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INVESTING IN EQUITY CROWDFUNDING IN FINLAND: RISKS AND OPPORTUNITIES

Bachelor's Thesis

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I declare I have written the bachelor's thesis independently.

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ABSTRACT

Equity-based crowdfunding has become a popular alternative for early stage financing. It has provided private investors with the opportunity to invest in a high-risk field easily without much possibility for extensive pre-assessment of the company. The objective of this thesis is to examine risks and opportunities of equity crowdfunding from the private investor's side and work out possible indicators of the companies that show higher or lower risks. The thesis also provides a broadened perception of why people invest, what signals of risk and quality they look for when investing. The research problem in the thesis concerns how people can manage investments in equity crowdfunding and whether these can provide a good investment alternative to traditional ones.

The first part of the research studied 49 companies that had been equity crowdfunded in Finland during the years 2013 to 2015. Only a few of the studied companies were profitable. The risks of investing in equity crowdfunding are many, and even successful investment are unlikely to provide returns in a long time. Early stage companies are evaluated by different methods like a comparison of financial ratios, size and industry categories. The second part of the research applied a questionnaire conducted in 2017 to study investor motives. The motives of investing were a combination of social and financial incentives. Investors were proven to be capable of identifying signals of quality that were likely to yield higher profits in the companies. Factors that investors perceived important were human capital signals of certainty and financial situation. The information in this research provides new knowledge to both investors and entrepreneurs on the equity crowdfunding market in Finland.

Keywords: Equity-based crowdfunding, investing, risk management, start-up financing, signals of quality, investor motives

INTRODUCTION

Crowdfunding started in a large scale in the United States by companies like Kickstarter and Indiegogo around 2008 and has spread its popularity to other countries. It has raised the interest of media and people, mostly through social media. Entrepreneurs who are looking for financing present their businesses to privately managed online platforms, which act as intermediaries between the crowd and the entrepreneur. The platforms are made very attractive for both private and corporate investors to buy shares in a high-risk field with only a few clicks online. Crowdfunding is a new way for the entrepreneur to collect funds without giving up big amounts of equity. (Belleflamme 2013, 586)

The crowdfunding phenomenon has been growing remarkably during the last years, and Finland is no exception. The reason for choosing the topic of this bachelor's thesis was due to own interest in start-up financing and the opportunities that crowdfunding can offer the private investor. The topicality and the fact that crowdfunding is a new alternative to traditional investments makes it interesting to investigate further from the investor's side. Many studies in the field examine and analyze crowdfunding opportunities from the entrepreneurs' side and of the fundraising. However, there lacks research on crowdfunding from the investor's point of view.

The research problem in the thesis concerns how people can manage investments in equity crowdfunding and whether these can provide a good investment alternative to traditional ones. Based on the problem, the research questions to be answered in this research are (Q1); what are the risks and opportunities of investing into equity crowdfunding? And (Q2); what kind of indicators of risks and opportunities do people look for when investing? Interesting would be to study whether the equity crowdfunding investors are somewhat less risk-averse in their profile compared to those who do not invest. The availability of financial statements of start-ups is very limited, and it is therefore not possible to use developed risk management methods nor strategies, but the indicators of risk can be studied.

The objective of this thesis is to examine risks and opportunities of equity crowdfunding from the private investor's side and work out possible signs of the companies that show higher or lower risks. The objective is also to provide a broadened perception of why people invest, what indicators of risks and signals of quality they look for when investing. The aim is to finally compare results and look for correlations.

The research tasks to achieve the objective begin with presenting the background information, studying risks, opportunities and risk management strategies in the literature review. Tasks included evaluation of theoretical models and data collection. Through different research methods using secondary and primary information collected and conducted in a Finnish environment of equity crowdfunding, the results will finally be assessed and discussed.

The data collection is made using an approach based on the research questions. The data will test the hypotheses (H1); equity crowdfunding can provide few, but very favourable investment returns and the risks are mainly loss of capital and (H2); investors' look for signals of quality and popular funding projects.

The object of the research is Finnish start-up companies on equity crowdfunding platforms, and people who invest in equity crowdfunding.

The method of research used for solving the problem in this thesis is combining different quantitative methods. The research methods study two distinct aspects of the problem, the risks, and opportunities that investors' perceive, as well as what the actual market looks like. I seek to find out new information to provide knowledge to both entrepreneurs and investor.

Chapter 1 discusses the meaning of crowdfunding, the basic concept, its forms and why it is an important alternative of start-up financing and what kind of rewards it can provide. In chapter 2 the evaluation methods of start-ups are discussed, as well as other risk management methods of investments. The sub-chapters present the risks and opportunities of investing. Chapter 3 includes the methodology of the thesis, the object, and limitations of the research. The collected data is shown in detail in the sub-chapters. Chapter 4 analyzes the data and displays the result using tables and graphs. In the sub-chapters, the result is discussed, and main findings are pointed out. Finally, proposals will be made before the conclusion.

1. THE CONCEPT AND FEATURES OF CROWDFUNDING

1.1. The term crowdfunding

Crowdfunding is a general term used for a very diverse set of financing activities. Common for these activities is seeking for smaller contributions from the general public. Crowdfunding is a kind of an open invitation to invest in or fund a project that the investor believes in. In academic literature on crowdfunding, one of the most established and commonly used definition is "crowdfunding involves an open call, essentially through the Internet, for the provision of financial resources either in form of donation or in exchange for some form of reward and/or voting rights" (Belleflamme et al. 2013, 5). Instead of traditional forms of financing, crowdfunding depends on a large source of investors, instead of a small group or individual with practical knowledge (Belleflamme et al. 2013, 1). The main objective is to provide entrepreneurs with alternative ways to raise funding.

According to Kleeman et al. (2008, 6) and Belleflamme et al. (2013, 1) the term crowdfunding is originally derived from the term crowdsourcing, which describes the concept of achieving feedback, ideas, and solutions to develop the production and innovation process. Crowdsourcing takes place when a company outsources tasks to the general crowd with intentions of getting individuals to contribute to the production process of a new product for example, for free or less than what the contribution is worth. (Kleemann et al. 2008, 6)

Crowdfunding is done through social media accounts and intermediaries, depending on the laws of the nation. The intermediaries bring together the crowd and the company seeking funds. The development of the internet has created the opportunity where consumers can use and freely create content through social networks and communicate with others (Ordanini et al. 2011, 445). From these definitions, we can highlight the key features of defining crowdfunding by opportunities which are provided online on intermediary websites. These intermediary platforms collect large amounts of funds from the general public for business ventures in early stages, and each investment amount is usually relatively small. There are studies on the meaning and definition of crowdfunding and how it has developed until today into its modern form, which involves more people than ever before and new participants with different kinds of expectations and requirements.

1.2. Forms of crowdfunding

Different crowdfunding forms are often allocated on the basis of reward or compensation. Ahlers et al. (2015, 961-962) classify the different forms into four categories: donation-based, reward-based, lending and equity. However, Hemer (2011, 9) organized different forms of crowdfunding by the complexity of the process into five categories (see Figure 1). "The provision of capital can take the form of donations, sponsoring, pre-ordering or pre-selling, fees for membership in clubs, crediting or lending and Private Equity (PE) investments, the complexity of processes varies greatly." (Ibid.). The tasks of controlling the funding are complex when there are many backers, and payment transactions need to be managed. This task is thereby outsourced to intermediary platforms (Ibid.).



Figure 1. Forms of crowdfunding by process complexity Source: (Hemer 2011, 9) Ahlers et al. (2015, 961-962) also notify that the legal complexity differs depending on the country. It also depends on the intermediary what kinds of types they choose to specialize in. Some authors use the criterion of dividing between pre-purchase products and final products as well. Belleflamme et al. (2013, 591-592) divides crowdfunding only in two categories: projects that are in production phase, such that do not require involvement of business angels or venture capitalists, and projects that are already in pre-ordering phase of the process

Crowdfunding can be referred to therefore as quite a broad umbrella term including a variety of different activities. The different forms that crowdfunding takes on in literature and the scope that it has been examined in tells about the different phases of development, which still seems like an ongoing process both in Finland and internationally. We should understand the complexity of the whole concept to be able to study equity crowdfunding, as it is part of a bigger body. To understand the market opportunities and risks, individual assessment of the currently operating platforms is required. Although crowdfunding takes on many different forms, there is little academic understanding of the determinants of investors' choices.

1.3. The funding gap

A study conducted in 2013 on Finnish businesses, showed that 25% of small and medium-sized new businesses did not receive any funding despite their attempts. Companies that had more than ten employees seemed to easier raise funding in comparison to smaller ones. (Finnvera 2013, 1) Crowdfunding can work as a substitute for traditional ways of funding. Belleflamme (2013) points out the important role of crowdfunding as an alternative to other forms of financing like venture capital and business angels. For smaller and newly established companies, financing may be a difficulty. This particularly affects companies that have expensive initial costs and are associated with high financial risk.

Despite all the attention that early stage financing receives, there remains a gap which is referred to as the "funding gap" (Green et al. 2015, 3). Such companies are usually in seed and growth stages and can also be defined as start-ups. These businesses have two choices of funding, self-financing or external financing. Most ventures are financed by own matters, and the lack of financing restricts business start-up activity. (Ibid.) It is clear, that there is a mismatch between supply and demand for early stage financing, but it is problematic to identify in exact amounts how much is missing. The funding gap is visualized in Figure 2.



Figure 2. The funding gap Source: (Author's own compilation)

The business activity and plan is often based around one idea or unfinished product. This why they are highly uncertain investment objects for financiers. Traditional banks require greater amounts of capital. Companies that cannot meet the requirements of collateral are forced to seek funding elsewhere. Higher risks mean that venture capital investors and business angels will feel necessity for larger equity. Crowdfunding meets the gap between the companies in need of financing and people that are willing to take the risk and invest in unlisted young businesses.

1.4. Rewards of investing

One aspect of the different forms of crowdfunding is the form of the reward, compensation or acknowledgment. Donation-based models lean on the acknowledgment of philanthropic giving, or it can also provide immaterial rewards (Turan 2015, 354). Pure donation based crowdfunding projects are rare and usually focus on charities and non-profit institutions while the pre-purchase model is the most common type of crowdfunding, it is very similar to reward based. (Bradford, 2012, 22-23)

Some methods similar to crowdfunding have been used historically in funding charitable projects or for common useful purposes. Reward-based methods offer, as the name implies, compensation for the investors or some reward. Investors are often offered an advance sale of a product or service or a share of future profits. Rewards can also be described as crowd sponsoring since the reward is a binding promise to the funders. (Hemer 2011,13-14) Rewards are mostly of low value, a way to thank the supporters in forms of products, thank-you emails or credits in a CD cover for example. Different features of the forms of crowdfunding are described below in Table 1.

	Form of funding	Form of refund	Motivation for funding	Examples of service providers
Donation-based crowdfunding	donation	no refund	social	
Rewards-based crowdfunding	donation, pre- purchase	Reward, product	social, but also reward-based	Mesenaatti.me (FI) Kickstarter (US)
Loan-based crowdfunding	loan	loan with interest, but social lending is generally without interest	economic, social	Vauraus Suomi (FI) Kiva (US) Groundfunding (FI)
Equity-based crowdfunding	investment (often in shares)	appreciation of the capital value of investment or dividends	economic, social	Invesdor (FI) Innovestor (FI) AROUND (FI) FundedByMe (SE)

Table 1. Rewards of different crowdfunding forms

Source: (Based on Ministry of Finance 2016a)

According to Ahlers (2015, 956-57) investors look for signals of quality that the entrepreneurs use to generate new investments. By providing detailed information about risks for the investors and preserving equity are effective signals to further increase the probability of successful campaigns, which means more investors. Surprisingly, social capital and intellectual capital did not influence the probability of a successful campaign. The strengths of the business owners often focus on a quite narrow sector, especially in technology companies.

It is often difficult to measure the intellectual capital of a company, and it can be very dependent on just a few people.

Equity-based funders receive shares, dividends and voting rights (Hemer 2011,13-14). Loan- and equity-based forms bear the risk of no reward at all. Central to all loan-based crowdfunding causes is that the investor seeks an option to bank offers. Social rewards in investing can be providing support to local businesses and creation of new jobs and participating in interesting causes, like being an owner of your favourite restaurant for example. Rewards act as an important part of crowdfunding, and it is part of its appeal to investors. Motivations for equity crowdfunding lies in the economic rewards, but also in the social rewards.

2. VALUATION, RISKS, AND OPPORTUNITIES

2.1. Evaluating start-ups

When buying shares, it is important to consider whether the shares are cheap or expensive. For companies in the early stages, the valuation is often based on factors like the intellectual capital of the company, the team, market prospects and the business idea. Evaluation is very problematic for any young company. This is pointed out by Berger and Udell (1998, 4-5) who discuss that receiving funding, grants and loans can be very difficult for young companies. Young companies do not have any record on business profitability, and sometimes hardly any show on customer interest nor sales. External financiers such as business angels, venture capitalists provide funding for early stage companies.

Most common valuation methods when evaluating start-ups is the net present value (NPV) and the internal rate of return (IRR). Both measures are similar but displayed differently. By adding up all cumulative cash flows discounted by the preferred rate of return, and if the NPV is over zero, the investment is beneficial. (Osborne 2010, 234) The problem with NPV calculation is that very few companies have an estimate of when they will pay dividends, and what value your shares will have in the future. It is possible to compare companies by adding the required return until the other company shows a negative NPV (Ibid.).

There exist lots of different methods for share valuation. Methods are used to assess the future through historical data. The predictions or outcomes are not definite although it is based on actual data. To be able to make as credible projections as possible values should be gathered from a longer time-period and different methods should be combined. There are also differences between valuations between industries, and this is the reason why companies' outcomes should be compared to similar ones in size and industry. (Balance Consulting 2017).

Market values (1) is one of the mostly used valuations and used in calculating for example price to earnings (P/E) ratio. P/E and many other ratios cannot be used to evaluate early stage companies as they do not usually have any show on dividend payments. Any profits are often invested back into the company for the first years. Market value is not equal to the

value of the company in an acquisition, in Finland it is usually 20 to 50 percentage lower than the selling price. The enterprise value (EV) presents the company's debt free value (2). When the liquid assets are higher than interest-bearing debt, the difference is subtracted from the market value as in equation 2. (Balance Consulting 2017)

EBITDA shows the debt-free value after operational costs have been subtracted. The equation 3 tells us in how many years the company could make back its enterprise value in EBITDA if it would not change. EV/EBITDA takes in concern the debt as well, unlike the P/E ratio. Young companies usually take on lots of debt, so this is one important factor to consider in the valuation.

The price to sales (P/S) ratio in Equation 4 shows the relationship between the market value and the annual sales. In wholesale industry, the ratio is often lower when compared to other industry ratios. The P/S ratio shows how many timed the market value is to the annual turnover. (Ibid.) The most commonly used figures of start-up valuation are presented in following equations:

$$Market \ value \ (P) = total \ number \ of \ shares \ x \ share \ price \tag{1}$$

$$EV = Market \ value + (Interest \ bearing \ debt - liquid \ assets)$$
(2)

where

EV- enterprise value

$$\frac{EV}{EBITDA}$$
(3)

where

EBITDA- earnings before interest, taxes, depreciation and amortization

$$\frac{P}{S} = \frac{Market \ value}{Annual \ turnover}$$

(4)

2.2. Risks of investing in equity crowdfunding

To understand the risks involved in equity crowdfunding, the environment needs to be examined. To examine the risks in equity crowdfunding, we can start by looking at the start-up scene in Finland. The definition of start-ups is very vague and complex, and there is no one true definition. There has been seen a positive influence in the operating conditions of start-ups that are seeking equity investments in the recent years. We can see some indicators of a more visible and active start-up scene in Finland through different events like the Europe's leading start-up event Slush, which is organized annually in Helsinki. A start-up can be defined as a young and small company with growth potential, which is privately owned and independent. Five percent of companies in Finland can be defined as start-ups (Lahtinen et al. 2016, 16).

Around 5,000 start-ups are born in Finland each year, of which about six percent will reach decent growth in the next three years. Of the six percent, approximately 300 start-ups, only one percent is interesting for private equity investors (Ibid.). Despite the increased activity and visibility of the start-up scene, the entire business environment does not look too optimistic in Finland. The last few years have been quite stable regarding the amount of existing enterprises (Tilastokeskus 2017). The amount of started companies in Finland overall has been decreasing over the last years, but in 2016 it has so far remained quite stable (Ibid.). It is common that 90% of newly started businesses fail during the first eight years of operating (Haswell 1989, 71).

Crowdfunding has been discussed actively as an attractive investment model in the last few years, but any certain data on risks is not available because the market is so new. Despite lack of data and discussion on risks, the markets have been expanding very quickly, and are likely to do so in the future. Turan (2015, 357) divided the cycle of crowdfunding regarding stakeholder's risks from pre-launch to exit stages by operational, financial and strategic risks (see Table 2). In the launch period, the venture should have all information necessary available to the investors. This is the time-period when investors see the pitch, the information, valuation and amount invested and the number of investors so far.

Table 2. Types	of investment	risks of e	equity	crowdfunding

	Pre-launch	Launch	Post-launch	Living	Exit
Financial		-low-risk awareness -payoff uncertainty -valuation and return on investment -comparability		-performance tracking	-liquidity
Operational			-delivery risk	-managerial problems	
Strategic risk		-diversification -information asymmetry -opportunity cost		-dilution of shares	

Source: (Based on Turan 2015, 357)

Equity investments have two types of rewards: dividends and capital gain. Most startups and early businesses fail, so you are much more likely to lose all the invested capital than to get it back with returns. These businesses also very rarely pay dividends. Even successful investments are unlikely to receive any dividends for many years. Profits are typically invested in the company to provide further growth and build value. Trade can only take place directly between buyers and sellers, so it may be difficult or impossible to sell the investments in the future. There exists a risk of dilution of the shares if the company raises more capital later leaving your investments to decrease in the percentage of equity. (Turan 2015, 357)

Turan (2015, 359) posits that because of the high-risk nature of the companies, investors are not willing to make any expensive due diligence. Investors do not have enough information to compare. Ventures that do not update nor provide any performance information might be tapping into fraud and misuse of investors. Because these companies are unlisted, they are not required to provide financial or operational data. Investors are also open to the risk of the company not being audited properly.

Based on previous discussions, we can conclude that there are four different types of major risks to consider in equity crowdfunding which are:

- 1. Loss of the capital invested
- 2. Inability to sell shares on open market
- 3. Possibility of dilution
- 4. Infrequent and unlikely dividends

2.3. Risk management of investments in equity crowdfunding

Start-up companies are inherently very high-risk investment objects. Success and failure are difficult to predict, but investors should figure out what they know and whether the information available is showing weaknesses or possibilities for success. It is possible to evaluate start-up ventures by looking at factors such as the management team, having an attractive market, an attractive new product or service, strong evidence of customer interest, the company has funds, demonstrates early growth potential, flexibility in strategy and potential for la arge payoff (Cusumano 2013, 26-29).

The most basic aspect of investing is broadly known as the higher the risk, the higher the return or loss. Because these investments are high-risk portfolio diversification is even more crucial than in safer investments. There is no control over the beneficiaries and investors do not have the prerequisites to analyze in depth the ventures' market conditions and risk factors. The crowdfunding platforms choose the companies they want to run a funding campaign for, but if investors should trust that the companies are authentic and assessed with caution is something that should be discussed. Innovestor tackles this risk by promising to invest in all companies they choose to support on their platform (Innovestor 2017).

Many psychological factors are involved in the process of investing. The success alone of a funding campaign might not be an indicator of future success, although it attracts more people to invest during the campaign. According to Mollick (2014, 8), there is a clear connection between the size of the social network to the success of a funding campaign. A venture with a high number of Facebook followers will more likely have a successful campaign. Other positive influences were a good pitch and video material in the pitch. (Ibid.) This means that investors might be concentrating on completely other facts than for example the financial historical data of the venture, or evaluating the market and the venture's employees. Sources of information are presented in Figure 3.



Figure 3. Sources of information for investors Source: (Author's compilation)

Bernstein (2010, 38-39) discusses how to measure risks of investments and how to explore return opportunities. Over time it should be possible to see trends and measure probable return. But good performance is more about good luck than skills of portfolio building. Historical data also shows that the longer shares are kept, the less risk there is for losses. According to Bernstein (2010, 38-39), average investors are likely to pick out shares from attractive looking companies, for example in technology industries for example. Because it is impossible to predict the future, our portfolio should be as diversified as possible. Money should be spread across assets that are operating in different fields of industry to minimize any setbacks in the future.

2.4. The opportunities and rewards

So far we have examined the key figures of valuation, risks, and risk management theories of investing in equity crowdfunding. But can the rewards of investing in equity crowdfunding be worth the risks? Early stage investing can be very rewarding and can provide involvement in exciting new businesses. According to The Finnish Business Angels Network (2015), the best investments yield an annual internal rate of return of 50-60%, and for the portfolio whole an average of about 20-30%. In 2013 56% of the exits were positive, and in 2014 60% were positive (Ibid.). Cityvarasto is one of the few profitable equity crowdfunded companies in Finland. They have been profitable even before they were funded, and from the

year 2014 to 2015 they managed to almost double their net profit to 408,000€ (Asiakastieto 2017).

In Europe, we find other majorly successful returns on investments. For example, the craft beer brand Camden Town Brewery from London was sold to global drinks company AB InBev in 2015 for £85m, which gave the investors a return of around 70% on their shares (Davies 2015). The UK-based equity crowdfunding platform Seedrs released data last year showing that their portfolio results have given an annual rate of return of over 14% from the years since launch in 2012 to 2015 (Alois 2016). They have shown that equity crowdfunding can provide solid returns for both small and large investors and even outperform other investment asset categories. Investors with a portfolio of 20 or more investments had a slightly higher average internal rate of return of 15% (Ibid.).

The tax treatment of investments that are in listed companies is heavier regarding dividends than those of unlisted companies. To support investments in early business stages, unlisted companies have a tax advantage in Finland. Dividends received from a listed company is taxed 85% as capital income, and 15% is tax-free income (Vero 2017). As the current tax rate is 30%, a dividend received from a listed company would pay $100 - (100 \times 0.85 \times 0.30) =$ 74.50, so the tax paid is 25.5%. Dividend income is more loosely taxed on unlisted companies, but you need to know the net wealth of the company. If the total dividend payment is under 8% of the net wealth, then the actual tax rate is only 7.5% (Ibid.). For investors, crowdfunding increases investment opportunities and ways to diversify their portfolio.

3. METHODOLOGY

3.1. The market size of equity crowdfunding in Finland

Investments in young growth companies have grown remarkably in Finland since 2014. The Ministry of Finance in Finland carries out annually a survey amongst the intermediaries operating in the crowdfunding market in Finland. As we can see in Table 3, the total amount of crowdfunding raised has increased from 2014 to 2015 by 36%, and further estimated to increase in 2016 by 117%. Equity-based crowdfunding has been estimated to pass loan-based crowdfunding in 2016, to be the second largest form of crowdfunding. So far, peer-to-peer lending has been the largest form of crowdfunding. All forms have been estimated to double in amounts from 2015 to 2016.

Table 3 Amounts of	f funding collected	in Finland through	crowdfunding (euro)
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	2014	2015	2016 (estimated)
Loan-based	13.3 million	20.8 million (+56%)	39.9 million (+92%)
crowdfunding			
Equity-based	8.66 million	14.5 million (+68%)	41.3 million (+106%)
crowdfunding			
Peer-to-peer lending	29.7 million	34.6 million (+16%)	71.3 million (+106%)
Reward-based	364,000	640,000 (+75%)	846,000 (+32%)
crowdfunding			
Total	52 million	70.5 million (+36%)	153 million (+117%)

Source: (The Ministry of Finance 2016b)

3.2. Equity crowdfunding intermediaries in Finland

3.2.1 Invesdor

Invesdor is a company working in financial technology maintaining debt and equity financing services across countries in Europe. Invesdor was founded in 2012 and it is based in Helsinki, Finland. Invesdor is a market leader in equity and debt crowdfunding providers in the Nordic countries, and it is the fastest growing platform in Finland. They offer funding opportunities for companies from seed and growth stages to initial public offerings. There are more than 50,000 investors registered, and more than 28 million euro has been invested in different ventures. Invesdor provides investment opportunities in all industry categories of ventures ranging from technology to clothing and beverages. The platforms aim is to provide other than traditional methods for financing namely, digitally, efficiently and safely. Currently Invesdor operates in Finland, Great Britain, Denmark, Norway, and Sweden. Invesdor has so far taken 184 projects on their platforms since 2012 (see Figure 4). Of these 78, about 42% of the total, have been successfully funded. (Invesdor 2017)



Figure 4. The number of successful funding rounds from 2012 on Invesdor Source: (Invesdor 2017)

3.2.2. Innovestor

Innovestor was founded in 2014 in Helsinki, Finland. The online platform offers a channel to invest in growth companies that their team has picked out. Innovestor invests in all of the chosen business ventures as well. Innovestor has offices in Helsinki, Stockholm, and Moscov. They have 2,400 registered investors, who have invested a total of 15 million euros through Innovestor. One main difference from Invesdor is that Innovestor is not accessible for all investors. Innovestor has a minimum requirement of 10,000 euros on investments. They offer also a portfolio service with a minimum requirement of 50,000 euros. Innovestor markets their investments growth opportunity of around 20% annual rate of return. Innovestor has taken a total of 20 projects since 2014, of which 15 have had a successful funding (see Figure 5). (Innovestor 2017)



Figure 5. The number of successful funding rounds from 2014 on Innovestor Source: (Innovestor 2017)

3.3. Research methodology and limitations

In this research part of the data collection is considered as secondary data which serves as a base and support for analysis, discussions, and conclusion. The data collected for longitudinal studies need to be regional and ensures that collection methods are comparable (Saunders et al. 2009, 269). Secondary data is always collected for a specific reason, and therefore it should first be considered whether it is suitable for the study. (Saunders et al. 2009, 270) As crowdfunding is quite a novel study area, an explanatory approach seems appropriate to investigate the risks in equity crowdfunding, as this initial data can be used as a base in further research (Mollick 2014, 4).

Secondary data was mostly collected from relevant educational business associated journals from the recent years. Crowdfunding is such a novel study that there is very little scientific literature available in the form of books. The intermediaries were easy to find and choose, as there are only three working sites for equity crowdfunding in Finland, but of which only two of them have all data publicly available. These two companies, Invesdor and Innovestor, show data of all the ventures that have been previously funded on their pages. Author's previous research (Toppari 2017) is used as a basis for the data gathering in this thesis, the existing data is supplemented by additional data from the two intermediary websites.

This data was used to find financial statements of all businesses from Asiakastieto, which is a leading Finnish business and consumer information provider. Asiakastieto offer information for risk management and decision-making, which fits the aim of the study. I used all projects that had started their funding in 2013 until 2015. 2013 was the chosen year to start collecting information because it was the earliest any funding were started on these platforms. 2015 was the chosen upper limit to be able to see any changes in time periods after the financing was achieved.

A questionnaire is an excellent way to obtain large amounts of data that can be easily compared, by for example age, gender or annual income. A questionnaire will add to the understanding of the problem because it elaborates on the investor's perceptions of risks and opportunities. The questionnaire was designed to ensure the anonymity of respondents. The questionnaire was shared on social media, on Facebook in two particular groups that are focused on investing. These two were chosen as they are the largest groups that focus on investing in Finland. The research methods study two different aspects of the problem, the risks and opportunities that are perceived by investors, as well as what the actual market looks like.

There are always limitations when conducting a research that need to be examined and acknowledged. Quantitative methods often face the difficulty of the sample size that is available. The sample size used in this paper is relatively small. The sample size depends on the size of equity crowdfunding in Finland and how many service providers and investors there are. The research representation of the overall equity crowdfunding situation in Finland is an important factor. I find the sample size adequate to represent the situation in Finland, and therefore the research findings to be reliable.

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The reliability of a research can be rated by the following three questions; (Easter by-Smith et al. 2012, 71):

- "1. Will the measures yield the same results on other occasions?
- 2. Will similar observations be reached by other observers?
- 3. Is there transparency in how sense was made from the raw data?"

As the secondary data sources are freely available to the public, the same results can be achieved by other observers at any other occasion. All secondary data gathered serves as a base for all analyses and calculations. The validity of the research has been increased by referrals and comparisons to previous study results where applicable. In the following chapter the research results have been introduced as comprehensively as possible, so that the reader can easily assess the reliability of the study and analyze validity of conclusions and analyses. Secondary data should be viewed as carefully as primary data.

3.4. Data

All data is obtained from the platforms is original, but some minor adjustments were made regarding the industry category division. Invesdor had many categories of industries that they had divided their data into on the webpage. The categories used in this study are seen in Table 4 below. Some industry categories were modified by carefully examining the business information, main products and services. The data collection was done with an approach based on the first research question (Q1); "what are the risks and opportunities of investing into equity crowdfunding?". This is done to test the hypothesis (H1); equity crowdfunding can provide few but very successful investment returns and the risks are mainly loss of capital. First the financial situation is analyzed of the companies, to see how well they are doing and if some have been listed or diluted shares by another funding round. The data is categorized to see if some indicators show more risks than others for example size, number of investors or industry.

Table 4. The categories used in data collection

Industry category	Definition
consumer products	products designed for customer use and retail
entertainment	radio, movie and live entertainment
hardware technology	hardware technology
health and fitness	health supplies, fitness activities and nursing
logistics	planning and execution of movement of material
online services	information of service provider on the internet
restaurant	restaurants
sports and free-time	football teams and free-time activities
storage	storage provider

Source: (Author's study)

3.5. Questionnaire parameters

The data for the survey was extracted from an online questionnaire conducted in spring 2017. Key parameters are shown in Table 5 below.

Table 5. Parameters for data collection in questionnaire.

Parameter Descriptor	
unit	person
collection time	10-17.04.2017
collection universe	The Finnish social media users on Facebook
method of collection	online questionnaire
number of questions	ten

Source: (Appendix 1)

The questionnaire was constructed using Google forms. The URL to the form was distributed during 10-17.04.2017. The questionnaire was distributed only in the Finnish language. The questions are divided into five themes (Table 6.) to capture the individual investor's familiarity of equity crowdfunding, restrictions of investing, assessment of signals of quality and opinions of risks and opportunities. The second research question is (Q2); "what kind of indicators of risks and opportunities do people look for when investing?". The questionnaire was formulated to test the second hypotheses (H2); investors' look for signals of quality and popular funding projects.

Table 6.	Question	naire d ⁱ	ivided	into	themes
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Theme	Number	Question
demographics	1	Which age category below
		includes your age?
	2	Gender?
	3	Education?
	4	Employment?
	5	Investment portfolio (€)
	6	Annual salary (gross €)
familiarity	7	Have you invested in equity
		crowdfunding?
motives	8	If I financially support a seed or growth company, I make it out of pure joy to help and do not expect returns.
signals of quality and risk	9	In your opinion, what describes investments in equity crowdfunding best? (you can choose several)
	10	What are important factors when choosing a company to invest in? (you can choose several)

Source: (Appendix 1)

4. RESULTS

4.1. Equity crowdfunded companies in Finland

Data was collected of totally 49 equity crowdfunded companies on both crowdfunding platforms Invesdor and Innovestor. When looking at their whole operational years in profits and losses, the overall profitable part of companies was only 8 out of 49 (see Figure 6). 3 of the sample were bankrupt and 38 were making losses.



Figure 6. Overall profitability Source: (Toppari 2017, 13, Invesdor 2017 and Innovestor 2017)

The profit margins of all companies were analyzed by subtracting the old amount from the new to find out the change of each year, and then the average numbers were looked at of all companies. The numbers were organized in a decreasing order. As we can see below in Figure 7, there was majorly a positive change. The companies in the middle showed no change, and some minor negative changes were also found.



Figure 7. Change in profit margins after funding in percentage Source: (Toppari 2017, 14, Invesdor 2017 and Innovestor 2017)

During the whole lifetime of the companies, the changes in profit margins were not as positive as after funding (see Figure 8). One extreme number of +3800% change in profit margin was left out of the graph below. Mostly there has not been any change for the crowdfunded companies, and almost equally positive as negative changes.



Figure 8. Change in profit margin during whole lifetime in percentage Source: (Toppari 2017, 14, Invesdor 2017 and Innovestor 2017)

When looking at different places of trading shares of early stage companies two lists were found; Privanet and Nasdaq First North (see Figure 9). Totally 9 of the companies had been listed, but the share prices were approximately on the same price level as they were in the

funding. On Invesdor's platform, 5 companies had offered a new funding round, but most of the companies had not experienced either change.



Figure 9. Dilution and listings of companies Source: (Toppari, 15, Invesdor 2017, Privanet 2017 and Nasdaq 2017)

The companies were split into two according to the median valuation. This was made in order to seek categories of higher and lower risk. When looking at valuations above median, the companies' average profits during their lifetimes were higher. The lower the valuation, the lower were the profits. Profits were negative on average below the median valuation. The same results were found in average profit margin during lifetime to valuation, the higher the valuations, the higher the average profit margins. Similarly, the number of investors was higher for higher valuated companies

Companies that had no data on profits were not included in the Table 7 below. There are totally 47 companies included in the industry categorisation. The categories are very different in size which makes comparison difficult. The highest profits were found in categories of logistics and storage, while the biggest losses were in entertainment, hardware technology and consumer products. The only positive profit margins were in sports and free-time and storage.

Industry	Amount of companies	Average profit margin	Average profit
logistics	3	-237%	299 800,00 €
storage	1	7%	249 600,00 €
sports and free-time	4	14%	150,00€
health and fitness	3	-33%	-18 000,00 €
restaurant	2	-13%	-77 400,00 €
online services	21	-13%	-96 806,35 €
consumer products	9	-259%	-127 018,52 €
hardware technology	2	-59%	-139 033,33 €
entertainment	2	-2546%	-306 500,00 €

ruore (. maash) categories of promaome	Table 7.	Industry	categories	by	profitability
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Source: (Toppari 2017, 16, Invesdor 2017 and Innovestor 2017)

The key figures presented in the subchapter 2.1. are used to evaluate the 41 companies of Invesdor as they had enough data provided (see Table 8). Market value of the companies were presented in the pitches, but could also be calculated by share price times the number of shares. The enterprise value shows the companies' debt-free value and the earnings after operational costs have been deducted. Those companies that have larger assets than debt the market value will be larger than the enterprise value. But as we can see, for almost all the debt is larger. The EV/EBITDA shows the number of years it would take to gain back the debt free value in EBITDA. In green below are those companies that were part of the eight profitable ones, in yellow are highlighted some high and low values. For example, Playmysong has the lowest EBITDA. Zipuli has the best EV/EBITDA ratio of only ten years, while Bryggeri AB Bock Wasa has the highest of 224 years. Netsono Oy has a P/S ratio of 1500, which is extremely high.

Table 8. Key figures of companies

Business	Market value	Enterprise value (EV)	EBITDA	EV/EBI TDA	Sales	P/S
Dusiness	Warket value		LDIIDA	IDA	Sales	1/5
Tuho % Turma Oy	400 000,00 €					
NetOutlet	500 000,00 €					
Joyride Games Oy (Ltd.)	1 100 000,00 €	1 495 726,00 €			118 000 €	9
Rakuuna Olut Oy	2 371 600,00 €	2 243 408,00 €			1 098 000 €	2
gTIE Oy	1 050 000,00 €		0,00€		19 000 €	55
format4media oy/Dikital	300 000,00 €					

RF SensIT	209 000,00 €		0,00€		17 000 €	12
Suppilog Oy	3 419 000,00 €	3 572 763,00 €	-12 153,00 €	-294	159 000 €	22
Playmysong	1 600 830,00 €	0012,00,000	-196 000,00 €		14 000 €	114
Hawina Productions	1 000 000,00 €		0,00 €		14 000 0	114
iResponse Solutions Oy	303 538,00 €	312 631,00 €	0,00 €			
Iron Sky Universe	5 500 000,00 €	512 051,00 0	0,00 € 0,00 €			
Pyynikin Käsityöläispanimo	80 000,00 €		5 000,00 €		202 000 €	0
Invesdor Oy	3 043 040,00 €	2 946 670,00€	-47 000,00 €	-63	202 000 € 75 000 €	41
Hakala Performance	90 000,00 €	2 940 070,00 C	-47 000,00 C 0,00 €	-05	102 000 €	
	,	1 612 672 00 6	· · · · · ·	17		1 1500
NetSono Oy	1 500 000,00 €	1 612 673,00 €	-96 718,00 €	-17	1 000 €	
VAJA Finland Oy	320 000,00 €	367 412,00 €	-25 500,00 €	-14	18 000 €	18
AXO-Service Oy	2 000 000,00 €	2 197 538,00 €	-18 000,00 €	-122		
Zipuli	1 000 000,00 €	1 458 323,00 €	152 541,00 €	10	3 620 000 €	0
Neonto Oy	850 000,00 €	884 344,00 €	0,00€		5 000 €	170
HIFK Fotboll AB	224 991,00 €	230 474,00 €	0,00€		195 000 €	1
Merplast Oy	1 525 000,00 €	1 911 769,00 €	60 000,00 €	32	2 194 000 €	1
oikian solutions ltd	1 169 991,00 €	1 479 170,00 €	16 052,00 €	92	156 000 €	7
Bon Tuonti Oy	700 000,00 €	791 223,00 €	-61 792,00€	-13	78 000 €	9
Oy Hockey Team Vaasan Sport	1 101 120,00€	1 889 575,00€	-89 064,00 €	-21	3 942 000 €	0
Koti-Medi Oy	1 200 000,00 €	1 825 167,00 €	119 346,00 €	15	1 621 000 €	1
Bittiraha.fi / Prasos Oy	2 750 000,00 €		-50 000,00 €		266 000 €	10
Cityvarasto Oy	24 411 700,00 €	32 219 620,00 €	1 207 992,00 €	27	4 429 000 €	6
Papu Design Oy	1 000 000,00 €	1 041 151,00 €	-58 000,00 €	-18	642 000 €	2
Oyj Ahola Transport Abp	15 012 824,00 €	31 629 684,00 €	1 078 533,00 €	29	66 104 000 €	0
Kaupunkitarinat Oy	1 690 350,00 €	2 636 904,00 €	-730 475,00€	-4	810 000 €	2
Bryggeri Ab Bock - Wasa	600 000,00 €	1 546 554,00 €	6 913,00 €	224		
360 Visualizer Oy	2 223 000,00 €	2 453 732,00 €	-144 574,00€	-17	136 000 €	16
Helsinki Allas Oy	2 500 000,00 €	3 937 254,00 €	0,00€		0	
SkillzzUp Oy	999 000,00 €	,	-12 500,00 €			
Heeros oyj	8 339 490,00 €	10 457 456,00 €			4 110 000 €	2
Eximap	1 402 000,00 €	1 393 555,00 €	-100 562,00€	-14	20 000 €	70
Uniq Works Oy	209 550,00 €	212 015,00 €	1 408,00 €	151	22 000 €	10
Heimo Community	1 000 674,00 €	975 138,00 €	-159 138,00 €	-6	18 000 €	56
Ägräs Distillery Oy	1 617 000,00 €	275 150,00 C	-139 138,00 € -28 412,00 €	0	10 000 0	50
HPK Liiga OY	1 400 000,00 €	1 549 814,00 €	129 688,00 €	12	29 000 €	48
$\frac{1}{2} = \frac{1}{2} = \frac{1}$		2017 June 2022	129 088,00 €	12	29 000 E	40

Source: (Toppari 2017 26-27, Invesdor 2017, Innoverstor 2017 and Asiakastieto 2017)

4.2. Investor motives

A questionnaire was used to capture the individual investor's familiarity of equity crowdfunding, restrictions of investing, private assessment of signals of quality and opinions of risks and opportunities. The second research question that is to be answered is (Q2); "what kind of indicators of risks and opportunities do people look for when investing?". The questionnaire was formulated to test the second hypotheses (H2); investors' look for signals of quality and popular funding projects. A total of 186 responded the questionnaire. Surprisingly, most respondents were within the age group 18-25, followed by decreasing amounts in higher age groups (see Figure 10). Usually, young people lack resources to invest, so this age group was not expected to be the largest.





The questionnaire was open for everyone within the investing groups, with no need for prior experience of investing in equity crowdfunding. Of the respondents, 17% had invested in equity crowdfunding, while 83% had not (see Figure 11). We can assume that the number of investments in equity crowdfunding is larger in the response group than average, because those with knowledge would possibly more likely participate in the questionnaire.



Figure 11. Respondents investment experience in equity crowdfunding Source: (Author's study)

From a logistic regression analysis for a "Invest vs. Do not invest" scenario, where I measured the probability of investing in equity crowdfunding for different response groups, I found out some interesting distribution in the binomial outcomes. To make the statistical analysis I used responses to questions 1,2,3,5 and 6 as predictor variables to determine the probability of investing in equity crowdfunding. The regression equation yields a continuous outcome in the logarithmic units, which I then converted to probabilities of investing, which keeps the boundaries of 0% and 100%.

The probability of investing according to age groups showed that there were clearly more probable investors within younger people (see Figure 12).



Figure 12. Probability of investing according to age Source: (Author's study)

The probability of investing according to gender resulted in women being more likely to invest than men, but difference was only 0,25%.

When looking at the probability of investing of different education levels, the results shows that people with higher degrees were more likely to invest in equity crowdfunding (see Figure 13).



Figure 13. Probability of investing according to education Source: (Author's study)

The probability of investing according to the size of the investment portfolio, showed those who had a bigger portfolio were less likely to invest in equity crowdfunding. But those who had larger income were more likely to invest.

Question 3 (see Table 6) asks the respondents to answer from 1 to 5 "If I financially support a seed or growth company, I make it out of pure joy to help and do not expect returns", where 1 means "Disagree" and 5 is "Agree" (see Figure 14). As expected, most respondents do look for returns when investing in growth companies, but a surprisingly many did not choose number 1 "Disagree," about 42% chose another answer.



Figure 14. Respondents' opinion on supporting companies out of pure joy expecting no return Source: (Author's study)

Respondents answered to the question "In your opinion, what describes investments in equity crowdfunding best? (you can choose several)" most commonly by expecting "Short-term capital gain" (49%) and "Long-term capital gain" (44%) (see Table 9). This was surprising, as high-risk investment objects usually are considered as long-term objects. Respondents chose for the estimate of equity crowdfunding gains, much more often when compared to "Short-term loss" (38%) and "Long-term loss" (25%). Respondents believed more in "Long-term dividend payments" (24%) than in "Short-term dividend payments" (9%). Other answers were; "Depending on market situation", "Large volatility", "Depends completely on the object", "Marketing of hopes, promises and dreams, although companies are making losses and the management team has no vision".

In your opinion, what describes investments in equity crowdfunding best? (you can choose several)	Responses	Response %
Long-term capital gain	82	44%
Long-term dividend payments	45	24%
Long-term loss	46	25%
Short-term capital gain	91	49%
Short-term dividend payments	17	9%
Short-term loss	70	38%
Other?	9	5%

Table 9. Respondents' estimates of equity crowdfunding returns

Source: (Author's study)

Question 5 asked what are important factors to consider when choosing an investment object (see Table 6) Signals of quality in the pitch and information available on media affects the decisions what to invest in. I embedded potential signals of quality into the answer alternatives. These included human capital (1), certainty (2), investors' involvement (3), personal motives (4), and financial situation (5) (see Table 10). Signals of certainty (2), when summed, had the most responses in "Secondary market of shares (ability to sell shares) and "Size of the company". Financial situation (5) was the second most common with most responses to "Valuation of business" and "Reliable sales projections". The least common choice was the investor's involvement (3).

The most popular answer in the questionnaire was the "Business idea", chosen by 58% of the respondents. The second most common choice was "Secondary market of shares (ability to sell shares)" by 50%, considering this an important factor. "Experience of the management team" (47%) was also chosen by approximately half of the respondents. "Size of the company" (38%), "Valuation of business" (36%) and "Reliable sales projections" (34%) were chosen by more than 1/3 of the respondents. The least important factors were considered the "Number of investors" (5%), "Involvement of other investors" (13%) and "Owner's number of shares" (15%).

What are important factors when you are choosing an investment object? (you can choose several)	Responses	Response %
Size of company (2)	71	38%
Experience of the management team (1)	87	47%
Owner's number of shares (2)	27	15%
Involvement of other investors (3)	25	13%
Sales history records (5)	43	23%
Secondary market of shares (ability to sell		50%
shares) (2)	93	
Reliable sales projections (5)	63	34%
Business idea (4)	108	58%
Valuation of business (5)	67	36%
Number of investors (2, 3)	9	5%
Country of operating (4)	38	20%
Other? (4)	21	11%

Table 10. Important factors when choosing an investment object

Source: (Author's study)

The opportunity to answer freely in an "Other" field was given in the questionnaire. Answers were for example: "Good value of P/E, P/B and P/S", "Growth potential of company", "Permanent competitive advantage", "Good leadership", "Industry", "Product and service portfolio", "Company prospects", "Financial buffers", "Increasing dividend" and "Income statement and balance sheet". These answers noticeably included signals of quality of human capital, certainty, personal motives and financial statement analysis.

4.3. Main findings and discussion

Of the total 49 companies included in this study only 8 were profitable overall during their operational years. It was expected that more companies would be bankrupt, than what the actual result was of only 3. The companies included were funded in between the years 2013 to 2015 and most of them in early stages, so that in mind the profitability seems accurate. According to Haswell (1989, 71) 90% of newly started businesses fail during the first eight years of operating. When looking at the changes in profit margin after funding in Figure 7, the

results were very positive, the funding seem to have fuelled growth. But the overall change in profit margin during the companies' lifetimes did not look as optimistic, there was mostly no change at all (see Figure 8).

In Figure 9 we could assess the risk of dilution of shares in the next few years, as discussed earlier in the sub-chapter 2.2. When a company raises new capital, the former investment will probably decrease in value (Turan 2015, 357). 9 out of the 49 companies (18%) had been listed on a public trading webpage and 5 (10%) companies had offered another funding round. The listing of a company is considered an advantage because it often increases in value and it offers the investors an opportunity to sell their shares. The listings were studied and they did not seem to have increased the share prices much from the initial funding unfortunately.

It was clear that higher value of a company was connected to higher profits. But the profits were on average negative below the median value. We can generalize that companies with higher value and number of investors show better outlooks. According to Mollick (2014, 8), there is a clear connection between the size of social network to the success of a funding campaign. In the industry categories we could see highest profits in logistics, storage and sports and free-time companies. Some doubtful points should be mentioned about the categories, as the size range is very big between the categories, comparison is a bit difficult.

When evaluating the companies by using different start-up valuation figures we found quite few positive numbers (see Table 8). The methods are problematic to use as there is so much data missing and lots of negative values. EV/EBITDA numbers ranged from 10 to 224 years. The P/S ratios should always be compared with similar size companies and industries. Low ratios can reveal undervaluation and high ratios over the industry average can be a sign of overvaluation, like Netsono Oy for example. Surprisingly many of the companies had very low P/S ratios, usually start-ups have very optimistic valuations.

The questionnaire revealed that 17% of the respondents had former experience of investing in equity crowdfunding. We can assume that the number of investments in equity crowdfunding is larger in the response group than average, because those with knowledge would possibly more likely participate in the questionnaire. Surprisingly many, almost 50% of the respondents did not choose the answer that they would not invest in companies out of pure joy and not expect returns. People do acknowledge the social rewards clearly of investing as

well. In Table 9 we see that respondents almost equally expect long-term and short-term gains from investment in equity crowdfunding.

From the logistic regression statistics we found out what types of people were likely to invest in equity crowdfunding. Younger people were more probable to invest. One reason for this outcome may be that younger people use the internet more and older generations have not discovered the possibilities of investing in non-traditional opportunities online. People with higher degree, and larger income were more likely to invest.

Table 10 presents important factors when choosing investment objects for the investors. The most popular answers were the business idea, secondary market of shares and experience of the management team. According to Cusumano (2013, 26-29), it is possible to evaluate start-up ventures by looking at factors such as the management team, having an attractive market, an attractive new product or service, strong evidence of customer interest, the company has financing, demonstrates early growth potential, flexibility in strategy and potential for large payoff.

4.4. Proposals

Some indicators could still be found that showed better opportunities than others. In the literature review we also found some risk management methods that the investor can use to differentiate between higher and lower quality start-ups.

In the study, higher valuations showed better outlooks by higher profits, as well as higher amounts of investors. Logistics, storage and sports and free-time companies had the best profits in a comparison between industries. Technology and online companies are very popular investment objects still, although their big losses, investors are influenced by success stories like Facebook, Instagram and Snapchat. There is lots of competition in these industries and the marketing costs might be very high, which does not make them a very safe investment object.

Businesses that had been profitable before the funding were also most likely to be profitable after the funding. Profit margins were on average negative but only 3 out of the 49 companies were bankrupt. The change after funding had been very positive, but overall during the lifetime there was not much change. Financial statements are important in evaluating the company. Other signals can be found from the pitch and media on management expertise and

customer interest. The listing opportunities seem to be very good, but at the same time many companies go through another funding round which will risk early investment to be diluted.

It was expected that most companies would have extremely high valuations compared to their sales, but the actual results showed that this was not the case. Most companies were very reasonably valuated, and some even under valuated when looking at the sales and P/S ratio. Many investment risk management methods were proven to be eligible in the study, but there is no guarantee of investments to be successful from the results of this study. For the study to be more reliable a bigger sample size with a longer period of study would be more adequate in a future study. The time-period of this study is quite short because of the nature of the equity crowdfunding market in Finland, which started in 2013.

CONCLUSIONS

Based on the results, we mainly found out very negative outlooks of equity crowdfunded companies, but social reasons are one of the major reasons why people invest. Investments have been increasing at a fast pace every year, despite the lack of show on success in Finland. Intermediaries have the power to market the investments with promises on high returns and in such a way that is beneficial for them. Unfortunately investing in equity crowdfunding seems more like a lottery than something that can be managed.

Crowdfunding has been discussed actively as an attractive investment model in the last few years, but any certain data on risks is not available because the market is so new. Despite lack of data and discussion on risks, the markets have been expanding very quickly, and are likely to do so in the future. Because these investments are high-risk portfolio diversification is even more crucial than in safer investments. To support investments in early business stages, unlisted companies have a tax advantage in Finland.

The objective of this thesis was to examine risks and opportunities of equity crowdfunding from the private investor's side, and work out possible indicators of the companies that show higher or lower risks. The objective was also to provide a broadened perception of why people invest, what indicators of risks and signals of quality they look for when investing

The objective was achieved through a literature review, quantitative research, analyzing the results and solving the problem. The object of this study was the Finnish start-up companies on equity crowdfunding platforms, and people who invest in equity crowdfunding. Data was gathered on different equity crowdfunding intermediaries in Finland as well as through a questionnaire.

The risks of investing in equity crowdfunding are many. Most companies are making losses and only a few are profitable but will most likely not be paying dividends for a long time. Even successful investments are unlikely to receive any dividends for many years. The change in profit margins seemed very positive after funding and some had been listed. But the overall profitability was negative and some companies had also offered new funding rounds, risking dilution of early investments. To evaluate the investments better, there would need to be conducted a new study in the future.

The social rewards of investing seemed to be almost as important as the financial rewards for people interested in equity crowdfunding. People were mostly looking at factors like the business idea, secondary market of shares and experience of management team. These were signals of human capital and certainty. These people who were chosen to answer the questionnaire had some interest in investing and actively followed discussions and news on investing. The questionnaire showed that people thought investments in equity crowdfunding to most likely perform well resulting in long-term and short-term gain.

The first hypothesis in this thesis was (H1); equity crowdfunding can provide few but very successful investment returns and the risks are mainly loss of capital. The hypothesis was partly proven correct, equity crowdfunding can provide on the basis of similar experiences internationally provide very big rewards. Only a few companies were profitable on the basis of this research, and the profit margins had had very positive change after funding. Equity crowdfunding comes with many risks mainly loss of capital invested, but also the opportunity cost should be thought of. The investment is also at risk for dilution and unlikely dividends.

The second hypothesis (H2); investors' look for signals of quality and popular funding projects, was proven correct. People are more likely to invest if many other have invested. People look for signals of quality in the pitch and evaluate the financial statements, but most important factor was the business idea. Signals of quality included human capital, certainty, investors' involvement, personal motives and financial situation. No statistically significant relations were found of investors who invest in equity crowdfunding would be less risk averse than those who do not invest. Younger people, high degree education and higher salaries showed more probability of investing.

The definition of crowdfunding is a developing process that continuous to take on new forms both in Finland and internationally. For smaller and newly established companies financing is clearly a difficulty. Social rewards in investing can provide support to local businesses and creation of new jobs and participating in interesting causes. Rewards act as an important part of crowdfunding and it is part of its appeal to investor, but whether it can provide successful investments will remain to be discovered in future studies.

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APPENDICES

Appendix 1. Questionnaire regarding investments in equity crowdfunding

10.04.2017

My name is Eva Toppari and I study international business at Tallinn University of

Technology. I specialize in finance and accounting. In this questionnaire, I study the investment motives and experience of investing in equity crowdfunding in Finland. The responses from this questionnaire will be used in my Bachelor's thesis. The questionnaire will be open for answers for one week. All responses are collected as anonymous. The questionnaire takes only one minute to fill out. Thank you for your support.

- 1. Which age category below includes your age?
- o 18-25
- o 26-35
- o 36-45
- o 46-55
- o 56-65
- o 66-75
- o 76-
- 2. Gender?
- o Man
- o Woman
- 3. Education?
- No education
- Primary school
- Secondary education / High school
- o Undergraduate
- Graduate degree (master's and doctorate)
- 4. Employment?
- Leading position
- Employee
- Entrepreneur
- Pensioner
- Stay at home mom/dad
- o Unemployed
- o Student
- 5. Investment portfolio (€)
- 5,000 or less
- \circ 6,000 20,000
- o 21,000-50,000
- o 51,000-100,000
- o 101,000 or more

- 6. Annual salary (gross €)
- 10,000 or less
- o 11-30,000
- o 31,000-40,000
- o 41,000-50,000
- o 51,000-70,000
- o 71,000- or more
- 7. Have you invested in equity crowdfunding?
- o Yes
- o No
- 8. If I financially support a seed or growth company, I make it out of pure joy to help and do not expect returns.
- o 1 Disagree
- 2 Somewhat disagree
- o 3 Neither
- o 4 Somewhat agree
- o 5 Agree
- 9. In your opinion, what describes investments in equity crowdfunding best? (you can choose several)
- Long-term capital gain
- o Long-term dividend payments
- Long-term loss
- Short-term capital gain
- o Short-term dividend payments
- Short-term loss
- Other?
- 10. What are important factors when choosing a company to invest in? (you can choose several)
- Size of company
- Experience of management team
- o Owner's amount of shares
- Involvement of other investors
- o Sales history records
- Secondary market of shares (ability to sell shares)
- o Reliable sales projections
- Business idea
- o Valuation of business
- Number of investors
- o Country of operating
- Other?

Comment: The original language of the questionnaire was Finnish. Source: (Author's study)