondents about their start-up and how it affected their behaviour. In the case of early stage companies with guidance like an angel investor, indirect questions that gauge the relationship between the entrepreneur and the angel have to be used.

The study is set to focus on entrepreneurial behaviour at the early stage in a venture. When an entrepreneur manages to acquire financing, there may be consequences that may change some behavioural aspects of the entrepreneur such as the levels of confidence, motivation, economic efficiency and more. Those potential changes may have an impact on the decision making of the entrepreneur and as a result an impact on the firm itself. It is also likely that techniques employed by angel investors, such as staged financing, which can improve financial efficiency, are not available or used by crowdfunding/ICOs.

3.4 Research Design

To answer the proposed research questions, a comparative case study was conducted. Interviews were done with companies/entrepreneurs who had financing rounds early in their firm's lifespan. In order to better capture the behavioural aspects of the entrepreneurs after the funding was completed, the authors were looking for cases that have recently had a successful fundraising campaign so that the memories and emotions of the process would be as vivid as possible. Due to response collection rates, finding similar cultural backgrounds and corporate culture was not an option.

Since multiple case studies were done, semi-structured interviews were used to gather data, which increases the possibility of making meaningful comparisons between each case (Bryman & Bell, 2012, s. 480). Because the authors were searching for elements of change in the interviewees' behaviour based on the constructs that were generated from the literature reviews, the interviewees were encouraged to describe the process, feelings and experience of financing in a story-telling manner.

3.5 Collection of empirical data

The authors of this thesis had decided since the beginning of the writing process to have two interviews for each of the three categories of financing methods in research, i.e. a total of six different interviews from six different companies that were in an early stage and have received funding through an ICO, crowdfunding campaign or angel investors. The reason why the authors have chosen to have two interviews from each fundraising methods is mainly because of time constraints. When it comes to the selection of the companies that the authors wanted to interview, it was done with an unbiased perspective, meaning that the authors

didn't use their network and acquaintances to find possible interviewees. To find early stage companies that fitted the purpose of the thesis, the authors searched through public internet domains (such as crowdcube.com, nordictechlist.com, tokentops.com). Because the intention was to have the interviews with the founders or CEOs of the start-ups, the authors used LinkedIn to directly come in contact with the entrepreneurs. Furthermore, it should be mentioned that the selected sample of interviewees were CEOs that could find available time to participate in our interview. Even though the authors contacted the CEOs personally and not the respective company email, the response rate was about 3%. Furthermore, the authors had made it clear in their initial text that they sent, that the CEOs' and companies' names would be anonymised, which the authors thought would enhance the response rate and make the entrepreneurs feel more safe and comfortable talking about sensitive subjects in an interview. Lastly, and due to the fact that four of the six start-ups were outside Sweden, all but one of the interviews were conducted through the use of video conference applications. Recording tools and applications were used during the interview, which allowed the authors not only the ability to listen again to the interview afterwards, but also to transcribe the interviews with the help of digital transcription services.

3.6 Analysis of the empirical data

For the analysis of the empirical data, analytic induction was used. This method was chosen because of the exploratory and explanatory purpose and aim of the thesis. Furthermore, this thesis is a study of cause. The authors' goal is to find the connections and relationships between the constructs explained in section 2.8. Analytic induction is a qualitative data analysis approach where a researcher seeks for a universal and causal explanation of a phenomenon (Robinson 1951). According to Cressey (1950), there are three main advantages of using analytic induction: 1) there is a possibility of disproving theories and to test one against another, 2) older theories can be revised when new evidence is considered, thus creating a cumulative growth effect of theory, 3) it creates a close conjunction of the facts and theory because a temporary hypothesis must be revised and adapted to the evidence and facts that contradict it. Moreover, analytic induction entails a rigorous definition of the phenomenon under study because without such a definition, a universal generalisation cannot be achieved.

Cressey (1950) also described the procedure of analytic induction, in a very explicit and analytic way, as follows: 1) First, a raw definition of the phenomenon under study is developed. 2) Then, a hypothetical explanation of the phenomenon is formulated. 3) One case is analysed throughout the hypotheses testing if the hypotheses fit the facts of the case. 4) In case a hypothesis contradicts with the facts of the case, either the hypothesis is revised or the explained phenomenon is redefined to fit the case in study. 5) After a small number of cases have been examined, functional certainty may be attained. If the researcher though discovers one case where the facts contradict the hypotheses, the explanation or hypotheses needs to be reformulated. 6) This procedure of testing the cases with the hypotheses and reformulating the definition of the phenomenon and the hypotheses is continued until all cases fit a universal relationship (Cressey 1950).

3.7 Quality of research

To establish a high level of quality for research paper, discussion and measurement of the concepts of reliability and validity must be addressed. Reliability is concerned with whether the results of the research are repeatable while validity is concerned with the integrity of the results that are generated from the research study (Bryman and Bell 2011). The concepts of reliability and validity are more relevant and important criteria in assessing and establishing the quality of a quantitative research. When it comes to a qualitative research, such as this thesis, the definition of those concepts must be slightly altered (Bryman and Bell 2011). Thus, validity has to do with whether or not the researchers are studying, observing and measuring what they claim they are.

External reliability is concerned with the question if the study can be replicated. This concept is in general difficult to apply in a qualitative research and as such for this thesis, because of the fact that duplicating the same environmental and societal settings is extremely difficult (Bryman and Bell 2011). Another factor that makes reliability a difficult concept to achieve is the usage of unstructured and semi-structured interviews because the questions that the researchers make don't follow a strict order making the replication of the study even harder. However, the authors have tried to achieve a high level of transparency and explanation of the procedures followed in this thesis in order to maximize reliability. Furthermore, although the interviews followed a semi-structured path, the constructs that were the main focus in the collection of empirical data were the same in all interviews.

Internal reliability has to do with the cases where there are more than one researchers and if the members of the research team agree about what they observe (Bryman and Bell 2011). The two authors of this thesis were working on this research every day and only when being together in the same place which means that there was plenty of time for discussion and settling down the possible differences in views, perspectives and opinions.

Validity, namely external validity, refers to the degree to which the outcome and results of a study can be generalised and applicable “across social settings” (Bryman and Bell 2011). This can be problematic concept to achieve since the results of this thesis are based upon a small sample of cases. However, the authors feel that the results of this research study can at least be a primary and perhaps a sufficient tool of describing the relationship between the constructs analysed in this thesis. On the other hand, we understand that the results cannot be generalised across all social settings since there are many factors that affect entrepreneurial behaviour and performance.

Respondent validation, or sometimes also called member validation, is the process where the researchers provide their interviewees the transcripts or findings that the researcher have arrived at. The interviewees then confirm that what the researchers have received as data or their finding are in line with what the interviewees have given as information (Bryman and Bell 2011). There are two ways for seeking respondent validation for a researcher. One is providing the interviewee a full transcription of the discussion in the interview, or providing the interviewee with the findings and results that were generated after the analysis of the interview. In this case, the authors provided all six interviewees the results presented in the next chapter and none of them had any objections with what the authors had understood and generated from the interviews. Full transcriptions of the interviews were never sent to the entrepreneurs nor have been added to appendix due to that they were very long and with many ambiguities in the text. This was due to transcribing applications not being 100% accurate, thus making it very hard for readers who were not present in the interviews to understand without the respective audio recordings.

4 Results

This chapter describes the data obtained from the interviews held. The interviews were varied, with very different respondents, both in terms of personalities and origins. The results are made up of six separate interviews with CEOs or founders directly engaged with the company from their respective beginnings. Some of them had long entrepreneurial careers or experience working with entrepreneurs on the side, with many early stage companies under their belts, whereas others had limited entrepreneurial experience prior to starting the one subject to interview. Of the six interviews, early stage companies were selected by their main source of financing, with two from each investment type studied, these being angel investment, crowdfunding and initial coin offering. All of the cases are made up of relatively early stage companies in order to make them comparable, with the oldest one started in 2009, getting the first external financing in 2015. The foundation for the interview questions can be found in the appendix. The interviews started with open questions about the company, trying to get the respondent to tell their company story and then probed about the constructs for detailed information relevant to the study.

Each case has a small summary in the end where a description of the effects on the constructs is given following the logic of the Figure 4. In other words, the reader will be able to quickly see which financing method was used, what was the impact on the behavioural constructs and how the performance was affected.

It should be noted for the readers that the names of the companies involved in the interviews have been altered so that they remain anonymous. This was done so that respondents would not have incentives to signal and be as honest as possible, as well not running the risk of having their investors and other stakeholders identify them. For the sake of distinguishability, the authors used a prefix that indicates the method of financing they used. The prefix Crowd is used for crowdfunded companies, Crypto for companies involved with ICO and cryptocurrencies and lastly the prefix Angel is used for the companies that have angel investors.

4.1 CrowdAlbatross

Background

The interview with CrowdAlbatross was held with an early stage company whose founders had no direct previous entrepreneurial experience. The founder interviewed, however, had a long career in investment banking and thus had plenty of experience from the investor side, and had worked with many early stage companies and business plans before. CrowdAlbatross stated that since they were experienced within the financing industry and thus had extensive previous experience in working with early-stage businesses, planning and funding meant they can avoid many obstacles new entrepreneurs face. CrowdAlbatross was funded by cornerstone investors before taking the matter to crowdfunding, which was still before they launched their product. The equity crowdfunding campaign was successful and managed to receive more capital than expected. The reason a crowdfunding campaign was pursued was both because of further needed capital for development as well as branding. The investments enabled the company to invest in graphic design work for their product and website, as well as marketing. Finally, the company hadn't launched any product yet and all the development and funding were focused on going out in the market by June 2018 (CrowdAlbatross, 2018).

Economic efficiency

According to CrowdAlbatross, obtaining financing did not result in changes to how thrifty the entrepreneurs were with the financial capital since the venture was already well planned, due to the founders experience from the investor perspective. Their experience meant they were well-versed in the hurdles new companies have to deal with and had planned accordingly. CrowdAlbatross noted however that biases are prone to affect entrepreneurs, as he had noted in years of working with early stage companies from the side. Their own biases in his current early stage company was thus probable to affect him and his co-founder according to himself. CrowdAlbatross also noted that once they had obtained the financing, it necessitated that they stick to one type of technology. "If they decide upon purchasing Volkswagen, they can't change to Porsche, due to the switching costs." The founders do not currently take out any wages of their own from the company (CrowdAlbatross, 2018).

Confidence

CrowdAlbatross noted that having a number of over two hundred investors liking their project enough to invest in it, most of them added due to the crowdfunding campaign

undertaken, resulted in a confidence boost. The founder the authors interviewed, mentioned as well that the purpose of going for a crowdfunding was not entirely because of the capital received. That could be found by other sources, he mentioned. The main reason why CrowdAlbatross decided to do the campaign was to test the market demand, and after its completion they were confident that their product has a future (CrowdAlbatross, 2018).

Conscientiousness

CrowdAlbatross noted that the pressure to perform from having investors was not necessarily a bad thing, since it behoves discipline. However, he did not feel that obtaining financing affected conscientiousness. On the other hand though, having external investors believing in the business idea has made the team motivated and focused on launching their product in the planned schedule (CrowdAlbatross, 2018).

Openness to experience

CrowdAlbatross spoke of the importance of having backup plans. In case of Plan A failing, not having the entire venture hinge upon having that milestone achieved is important. In the sense of financing, the crowdfunding started off as a backup plan. Something connected to openness to experience that CrowdAlbatross noted, is that the founders were still a bit unsatisfied with the logo and branding. Having decided to go with the crowdfunding campaign, should they decide to change their brand, the firm would incur switch and sunk costs (CrowdAlbatross, 2018). This shows that the founders have a sensitivity to aesthetics, which is a marker for openness to experience.

Emotional stability

CrowdAlbatross stated that he was not very worried in general as a person. However, writing progress reports to stakeholders every month results in a pressure to perform and is a cause of concern during months of limited progression and achievement. If it were only the founders' money, the pressure would be on themselves only and lower as a result (CrowdAlbatross, 2018).

Risk propensity

CrowdAlbatross stated that their risk appetite increased with financing success. They were however still below budget in terms of spending. For instance, the founders decided upon how much of the financing should go to marketing at launch compared to over the whole

year. At present, they have decided that it should go for near 50 percent of the marketing budget. Ultimately however, a major venture requires decisions and with the money involved, it is inherently risky (CrowdAlbatross, 2018).

Momentum

Having achieved financing, CrowdAlbatross stated that maintaining interest in the project from the public in addition to investors was important, as in, maintaining momentum (CrowdAlbatross, 2018).

Summary based on Figure 4

Following the logic of Figure 4 presented in the introduction, the effects that the crowdfunding campaign had on CrowdAlbatross are summarized. CrowdAlbatross, having previous experience with entrepreneurship and high emotional stability. When it came to behavioural change, there was a change to confidence, risk propensity and openness to experience. Economic efficiency change was low as well as change to conscientiousness. With the financing achieved via crowdfunding, launching soon is important to maintain interest in the project. The company has thus far held up to their milestone plans and is preparing for launch in June 2018 showcasing good performance output. (CrowdAlbatross, 2018).

4.2 CryptoTiger

Background

The interview with CryptoTiger was held with the CEO of the company. The CEO is an experienced entrepreneur with decades of experience in technological ventures and venture capital in Silicon Valley. One of the first things that were mentioned during the interview was that when the idea was formulated, the founders had considered the idea of seeking capital through venture capitalists. But the CEO explained to the team that the project was not the right one for venture capital because they require the ability of the project to be pivoted if they feel it is necessary. CryptoTiger's project is built on an open source software and a blockchain protocol and according to the CEO, it can't be used for other reasons except its intended use and the only ability it has is to be expanded. Another reason why they didn't want to obtain venture capital was because they wanted to keep the founders in control of the

company. Those were the main reasons they decided to seek funding through an Initial Coin Offering (ICO). The CEO mentioned that when deciding the budget the company expected to be able to raise 20 million but scaled down to 1 million in the end. The reason for this decision was because of the fact that even if 20 million would be obtained, the company needed only one million to achieve its mission. The ICO was opened in autumn of 2017 with a pre-set amount of tokens available for sale of which 51% were sold to the public. Another fact that was mentioned in the interview was that when the ICO opened, the expected pre-sales came through and then nothing more. The founders were afraid that they may not even reach their soft cap when one day all of the sudden all the tokens were gone in two hours. Another fact that needs to be addressed here is that the tokens sold, do not represent shares in the company; they rather represent product accessibility and project voting rights. Finally, the authors want to add a note that may help the reader better understand the nature and incentives of people investing in an ICO. According to the CEO of CryptoTiger, last autumn (when ICOs exploded as a financing method) was the "silly" period of ICOs where the people investing in ICOs were mainly concerned about short term profits and much less on the products and services that the tokens were connected with. After this short term period was over, an ICO would usually be left with the investors that care about the actual offer of the company and forms a community with people whose interests are aligned to each other. In the case of CryptoTiger, the community of investors was approaching 3000 members during the time when the interview was held. Within this community, the ICO members will vote on which projects to undertake (CryptoTiger, 2018).

Economic efficiency

The capital raised through the ICO was considered as a duty to be spent on matters and developments that the community of investors had voted for. Matters such as the development of the blockchain protocol, improvements of the website, as well the creation of mobile applications. CryptoTiger also used the capital raised to recruit more developers to speed up the development process and traveling around the world to conferences about crypto currencies and industry related conferences. Furthermore, the CEO stated that he used money from the ICO to come in contact and collaborate with other companies in the industry to expand their product portfolio. The money gathered from the ICO was used mainly to accelerate the company's process of growth, and it allowed them to spread the knowledge and adoption of the usage and utilities of the blockchain technology.

Something else that needs to be mentioned here, is that the company chose to take a different

path when compared to the majority of all the ICOs when it comes to how much money they would like to raise through the ICO. Usually in the market of ICOs, there is no hard cap (maximum amount of funds raised), but in the case of CryptoTiger they didn't want to raise more money that they had planned because they wouldn't know where to spend it. This decision was taken within the company as well as with the early community that was developed before the ICO launched (CryptoTiger, 2018).

Confidence

CryptoTiger stated that one of the most important things that were gained through the ICO was not the amount of financing but rather seeing that the project was backed by so many persons, even though there was no product yet to be sold. Therefore he claims that seeking funding through an ICO was important to justify the cause, and to become confident that the idea of the project is shared with others outside the company. The CEO mentioned that when it came to the younger team members, the effects of increased confidence were very apparent in their faces and behaviour but did not affect him personally as he is an experienced entrepreneur (CryptoTiger, 2018).

Conscientiousness

After the successful ICO, the team saw that their business idea had received positive feedback from the crowd and that acted as validation for the team. Seeing others believing in the idea made the team sure that the idea is being liked and adopted by others who are willing to invest on it. As such, after the completion of their ICO campaign, the team started to work harder on developing the organisation (CryptoTiger, 2018).

Openness to experience

Regarding openness to experience, CryptoTiger said that having a successful ICO definitely changed the company's way of thinking. Before the ICO, the team was thinking about whether the project was correctly defined if they can improve the idea and were wondering if the public would like the idea enough to invest their cryptocurrencies in it. After the ICO though, "people [the team] went right into tactical mode" and were considering the possible options for the future that funding had allowed. Before the ICO funding, the action plan was "ironically already predefined" and public available but that wasn't the case after the ICO funding. The ICO and its success caused people to up their game and become more open to ideas on how to achieve the company's objectives. To emphasise the change in openness to

experience, when the project got funded "everyone got that childlike wonder of experience". Anything and everything seemed to help the project and everyone stood around whiteboards discussing and evaluating ideas (CryptoTiger, 2018).

Emotional stability

CryptoTiger described that the journey of their start-up is exactly like every other start-up ever done, with moments of high confidence in the project, as well as moments when doubt is the main feeling. Because of his age and experience, he could handle the pressure. The pressure was more impactful on the young people in the company (CryptoTiger, 2018).

Risk propensity

CryptoTiger seems to have no changes in his risk propensity. This is because the company had planned and calculated all the things that need to be done after a successful ICO, and of course the fact that the ICO had a hard cap, meaning that the fund raising did not end up with surprisingly huge amounts of money (CryptoTiger, 2018).

Momentum

When the founders saw that all the tokens were gone in less than 2 hours, this certainly gave a boost in confidence to the team; however, it was also a moment when they realised that changing their mind was not an option anymore. It was a moment when everything had been initiated; what was needed from that point was focus on developing the project (CryptoTiger, 2018).

Summary based on Figure 4

CryptoTiger had an ICO and is driven by an CEO who is both very emotionally stable as well as a very experienced entrepreneur. The direct effects of the ICO where the five change constructs are concerned, are characterised by a huge change in confidence, openness to experience and economic efficiency. On the other hand, risk propensity and conscientiousness didn't change. Finally, the company had a strong momentum boost due to the ICO and the performance has been deemed high due to CryptoTiger's decision to restrict the financing to 1 million dollars, in place of up to 20 million (CryptoTiger, 2018).

4.3 AngelShark

Background

AngelShark started in 2009 with four founders, without previous experience as entrepreneurs. In 2015, they found themselves in the need of additional finance and found some angel investors. The capital was wanted for marketing and expansion of the venture. In addition to obtaining capital, the goal with angel investors was also to get knowledgeable individuals into the board. The addition of the first angel investors also came as a result of previously established customer relationships. These angels had been customers since the company was established, which meant they had a lot of insight into the venture. The founders also met angel investors outside the board every couple of months. While the first angel investors were in it for fun, and to help out the venture, the later angels were interested as strategic investors and in it for potential economic gain. The CEO has no longer over half of the equity, but according to himself, it still feels like he has it (AngelShark, 2018).

Economic efficiency

Getting the financing the first time resulted in a lot of bad spending. AngelShark stated in retrospect that getting the money again, he would have spent a lot of the money differently. Since it was the first time AngelShark entrepreneur raised significant financing for a company, he experienced a lot of learning. AngelShark also noted that investor's guidance for spending money differs between investors without start-up experience from those who have. Those with experience understand the mistakes an entrepreneur can commit in terms of spending and can thus give better advice to prevent bad spending. Investors without entrepreneurial experience tended to be less understanding about bad spending. Investors affecting operational decisions are not always beneficiary, increasing the workload for the remaining employees after a series of redundancies did not result in improved performance which the CEO had foresighted by gut feeling. AngelShark notes that it is simply easier running a company with a lot of money in the bank, but with a lot of money it's easy to spend it all and run out. For first time entrepreneurs, using money inefficiently often becomes a part of the learning experience. AngelShark also noted that having a lot of capital opens up the possibility of pursuing strategies that are likely to generate actual growth like marketing and hiring more people (AngelShark, 2018).

Confidence

Getting financing did not affect the confidence of AngelShark CEO according to himself (AngelShark, 2018).

Conscientiousness

Having more eyes on the CEO, gives a lot of pressure. AngelShark felt a strong need to perform professionally after obtaining financing, having to show numbers to the investors on a monthly basis. AngelShark notes, however, that the pressure is a positive force for himself to perform but is a negative force for many other persons. Getting external financing means that the entrepreneurs learn about the value of money and respect for the investors willingness to part with their own financial resources, which spurs working hard with the financing (AngelShark, 2018).

Openness to experience

AngelShark noted that getting financing changed openness to experience in a negative way, going for a more focused plan. However, the CEO stated that he tries to be as open to ideas as possible. Obtaining financing requires more perspective as well, since new stakeholders are added into the equation (AngelShark, 2018).

Emotional stability

AngelShark's CEO stated that he is generally not a person who worries, is upbeat and positive and goes with the mind-set "work for the best and prepare for the worst". The CEO is a solution minded person and attributes this positive entrepreneurial behaviour to his mentor (AngelShark, 2018).

Risk propensity

AngelShark reported that risk appetite increased with more capital and resulted in riskier decisions, but also that the growth rate increased as well, since financing was obtained. Overall, since obtaining financing the firm has performed well, the CEO considers the majority of decisions to have been well-made. AngelShark notes that if he did the journey again, he would raise capital much earlier and much more (AngelShark, 2018).

Momentum

Since AngelShark obtained financing, they were able to grow a lot as a company, which led to further investment rounds with further growth. AngelShark also stated on the concept of momentum that while it is important for entrepreneurs to make use of momentum, it is also important to learn how to operate a company during the lows. AngelShark feels that business people who leave companies when the times aren't the best, are not really good business people (AngelShark, 2018).

Summary based on Figure 4

AngelShark sought after external capital through angel investors. The founder was an inexperienced and emotionally stable entrepreneur. Having received capital from angel investors, the founder had high change to risk propensity and conscientiousness, while confidence, openness to experience and economic efficiency much. Although not many changes were found to the majority of the constructs, the founder's company had a good performance, due to having achieved significant growth since the financing (AngelShark, 2018).

4.4 CrowdElephant

Background

CrowdElephant was established in late 2014 and launched its product late 2016. The company offers services in the medical industry. The company was started by two founders without previous entrepreneurial experience. The respondent is a doctor himself and the other co-founder has a background in IT. CrowdElephant described how the idea was born and how it was developed to the current stage it is today. They brought the company into life using internal capital and bootstrapping and have been seeking external funding to further develop and grow their venture. They had previously tried to approach institutions to help with the expansion, finance and growth of the company but they got refused because the company was in a very early stage and their revenues weren't high enough to justify the amount of funding they were seeking. Alternatively, the founders decided to create and run a crowdfunding campaign in order to raise the capital they needed for the development of their service and company. A valuation of the company was made and then the company started an equity-based crowdfunding campaign. With ten more days for the campaign to finish,

CrowdElephant had reached their goal and by the end of the campaign they had managed to raise nearly double the amount of capital that was the initial plan; however, in the same time they had to give away the equivalent shares of their company which according to the director was an acceptable trade off. Since the beginning of CrowdElephant's start-up process, the goal of the founders has been a trade-sale or an IPO and therefore further growth and more financing rounds are expected in the near future (CrowdElephant, 2018).

Economic efficiency

CrowdElephant explained that because this is their first entrepreneurial venture, they have been very cautious when it comes to spending money in the start-up process. The capital gained from the crowdfunding campaign allowed the company to have more clarity and was seen as a bit of a roadmap into what was needed to be done. After the successful campaign, the money was spent on hiring more personnel. CrowdElephant expanded the number of persons in the team and hired people for the business development. Another fact that portrays the thriftiness of CrowdElephant is that the founders have set a minimum wage for themselves. Finally, the director mentioned that the overall economic efficiency went up after the crowdfunding campaign, because there were another persons' money on the table (CrowdElephant, 2018).

Confidence

After CrowdElephant saw that their crowdfunding campaign resulted in receiving double the amount of capital they had expected, the confidence of the team in the business idea increased a lot. It was a sign showing them that the market supports the idea and the team had a higher willingness to continue working on the development of the company (CrowdElephant, 2018).

Conscientiousness

CrowdElephant said that one of the reasons they were trying to raise money was to achieve growth and be ready for an institutional financing round. After the end of the crowdfunding campaign, he said that the pressure continued to be apparent and that they had the tools to focus on their growth and development of the business. Another fact that changed when workload is concerned, is that CrowdElephant has to write regular updates and reports to the thousands of small investors gained from the fundraising campaign. Furthermore, having

other people's money made them feel a need for showing the investors that CrowdElephant is valuing their money, and that they need to be efficient in spending it (CrowdElephant, 2018).

Openness to experience

CrowdElephant describes the company as a fluid start up without a strictly hierarchical structure where everyone is free to share their ideas to the board. After the crowdfunding campaign, he mentioned that having new members in the team increased the flow of new ideas, and due to the increase in confidence, CrowdElephant feels that everyone was more open to share their ideas with the founding team and therefore more ideas are being evaluated after the campaign (CrowdElephant, 2018).

Emotional stability

When it comes to the emotional stability of the founders, the director describes himself as an executive who worries in a healthy and productive way; he also mentions that this small amount of worry is desirable to keep the challenge up. On the other hand, the CEO of the company has a more confident attitude who can take all ups and downs in the board and continue to show an emotional stability inside the company as the head of it (CrowdElephant, 2018).

Risk propensity

When asked about changes in risk propensity, the director realised that indeed it had increased. He described examples after the funds from crowdfunding came in, when the team has taken some investment decisions that they would not take if it wasn't for the external funds that the company had acquired (CrowdElephant, 2018).

Momentum

One fact that the director discussed about, is the momentum that the company had after the end of the crowdfunding campaign. In addition to the boost it gave in the confidence and conscientiousness of the team, it also resulted in positive marketing exposure to both customers and businesses. CrowdElephant stated that because many have heard about the crowdfunding campaign, they treat the company different than before; CrowdElephant now get more tenders and there are lots of new opportunities purely because people believe in the business idea (CrowdElephant, 2018).

Summary based on Figure 4

CrowdElephant had a crowdfunding campaign which was led by its inexperienced founders. Obtaining external financing resulted in a significant boost to confidence and change to risk propensity and openness to experience. A medium change was seen in the constructs of conscientiousness and economic efficiency. The crowdfunding gave the company a strong validation of the idea which led to having a momentum and good performance (CrowdElephant, 2018).

4.5 CryptoBear

Background

CryptoBear did a preICO in fall 2017 to test the demand for their product as well as raising capital to create a marketing campaign for their future ICO. At the financing moment, the product was in alpha stage with a small team with sales on a national level. The idea of pursuing ICO financing was born only about two weeks before the preICO. The preICO was set to last two weeks but finished within three days due to one unknown investor buying the majority of the tokens available. The preICO financing went into further development of the product and marketing for the official ICO to come. Even though being a preICO only, the financing meant a lot to CryptoBear due to favourable exchange rates to their national currency. Of their investors, CryptoBear gauged that most of them were mostly interested in potential earnings of their investment, and less interested in the product. At the same time, a community following was deemed important for the spread of the product (CryptoBear, 2018).

The performance since the preICO has made it possible to keep the project going. However, as a result of failing to reach the soft cap during the ICO the firm has been unable to adopt capital intensive strategies which would be able to spur sales growth. Since the company needs to expand horizontally, the marketing team needs to be expanded to reach new markets (CryptoBear, 2018).

Economic efficiency

When the financing was obtained as a result of the preICO, a plan was made for the spending until the official ICO, which the CEO considered efficiently spent. Since the preICO

financing was quite small in proportion to the upcoming ICO, the financing was spent carefully so it would not run out before the ICO; thus, spending only on necessary things. The team is composed of experienced business people and is thus not prone to entrepreneurial mistakes (CryptoBear, 2018).

Confidence

Getting the financing made the team feel excitement, or as CryptoBear stated, frustrating excitement. The CEO and the other founders have a lot of experience in knowing how difficult it has been to raise capital in their country and after seeing how easy it was to receive enormous amount of money it gave a huge boost in confidence (CryptoBear, 2018).

Conscientiousness

According to CryptoBear, diligence did not change significantly after the successful preICO, but the fact that people invested money into their venture gave them pressure to perform and a feeling of responsibility. Since ICOs as a financing platform has had many scams, the team felt it important to work hard in order to make the project a success and establish them as a valid and trustworthy company (CryptoBear, 2018).

Openness to experience

Getting the financing was a test to try out the ICO platform, which opened up new plans. Due to that there was no guarantee that preICO would work, getting the financing made further plans possible and the project as a whole. Thus the financing made planning further ahead a reality. On a different note, getting preICO money made a lot of people approach CryptoBear trying to join in on their success and get money from them, by offering services such as advice for the official ICO, but they were mainly scammers. This gave the company experience on how to evaluate offers as well as insights on how companies that have successful ICO can become target for offers and scams (CryptoBear, 2018).

Emotional stability

The CEO is prone to worrying as a person, but other people in the team are generally very calm. For instance, worrying about the ICO failing to reach the soft cap did not cause the team members to panic. For instance, the other co-founder and CTO are generally very calm, and if they worry about something they tend to not be very open about it (CryptoBear, 2018).

Risk propensity

As a team, CryptoBear are not risk takers “due to being businesspeople”. Investments done are analysed by their potential value and alignment to the goals of the company (CryptoBear, 2018).

Momentum

CryptoBear succeed with their preICO; however, in spite of marketing done with that capital, they were unable to fulfil their ICO soft cap, lowering their momentum (CryptoBear, 2018).

Summary based on Figure 4

CryptoBear’s CEO is an experienced entrepreneur that received external financing through a preICO, but with a tendency to worry. This had a big impact on both the confidence and openness to experience. Conscientiousness and risk propensity didn’t change while there was a medium change to economic efficiency. The momentum CryptoBear got from the preICO was lost when the ICO did not succeed. Performance was good as a result of having an established product on the national market with opportunity to expand due to having a successful preICO with a community built up based on interest in the project (CryptoBear, 2018).

4.6 AngelEagle

Background

AngelEagle is a company founded 2012 specialized in strategic management software. The CEO is an experienced entrepreneur with successful entrepreneurial activities and start-ups in the past. The founders of the company used their own money to build and start the company and were bootstrapping until 2015 when they were looking for external investment and turned to angel investors. Most of the company's founders had used their money buffer and had quit their jobs to fully focus on the development of the company. AngelEagle's reason why choosing angel investors over another method of fundraising was because they were still in an early phase and didn't quite have the required revenues to justify their need for investment. AngelEagle gave a lot of perspective on how the feelings, confidence/doubt and in general the emotional stability goes through a rollercoaster during the start-up process. AngelEagle described in detail how running a business entity goes from a fun and learning activity to the stage when the entrepreneur doubts himself and the business idea and how

receiving investment from angel investors can put both the company and the entrepreneur back to track for development and self-assurance. On a final note, it should be mentioned that currently after few investment rounds from an angel investor, the founders have about one third of the company's shares; this was necessary for the company to be alive today. But although the external shareholders have the majority of the shares, decision making is still on the hands of the CEO and the angel investors have in general a more passive position (AngelEagle, 2018).

Economic efficiency

AngelEagle stated that they were bootstrapping during the first two years and have been cautious with costs. That didn't change even after the investment rounds where they received capital from angel investors. Moreover, the amount of capital received was limited and was enough to cover the costs that were necessary for the survival and development of the company (AngelEagle, 2018).

Conscientiousness

AngelEagle stated that the founding team worked very hard on starting and developing their company. The CEO specifically mentioned that they couldn't work much harder after the financing moment because they were already giving their best efforts. But despite this, operating with external capital gave the team a pressure to be more effective and focused. This was a result of the confidence that the team got from realising that someone else was willing to invest in the company (AngelEagle, 2018).

Openness to experience

Receiving funds from angel investors didn't change the team's openness to experience. The company knew exactly what was needed to be done for the company to develop and grow. AngelEagle also mentioned that even though new ideas and changes in the business plan have been made, those actions were not a result of receiving external funds (AngelEagle, 2018).

Confidence

AngelEagle described how ups and downs in the company affect the confidence of the team and how before the investments from angel investors, the team was full of doubt. After

bootstrapping for the first years and having second thoughts about the business idea, AngelEagle describes that it was even challenging to pitch the idea to investors because of the levels of doubt. But after receiving the first investment round the team got a confirmation from outside that the business idea is valid and can turn to be a successful business. Bringing external capital into the company gave the founders the boost in confidence that was needed to focus (AngelEagle, 2018).

Risk propensity

When it comes to risk propensity, the AngelEagle explained that because of the limited amount of capital they received from angel investors, their risk propensity didn't change. He furthermore added that their entire start-up is an extremely risky journey; the risk is always apparent (AngelEagle, 2018).

Emotional stability

The CEO was a person who often worries about business and life matters. He is a very focused and determined person when it comes to entrepreneurship. He described how it is possible that such worries can impact his personal life as well. Before the company received financing, there were lots of doubt when it comes to the success of his venture and doubts about if they were just fooling themselves and losing their time and money (AngelEagle, 2018).

Momentum

The fact that AngelEagle received financing from angel investor, was a key point to the momentum of the whole team. Receiving financing from external sources who believed in the business idea, made the founders confident and since then, the levels of worry and mostly doubt have changed radically. As the CEO said, having someone else outside the company investing in the idea and believing in it gave the team a validation that what the company is trying to achieve is valid (AngelEagle, 2018).

Summary based on Figure 4

AngelEagle needed external capital to survive. The founder is an experienced entrepreneur who is prone to worrying. Receiving financing had a medium change to confidence and high change to economic efficiency. The rest of the behavioural constructs had low change.

Finally, the financing didn't give the company a momentum and the performance was low (AngelEagle, 2018).

4.7 Interview response table

	Confidence	Economic efficiency	Conscientiousness	Openness to experience	Emotional stability	Risk propensity	Momentum
CrowdAlbatross Crowdfund	Increased confidence as a result of crowdfunding	Financing did not affect economic efficiency but forced investment decisions	Pressure to perform from investors is a good thing. Also increases team motivation.	Important to have multiple plans. Founder also exhibited sensitivity to aesthetics.	In general not very worried.	Risk appetite increased with financing success.	Getting financing made it important to maintain attention to the project.
CryptoTiger ICO	More important than the financing, ICO success proved interest in the project.	Money spent on matters their community wanted. Product development, attracting collaborations	ICO gave positive feedback and acted as validation, thus spurring the team.	Big impact. New ideas for achieving company's objectives, people started to think alternatives,	Like every other start-up, high confidence with moments of doubts. Age and experience negated the worry.	No reported changes from financing. ICO was planned with a hard cap on financing, thus no over financing.	Obtaining financing meant changing one's mind was not an option.
AngelShark Angel	Getting financing did not affect confidence.	Getting financing the first time resulted in bad decisions, which results in entrepreneurial learning.	Getting external investment results in pressure to perform due to month reports and more eyes.	Financing results in a more focused approach, despite trying to be open.	CEO is not a person who worries	Risk appetite increased with financing success.	Using momentum is important
CrowdElephant Crowdfund	Increased confidence as a result of crowdfunding	Cautious for expenses. Money spent on personnel	Increased. Got the tools they needed to expand.	Increased flow of new ideas by new members and staff	Healthy and helpful stress.	Risk appetite increased with financing success.	Getting financing helped in getting known in the market and receive offers
CryptoBear ICO	Getting financing resulted in a significant confidence boost.	After pre ICO, plan was made for spending until official ICO	No significant change, but external investment provoke responsibility.	Financing from pre ICO made further plans possible.	CEO is prone to worrying, but other top members are not.	Not risk prone as entrepreneurs.	Despite succeeding with preICO, they were unable to fulfil their ICO soft cap
AngelEagle Angel	Increased confidence after receiving financing.	Cautious with spending. Used to bootstrapping and the limited financing.	Pressure to perform due to using investors' money	Financing did not have an impact.	CEO is prone to worrying.	Did not change.	Big impact after investors came in and believed in the business

Table 1: Interview response table

4.8 Summary of results

Having had all the interviews, certain similarities begin to emerge in connection with the financing obtained. Nearly all of the respondents stated that obtaining financing resulted in a confidence boost, or at least said that it gave proof of interest. Obtaining financing did not result in a confidence change to AngelShark. The highest change was observed in the respondents that were financed by ICOs and crowdfunding.

The responses on the matter of economic efficiency in relation to the financing moment, appeared to correlate with previous entrepreneurial experience. One of the first time entrepreneurs stated that obtaining financing for the first time in his entrepreneurial career resulted in bad financing decisions but also in entrepreneurial learning as a result. The more experienced entrepreneurs were prone to claiming that obtaining financing did not affect the economic efficiency of the firm, due to having established operational plans beforehand or due to experienced work ethic. Regardless, the financing moment would force the entrepreneurs to take economic action, as in spending their acquired finance, locking more capital vested into the venture. Switching costs and sunk costs increases risk. Half of the respondents stated that risk appetite did increase with obtaining financing whereas the other half stated that it did not.

While some of the respondents stated that their diligence did not increase by obtaining financing, all the respondents yielded that to some extent, getting financing increased pressure to perform, or gave validation from the market, be it from an investor side or customer side, depending on the financing type. ICO and crowdfunded ventures have the potential to attract both investor and customer investments.

The responses were varied about openness to experience. CrowdAlbatross noted that financing did not change openness to experience but that it is important to have multiple plans. Their crowdfund was in fact a plan B. He also displayed aesthetic sensitivity regarding his brand and marketing. CryptoTiger stated that obtaining financing made a big impact on the team as a whole. The company considered new ideas for fulfilling the company objectives and the team members began to think for themselves. AngelShark stated that getting financing resulted in a more focused position on the core business, despite trying to remain open. On the other hand, AngelShark stated that adding new stakeholders added more

perspectives to be considered. For CrowdElephant, the number of ideas being evaluated saw an increase due to the confidence that everyone had after their crowdfunding campaign. For CryptoBear, financing made further plans possible and thus served as an opener for the company. AngelEagle stated that financing did not change openness to experience because they already had a clear plan of what they were going to do.

When it came to emotional stability, the respondents were differently prone to worrying about things in general, such as their ventures. The entrepreneurially experienced CEO of CryptoTiger stated that early stage companies start off with high confidence that over time goes into moments of strong doubt. However, age and experience reduced the worry. CrowdElephant stated that worrying constitutes healthy and helpful stress, which maintains the challenge and productivity.

A concept that emerged from the interviews was the importance of maintaining the momentum as financing is achieved. Attention from investors and customers alike is important, due to the way they synergize. If an ICO or crowdfunded venture proves interest from the public, other investor sources will become more available as product undergoes further development or launch. Investment from the investor's side make it possible to attract interest from the public via marketing about an upcoming launch.

Observed differences between the financing types in these cases are different as well between each case. AngelShark and AngelEagle went for angel investment, but for different reasons. For AngelShark, a first time entrepreneur, the financing was sought for expansion purposes, where AngelEagle needed financing for sustenance. The guidance and expertise was important for AngelShark due to the venture being the entrepreneur's first start-up. It was not as important for AngelEagle, due to being an entrepreneurially experienced CEO.

Depending on the financing type, achieving financing results in different types of validation from the market. Since equity crowdfunds are mainly composed of investors rather than customers, the validation from the market was different for the crowdfund cases in this study compared to the ICOs. Interestingly, this meant that the equity crowdfunds studied, attracted the least non-financial feedback to their ventures. Angel investors would at least, in the cases where they were not on the board, meet with the CEO regularly. Due to the way ICOs function, they lead to the creation of an online community of people interested in the product,

which in at least one of the cases included rights to vote and influence the path of the company. The crowdfund investors would receive monthly reports on progress and only a few would respond with questions about it.

5 Analysis

This chapter contains analysis done with the purpose of extracting hypotheses from the interview data gathered. The estimations generated were created with critical analysis of the interview responses. It is important to take into consideration that the estimated values below on the first five construct do not represent the overall value of each construct, rather the estimation of how much the constructs changed after receiving financing with a minimum value of 1 and maximum of 5. Below is the table of the value estimations.

5.1 Value Estimations

	Confidence	Conscientiousness	Risk propensity	Openness to experience	Economic efficiency	Emotional stability	Experience	Momentum	Performance
CryptoTiger	4	2	2	5	5	5	5	4	4
CryptoBear	5	1	1	4	3	1	4	2	3
AngelShark	1	5	5	1	1	4	2	3	4
AngelEagle	3	2	2	2	4	1	5	2	2
CrowdElephant	4	3	4	4	2	3	1	3	4
CrowdAlbatross	4	1	4	3	2	4	4	3	3

Table 2: Value estimations

The addition of financing has had a quite significant change on the confidence level of most of the respondents. Differing levels of change have also been observed in conscientiousness, risk propensity, openness to experience and economic efficiency. The remaining constructs are constituted of input constructs and output constructs. Emotional stability shows the general propensity of the entrepreneur to worry, which was included due to Zhao's (2010) study on the effects of the big five psychological traits on entrepreneurial intention and performance. High emotional stability, a lack of worrying is correlated with higher entrepreneurial performance; no such link can however be made in these cases. Experience is the estimation of the previous entrepreneurial experience amongst the respondents. Momentum is the estimated level of growth the firms undergoes as a result of non-behavioural factors, like capital based growth. The estimations are based of the author's considerations of the answers from the different interviews. Performance represents an overall estimation of the firm's performance based on the interview response.

Categorisation

The six companies have further been categorised below based on their reason for seeking financing, whether they are established on the market and if they have sought external financing previously. The authors felt that those three factors may play an important role in the hypothesis building procedure and thus additional categorisation was formulated. The status of each firm in relation to the categorisation can be found in appendix in section 9.1.1.

5.2 Hypotheses construction

After creating the estimation table, a colour scale analysis was applied to the table to help identifying potential relationships between the constructs. In addition, the theoretical framework guided the authors in which direction the hypotheses could be found. After making many different assumptions and quick tests of those through the cases, a set of 7 initial hypotheses was created and was used to start the process of analytic induction as described in chapter 3.6.

The hypotheses construction uses a case by case structure to develop the final hypotheses set. Each case is examined with the hypotheses, with each new anomaly identified, the hypothesis is revised to reflect the data. The initial hypotheses set was drafted after examining one case in particular, CryptoTiger, attempting to establish patterns between phenomena and the causal relationships between the constructs. After that, each case was examined for anomalies to the draft hypotheses. For purposes of application, a difference at most 1 point (from Table 2 of value estimation found in chapter 5.1) is needed to be considered a correlation. The details of the analytic induction process can be found in the appendix 9.1.2.

5.3 Final hypotheses

Below are the final seven hypotheses that were formulated after the process of analytic induction.

1. Confidence significantly changes (4+) when financing obtained is sourced by many actors (ICO or crowdfunding) while receiving financing from angel investors entails a smaller change to confidence (3 and lower).

2. Change to conscientiousness appears to be dependent on previous entrepreneurial experience: When entrepreneurial experience is high, conscientiousness change is low and vice versa.
3. Change to confidence linearly correlates with change to openness to experience.
4. Except cases where the firm had other previous financing: Change to risk propensity appears to be dependent with previous entrepreneurial experience: When entrepreneurial experience is high, change to risk propensity is low and vice versa.
5. Except cases where both change to confidence is high and entrepreneurial experience low and where the financing is not obtained for survival reasons: Change to openness to experience appears to be dependent with change to conscientiousness: When openness to experience change is low, conscientiousness change is high and vice versa.
6. Except cases where entrepreneurial experience is low and change to confidence is high: Change to economic efficiency appears to be dependent with risk propensity change: When risk propensity change is low, economic efficiency change is high and vice versa.
7. In order for performance to be good (3+), a significant change to either openness to experience or conscientiousness is required at the financing moment. (3+)

While conducting the interviews and importing the results from the transcriptions, the first hypothesis was formulated: having a successful crowdfunding campaign or an ICO, significantly increases the confidence of the entrepreneur in comparison with having angel investors where the change in confidence is lower. The authors believe that having many smaller investors backing up a project has a stronger effect on one's confidence and gives a stronger validation of the project's idea. This belief falls into line with the stories of the CEOs that were interviewed and had an ICO or a crowdfunding campaign. All four of them stated that having a plethora of people investing in their company boosted their confidence. The phenomenon also seems to occur in regard to openness to experience; this despite a similarity established between ICOs and angels in the results, which showed how equity crowdfunding investors commonly are of the three financing types, the financing type with the least non-financial feedback from their investors. This strengthens the hypothesis that the confidence change occurred due to a similarity between ICOs and crowdfunding: many more investors have liked the early stage company enough to invest in it and that boosted the confidence. A lack of confidence in angel investors could also be due to a strained investor

relation, in which the angels see it as their role to question the entrepreneur, but the entrepreneur only feels pressure instead, lowering confidence. In AngelEagle's case, a quite high confidence change could be due to passive angels and the financing ensuring their survival. In AngelSharks case, the angels had more pronounced influence and no confidence change in the CEO of AngelShark (Collewaert, 2012).

When it comes to the relation between conscientiousness change and previous entrepreneurial experience, they appear to be dependent. It seems that less experienced entrepreneurs become more dedicated to their ventures after they have received external capital and validation of their idea due to financing. It is also likely that experienced entrepreneurs have a well-established self-work drive and do not need external pressure in order to work hard. The same relation can be seen with the constructs of entrepreneurial experience and risk propensity. Changes to risk propensity is lower when previous entrepreneurial experience exists. As one of the interviewees said, "in order to learn you must take some risks in the beginning".

It would also seem as change to confidence correlated with change to openness to experience. Change to confidence itself also seemed to be affected by the type of financing, creating a possible sequence of causation. Type of financing leads to heightened confidence, which in these cases, correlates with change to openness to experience. Change to openness to experience also makes a good performance possible, according to hypothesis seven.

Openness to experience appears to be dependent with conscientiousness. When one changes the other doesn't. This could be because after receiving external capital, an entrepreneur may have to focus on his/her new choices and options that appear as a result of financing such as new tenders, new collaborations or new emerging strategies. For other entrepreneurs, getting financing meant that they got the validation that the idea is both viable and has a demand, and this fact has a positive effect on the entrepreneur to focus on their action plan and strive for the development of their offerings or their product launch.

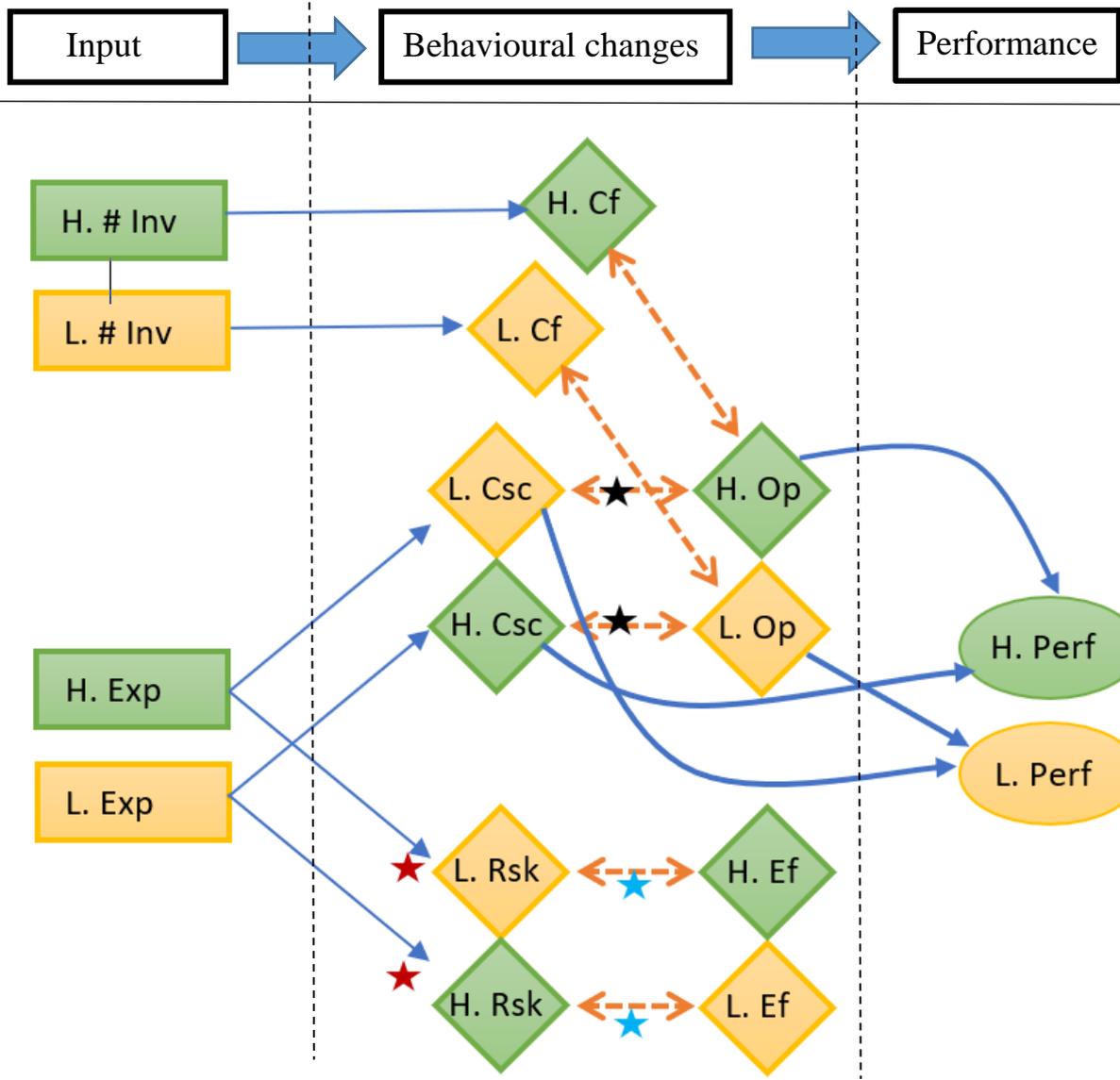
Change to risk propensity appears to be dependent with change to economic efficiency; when one changes the other one doesn't, and this hypothesis was very apparent in the cases studied. Getting external financing means by default that an early stage company has more capital to operate with. The investments can therefore be of two types: investments that are new

openings and opportunities and involve an element of direct risk, or scheduled investments that are focused primarily on the development of the early stage company and entail less risk.

The final hypothesis is that in order to have a high performance, changes in either openness to experience or conscientiousness is required. This also falls into line with previous empirical data on how these behavioural traits correlate with performance from the start point. Emotional stability correlated with entrepreneurial performance according to Zhao's study, but in the cases in this study, no such link seemed apparent (Zhao et al. 2010). The non-behavioural construct momentum seemed to correlate well with overall performance, but bore no other pattern conclusions with the behavioural change constructs.

5.3 Hypothesis model

Based on these hypotheses, a model was generated to show the relation of the constructs with each other. In the model illustrated below at Figure 5, financing type and previous entrepreneurial experience serve as opening points of causation, as they are relatively static compared to behavioural change constructs, despite entrepreneurial experience being continuously accumulated during an entrepreneur's career. Entrepreneurial experience is dependent with change to risk propensity at the financing moment, and thus indirectly affects change to economic efficiency, which is dependent with change to risk. This means that an experienced entrepreneur is likely to experience limited risk appetite growth (except when the venture has had previous external financing sources) and as a result, increased the economically efficient behaviour of the firm. Entrepreneurial experience also correlated with low change to conscientiousness, which correlated with high openness to experience. For example, a new entrepreneur would thus be likely to change their conscientiousness and work a lot harder after obtaining financing, but as a result, be more likely not to change or even lower their openness to experience. Change to one of these conscientiousness or openness to experience however, make firms prone to deliver good or high performance. The other starting point is financing type, which affects confidence. Mass invested ventures like ICO or crowd backed ventures, result in a lot higher confidence than angel invested firms, which also correlates with change to openness to experience.



Anomalies/Exceptions:	Shape explanation/Legend
★ Except cases that have had previous financing rounds.	→ One way effect
Except cases where entrepreneurial experience is low and change to confidence is high.	↔ Two way interaction
★ Except cases where both change to confidence is high and entrepreneurial experience low and where the financing is not obtained for survival reasons.	◆ Symbolises change
	■ Static
	● Affected outcome
Abbreviations	
L.: Low H.: High # Inv: Number of investors Exp: Experience Cf: Confidence	Csc: Conscientiousness Op: Openness to experience Rsk: Risk propensity Ef: Economic efficiency Perf: Performance

Figure 5: Hypothesis model

6 Discussion

The hypothesis model has practical and academic implications that may or may not be valid. Since it is not certain that the hypotheses would hold true in a quantitative study, the same also holds true for interpreted implications of the hypotheses.

Figure 4 in conjunction with the analytic induction makes the creation of a hypothesis model possible. The model illustrates how the inputs, which financing method used and how the previous entrepreneurial experience influence which behavioural changes occur. The hypothesis model further shows which behavioural patterns appear to be important for the performance.

The model suggests that angel investing is a good option for low experienced entrepreneurs mainly. The cases in this study increased confidence only in mass funded ventures which appears to correlate with change to openness to experience, which according to the model, is one of the vehicles for achieving good performance. Since change to openness to experience appears to be dependent with low conscientiousness change, it follows that the best option for experienced entrepreneurs is to pursue other financing sources. While unlikely to be an universal truth, it may be a cause for concern amongst experienced entrepreneurs. A way that angel investments also potentially holds down confidence growth could be explained through angel involvement (Collewaert, 2012). In the angel invested cases in this study, the confidence change was at its lowest in the case in which the entrepreneur had the most involvement from the angel investors. Despite that, the performance was good, due to the increase in conscientiousness. The implication of the hypothesis is that experienced entrepreneurs may find it difficult to perform under involved angel investors influence. It could simply be that it is not advisable to try and steer a ship with multiple captains. Further support on the matter of confidence can be found from Howell's study on feedback (2017). Negative feedback increases the chance of venture abandonment and lowers the chance of survival. Even if the addition of angel investors carries no guarantee of failure related to an investor relationship gone awry, the possibility exists. Working hard after the angel investment, as in an increase to conscientiousness, may assist the relationship between the investor and entrepreneur. Exploring many potential options might irritate an involved angel investor clamoring to see results. While dependent on the personalities of the entrepreneur and investors involved, this finding could be an interesting suggestion for entrepreneurs.

In the angel investor case with low performance, the expected reason for the low performance was due to the financing reason of survival. This was interpreted to be an explanation for the fact that neither openness to experience or conscientiousness changed. It could also be that change to conscientiousness isn't conducive with previous entrepreneurial experience, the work drive cannot be raised much further when it has already been established. This strengthens the implication that angel investors are not advisable for experienced entrepreneurs. If change to confidence is linked with change to openness to experience and change to openness to experience at the financing moment is itself linked with previous entrepreneurial experience. Due to needing mass funding to boost confidence and not to hold it down with angels: Angels are not advisable for experienced entrepreneurs.

Although risk propensity is a personality trait that may be critical for an entrepreneur to start a new venture, Zhao et al. argues that willingness to bear risk might not be beneficial for the future of an entrepreneurial firm (Zhao et al, 2010). Our sixth hypothesis is that risk propensity is dependent with economic efficiency where change to one is low results in the other being high. This hypothesis stemmed out firstly from the analysis of the value estimations table as well as from the interviews. Going back to Zhao's study, they argue that in the early stages of a company, entrepreneurs are usually required to manage their risk propensity carefully to maximise the economic efficiency of the limited resources a new firm usually has (Zhao's et al. 2010). This is a problematic finding for inexperienced entrepreneurs, suggesting that heightened risk-propensity after financing is a negative outcome due to being post-startup. It could however be beneficial for ensuring the entrepreneurs continued motivation in their ventures. If there was a need for risk propensity in order for the entrepreneur to have enough trust in the business plan to commit to the actual foundation of the firm, it might also be necessary for the entrepreneur to keep going. As long as it does not challenge the economic efficiency to the extent that jeopardizes the survival of the firm, sustained risk propensity may be a necessity to keep the entrepreneur motivated and involved in the venture, despite the lack of effect to a positive performance, according to Zhao et al. (2010). Since it is also inexperienced entrepreneurs that appear to exhibit the most risk propensity growth after obtaining financing, the reduced doubt in the venture as a result of the risk propensity may be especially important to cover for the lack of experience with previous startups.

According to the model, either a change to openness to experience or conscientiousness is required in order to perform well. It is also not unreasonable that the hypothesis of dependency between them are correct as well, due to being known antipoles within psychology. The change to one of them in practical terms would be antithetical to each other as well, due to openness to experience manifesting itself by causing the entrepreneur to evaluate and explore multiple options while change to conscientiousness would manifest itself by the entrepreneur working hard on the established business plan. Since both of the factors are relevant in Zhao's (2010) correlation study on performance and correlation with the big five factors and risk propensity, there is statistical support from previous research that openness to experience and conscientiousness are important in connection with performance. This study adds support that the two factors are relevant to performance and adds that potentially, one of them needs to change for a firm to have a good performance.

The study of entrepreneurial behaviour in a change context is hard to measure, as well as making accurate, valid estimations of their connection with other phenomena of interest, such as performance. However, this study showcases that entrepreneurial behaviour does happen in relation to the financing moment and has implications for the firm's future and thus provides an opening for future research on the matter and bridges the identified literature gap a bit. More research is needed to evaluate the importance of behavioural changes brought by important events in an entrepreneur's career, both qualitative and quantitative.

6.1 Limitations

There is of course the possibility that entrepreneurial behaviour changed due to other factors that affect entrepreneurs. It is also hard to certify that certain changes came about due to the factors delved into within the hypotheses. Hypothesis 1 suggests that financing type affects confidence, but the confidence change itself may have been due to other factors than the crowdfunding or ICO. Hypothesis 3 refers to that when confidence level changes, so does openness to experience, however, the causality between the two factors is unclear as to which one is influencing the other, if they are influencing each other. In other words, there may be correlation, but no guarantee of causation.

It is possible that the level of performance observed and gauged by the authors would not stand up to financial measurement with actual financial data from the respective firms, in

addition to comparison. The authors are also not psychologists and the evaluations of change to psychological factors is thus not certified by an educated psychologist. If the study was done with a certified psychologist, the outcome might have been different.

When it comes to the sampling of respondents, the respondents are made up of entrepreneurs who were willing to yield their time for the study. Most entrepreneurs did not respond at all, but some responded that they did not have the time. There were also two planned interviews that never happened either due to the respondent cancelling just before or stopped responding altogether. In other words, the respondents were preselected by their own willingness to dispense with their time for the study.

Another problem connected to the respondents is their signalling. Respondents might not be inclined to remember or admit that getting financing resulted in negative change to their behaviour. They may have responded in ways to paint themselves in a better light. Cognitive biases can thus affect the way a respondent answers questions. This problem is perhaps offset a bit by the anonymity. One of the respondents in particular was very open about how getting financing resulted in poor financial decisions and had no apparent holding back on response in that regard, but others may or may not have been so open discussing and admitting bad choices made in the past.

Because of the small sample of cases that were analysed in this research, no apparent patterns were found regarding the relationship between the constructs of risk propensity and economic efficiency in relation with the venture performance. Change to economic efficiency refers to something different from profitability in this study, compared to Zhao's study (et al. 2010), since it is used as a change factor, rather than as a direct variable. In a quantitative study, it might be advisable to measure both change to economic efficiency, in addition to the total profitability level.

7 Conclusions

The thesis provides empirical support for that entrepreneurial behaviour changes are prone to occur in the financing moment. Based on interviews and analysis of them, hypotheses were produced which provide insight into potential implications and links between the constructs researched. There appears to be limited, but existent effects upon entrepreneurial behaviour brought upon by the differences in the financing methods used. The observed changes to confidence and openness to experience, specifically in mass invested firms by crowdfunding or ICOs, showcase a different effect from angel invested firms. This conclusion is supported by previous theory on how angel investor relations can have negative effect on the entrepreneur's self-esteem and confidence in their ventures (Collewaert, 2012). This suggests that angel investments are inadvisable for experienced entrepreneurs.

In a broader context, the financing moment, irrespective of financing method used, affects different behavioural characteristics. Different change in constructs in the respective cases and the hypotheses present an attempt at explaining patterns and reasons on why the data outcome was the way it realised. Common amongst all the cases is that there appears to be change in connection with the financing moment, though which constructs change differ. Based on the results in these cases, it appears that either a change in conscientiousness or in openness to experience is necessary in order to achieve a good performance. Entrepreneurial experience appears to be a specifically important factor in relation to the observed changes, seemingly dictating which other factors change. Based on Zhao's study (et al. 2010), these behavioural changes also have theoretical support for having performance implications.

8 Contribution

The case studies done provide new data on a clearly defined literature gap. The results of the report show that behavioural changes do occur in connection with the financing moment and that the observed changes, based on previous behavioural theory, hold potential implications for the future of the firms in question. This thesis thus serves as an opening, into a new field of research in connection to entrepreneurial behaviour.

The hypotheses produced by the analysis, suggests that changes to the entrepreneurial behaviour are prone to occur throughout a firm's life cycle. This presents an opening for future research, both for testing the hypotheses formulated and conducting more qualitative as well as quantitative research into behavioural changes during a firm's operational life cycle.

The report also documents an emerging phenomenon in financing, initial coin offerings. The work presents both differences in the new method from the more traditional financing methods, but also similarities. ICOs also offer further research opportunities in relation to entrepreneurial behaviour. The property of customizability gives a new perspective to how financing can be obtained and gives a variety of incentives to both entrepreneurs as well as to investors to seek financing and opportunities for investing respectively. This has potential implications both for how entrepreneurs choose to seek financing, given that their entrepreneurial behaviour might dictate how they customize their ICO, as well as change as a result of it.

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9.1 Appendix

9.1.1 Categories

Financing reason: The different respondents held different reasons for financing:

- CryptoTiger (ICO) - Independence from shareholders, market test, early stage company stage
- CryptoBear (ICO) - Market test, development stage
- AngelShark (Angel) - Growth and expertise, growth stage
- AngelEagle (Angel) - Survival and development, pre-launch stage
- CrowdElephant (Crowdfunding) - Growth, marketing as emergent strategy
- CrowdAlbatross (Crowdfunding) - Development, branding, market test, pre-launch stage

Established on the market with revenues at financing moment:

- CryptoTiger (ICO) - No
- CryptoBear (ICO) - Yes
- AngelShark (Angel) - Yes
- AngelEagle (Angel) - Yes
- CrowdElephant (Crowdfunding) - Yes
- CrowdAlbatross (Crowdfunding) - No

Previous external financing:

- CryptoTiger (ICO) - No
- CryptoBear (ICO) - No
- AngelShark (Angel) - No
- AngelEagle (Angel) - No
- CrowdElephant (Crowdfunding) - No
- CrowdAlbatross (Crowdfunding) - Yes

9.1.2 Analytic induction process

Initial hypotheses: CryptoTiger

1. Change to confidence was high as a result of financing, which was due to being a mass funded venture where lots of actors were involved.

2. Change to conscientiousness was low, due to previous entrepreneurial experience.
3. Change to confidence linearly correlates with openness to experience.
4. Change to risk propensity was low, due to previous entrepreneurial experience.
5. Change to openness to experience was high, due to low change to conscientiousness.
6. Change to economic efficiency was high due to low risk propensity change.
7. In order for performance to be high, a significant change to either openness to experience or conscientiousness is required.

Examination of initial hypotheses: CryptoBear

1. Applies
2. Applies
3. Applies
4. Applies
5. Applies
6. Applies
7. Applies

AngelShark

1. Applies
2. Applies
3. Applies
4. Applies
5. Applies
6. Applies
7. Applies

AngelEagle

1. Applies
2. Applies
3. Applies
4. Applies
5. Anomaly: Neither openness to experience and conscientiousness changed: Revision added: Change in neither occurred due to financing being sought for survival reasons.
6. Applies

7. Applies

CrowdElephant

1. Applies
2. Applies
3. Applies
4. Applies
5. Anomaly: Both openness to experience and conscientiousness increased as a result of financing. Revision added: Low experience with high confidence causes both openness to experience and conscientiousness to change.
6. Anomaly: Both economic efficiency and risk propensity increased. Revision added: Low experience with high confidence causes both economic efficiency and risk propensity to change.
7. Applies

CrowdAlbatross

1. Applies
2. Applies
3. Applies
4. Anomaly: Risk propensity increased and entrepreneurial experience is high. Revision: Hypothesis does not apply due to CrowdAlbatross having previous external financing.
5. Applies
6. Applies
7. Applies

CryptoTiger

1. Applies
2. Applies
3. Applies
4. Applies
5. Applies
6. Applies
7. Applies

No new anomalies were discovered in a second round of investigation after the changes to the final version.

9.1.3 Interview Guide

Background questions

Please tell us about the company

- Previous founder entrepreneurial experience?
- General company information, firm age, financing dates etc.
- Moment of financing

Constructs:

Economic efficiency

Confidence

Conscientiousness

Openness to experience

Emotional stability

Risk propensity

Performance questions

How has the performance of the firm been?

- Storytelling before and after the financing
- Growth/expansion after financing
- Record performance/problematic periods

9.1.4 Contacting email

The following email was formulated and sent to entrepreneurs that the authors tried to get in contact and plan their interviews:

Hello (Name)

We are Adam and Thomas and we are currently doing our master thesis in entrepreneurship at the University of Gothenburg in Sweden.

The reason why we are contacting you is because we would like to ask if you would be kind enough to spare some of your time and help us gather some information that we could use for our master thesis by doing one interview with us at some point in the near future.

Information about the subject of our project.

We are making a research about how different fundraising methods may affect the entrepreneurial behaviour of a startup such as confidence, motivation, optimism and so on. The 3 methods of fundraising in research are angel investors, crowdfunding and ICOs.

The interviews will be not more than 60 minutes and they will be conducted in a semi-structured form meaning that you will have a level of freedom for expanding your thoughts. We won't be needing sensitive details but we would appreciate if you could share with us how it allowed your company and you as an entrepreneur, to proceed into the after-funding stage. Preferably we are looking for companies that have recently had a successful fundraising campaign (6-18 months) so that the memories and emotions of the process will be as vivid as possible.

Obviously, you will be given access to our paper when we are done with it (June 2018) as it might be of an interest for you on both a professional and personal level. In addition, both the names of the interviewees and the company will be anonymised, unless you wish otherwise.

If this sounded like something you would be interested in helping us with, let us know so that we can give you more details on the structure of the interviews and maybe start planning the process. In case you have any questions about this project, please don't hesitate to contact us! We thank you for your time and we hope we have garnered your interest in our project!

Best regards

Adam and Thomas

9.2 Tables and figures



Figure 1: Entrepreneurial causation proposition

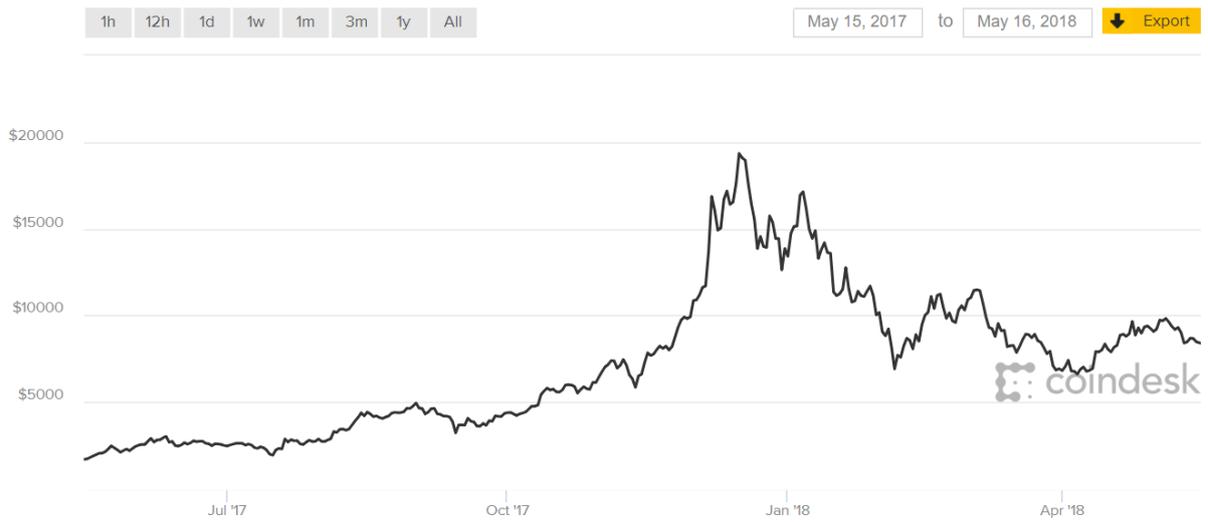
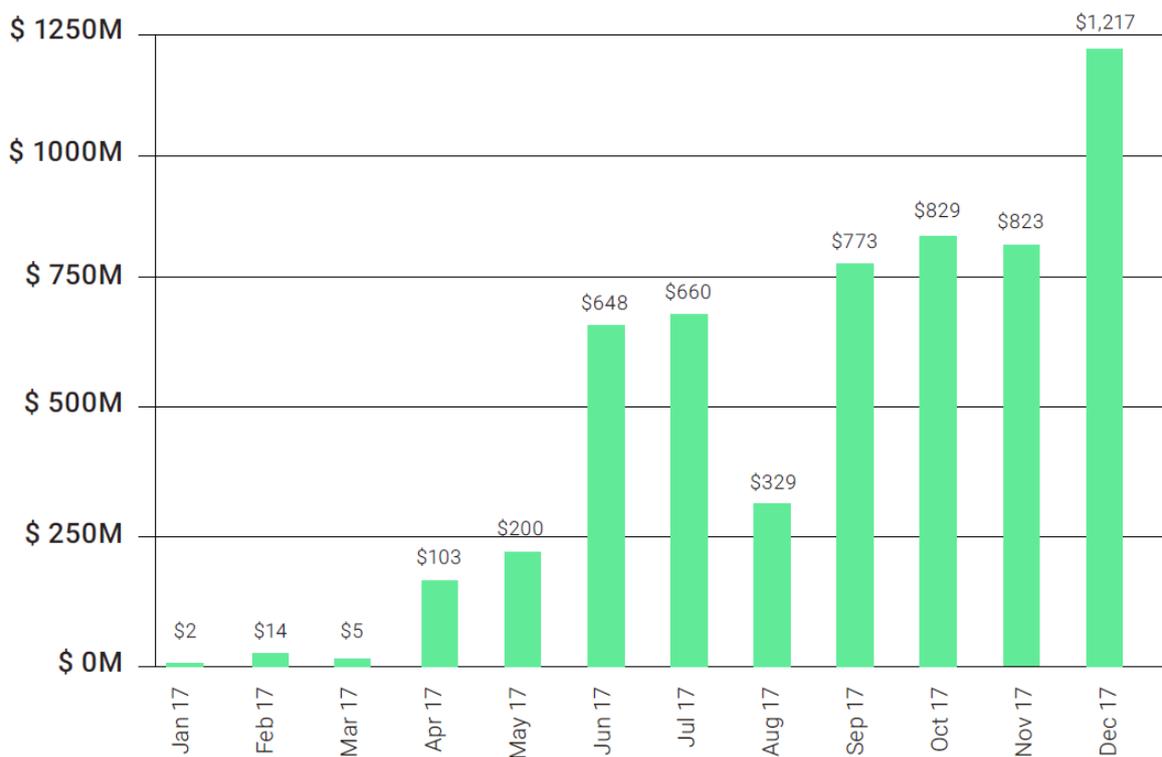


Figure 2: Bitcoin price over the last two years. Source: Coindesk

USD Raised by ICOs in 2017 - Monthly Totals



Source: The state of the token market, a year in review & an outlook for 2018
 A joint production by FabricVentures & TokenData, 2018

Figure 3: USD raised by ICOs

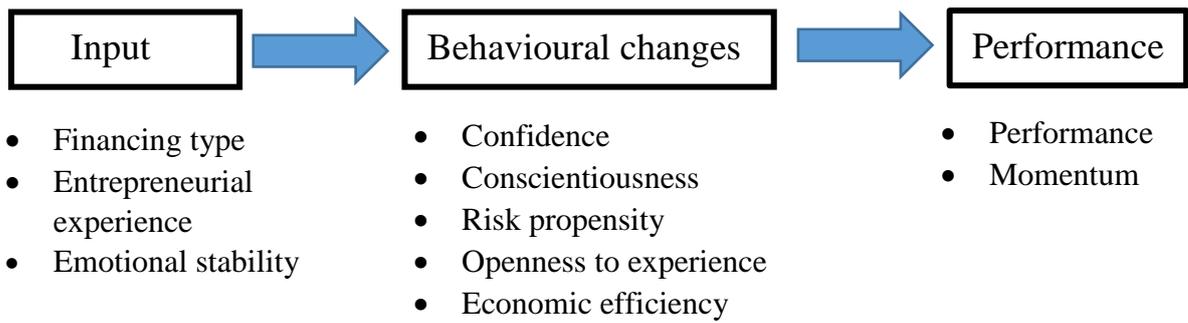
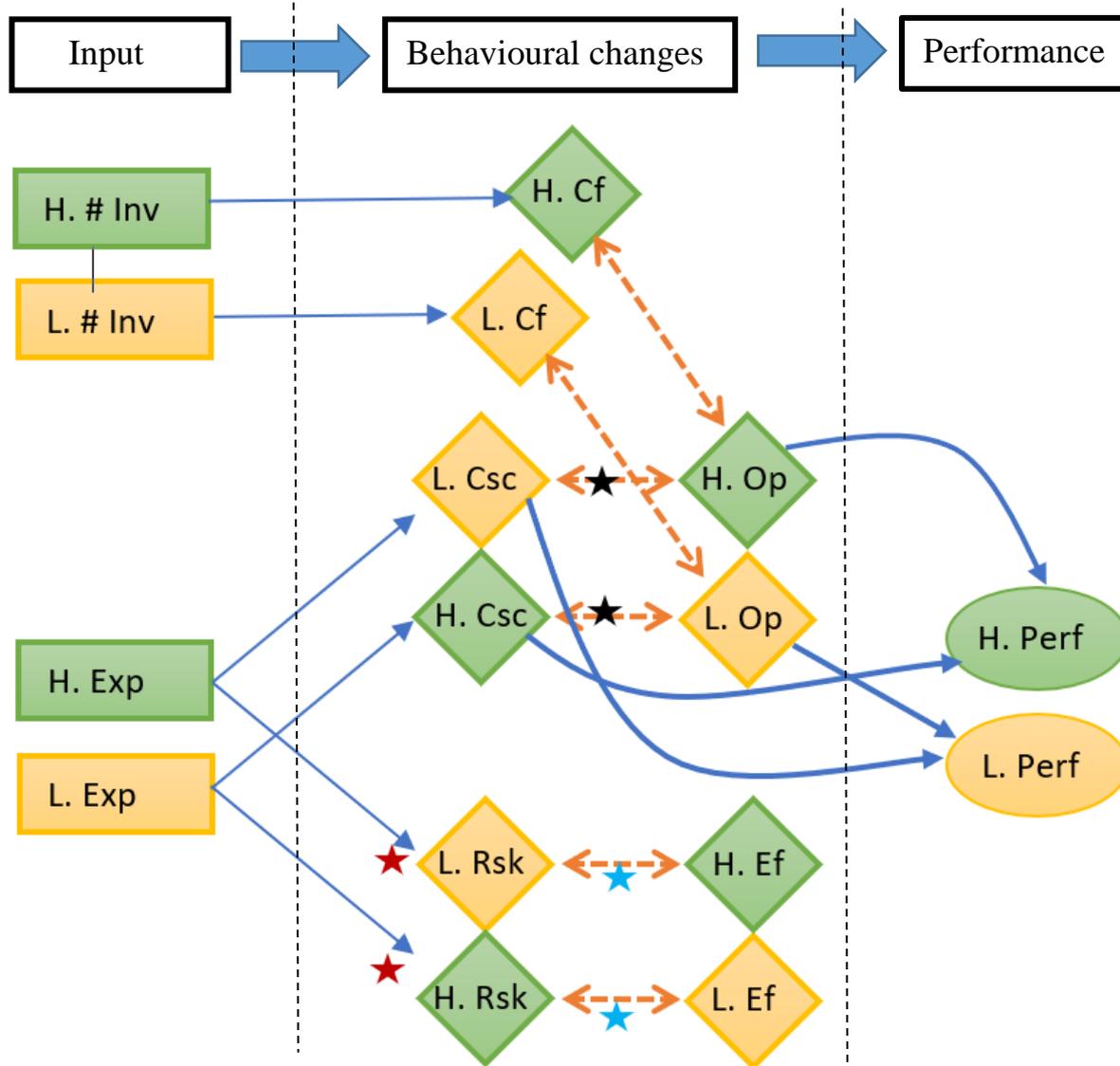


Figure 4: Expansion of Figure 1 with the implementation of the constructs

	Confidence	Conscientiousness	Risk propensity	Openness to experience	Economic efficiency	Emotional stability	Experience	Momentum	Performance
CryptoTiger	4	2	2	5	5	5	5	4	4
CryptoBear	5	1	1	4	3	1	4	2	3
AngelShark	1	5	5	1	1	4	2	3	4
AngelEagle	3	2	2	2	4	1	5	2	2
CrowdElephant	4	3	4	4	2	3	1	3	4
CrowdAlbatross	4	1	4	3	2	4	4	3	3

Table 2: Value estimations



<u>Anomalies/Exceptions:</u>	<u>Shape explanation/Legend</u>
<p>★ Except cases that have had previous financing rounds.</p> <p>★ Except cases where entrepreneurial experience is low and change to confidence is high.</p> <p>★ Except cases where both change to confidence is high and entrepreneurial experience low and where the financing is not obtained for survival reasons.</p>	<p>→ One way effect</p> <p>↔ Two way interaction</p> <p>◆ Symbolises change</p> <p>■ Static</p> <p>● Affected outcome</p>
<u>Abbreviations</u>	
<p>L.: Low</p> <p>H.: High</p> <p># Inv: Number of investors</p> <p>Exp: Experience</p> <p>Cf: Confidence</p>	<p>Csc: Conscientiousness</p> <p>Op: Openness to experience</p> <p>Rsk: Risk propensity</p> <p>Ef: Economic efficiency</p> <p>Perf: Performance</p>

Figure 5: Hypothesis model