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Abstract

Equity crowdfunding has matured to a viable option for non-technology and technology companies to raise funding in their early and later stages in the past ten years. Venture capital (VC) companies and business angels have been increasingly involved in equity crowdfunding rounds. In recent years, a new forms of crowdfunding, initial coin offerings (ICOs) and security token offerings (STOs) have emerged.

To understand more of the emerging funding industries, this study seeks to shed light on how the maturing equity crowdfunding industry will evolve in the future, how it will affect on the operation models and business models of venture capitalists, how the blockchain technology will affect on equity crowdfunding and what are the advantages and disadvantages of ICOs and STOs compared to a traditional equity crowdfunding. The study uses explorative research method based on semi-structured qualitative interviews with entrepreneurs, who have raised funding from venture capitalists, organized an initial coin offering or an equity crowdfunding round and interviews with venture capitalists, whose portfolio companies have raised funding through equity crowdfunding.

Based on the interviews several key findings can be concluded on why companies choose to raise funding by organizing an equity crowdfunding round, why venture capital backed companies raise follow-on funding through equity crowdfunding, how venture capitalists see equity crowdfunding affecting to their business models and how equity crowdfunding offers an alternative way to raise funding for companies, that venture capital companies do not fund. Initial coin offerings and security token offerings are a new form crowdfunding, which emerged in 2013. This thesis will explore the advantages and disadvantages of ICOs and STOs compared to traditional equity crowdfunding.

One of the central findings of this study is that equity crowdfunding, initial coin offerings and security token offerings can be used to finance different type of companies and projects that are not suitable for venture capitalists, because venture capitalist have tight criteria's regarding the industry, growth and scalability of the company. Venture capitalists do not see equity crowdfunding as a threat to their businesses, but rather as an ancillary for venture capital and a tool for a venture capitalist to raise follow-on funding for their portfolio companies. Another key contribution of this research is that companies who organize ICOs and STOs have applied the token into to core of their strategy by using a token as a payment method, using tokens to pay dividends, buying back the issued tokens, rewarding employees by giving them tokens and use tokens to encourage the community to act in a way that is beneficial for the company.

Keywords equity crowdfunding, venture capital, blockchain, token sale, initial coin offering, security token offering, start up financing

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Tiivistelmä

Osakepohjainen joukkorahoitus on kehittynyt varteenotettavaksi rahoitusvaihtoehdoksi teknologia- ja muille yrityksille viimeisen kymmenen vuoden aikana. Venture capital (VC) yritykset ja businessenkelit ovat olleet aktiivisesti yhä enemmän mukana osakepohjaisissa joukkorahoituskierroksissa. Viime vuosina on ilmestynyt uusi joukkorahoituksen malli, kolikkoanti (initial coin offering, ICO) ja digitaalisten arvopapereiden liikkeellelasku (security token offering, STO).

Ymmärtääksemme enemmän näistä verrattain uusista rahoituksen muodoista, tämä tutkielma pyrkii tuomaan selvyyttä miten osakepohjainen joukkorahoitus -toimiala tulee kehittymään tulevaisuudessa, miten se tulee vaikuttamaan venture capital -yritysten liiketoimintamalleihin, miten lohkoketjuteknologia vaikuttaa osakepohjaiseen joukkorahoitukseen ja mitkä ovat ICO-antien ja STO-antien edut ja haittapuolet verrattuna tavalliseen osakepohjaiseen joukkorahoitukseen. Tässä tutkielmassa käytetään eksploratiivistä tutkimusmenetelmää ja haastattelut on tehty puolistrukturoituina haastatteluina yrittäjien kanssa, jotka ovat nostaneet rahoitusta venture capital sijoittajilta, järjestämällä osakepohjaisen joukkorahoituskierroksen tai ICO-annin sekä haastatteluihin venture capital -sijoittajien kanssa, joiden portfolioyhtiöt ovat nostaneet rahoitusta osakepohjaisella joukkorahoituksella.

Haastatteluiden perusteella voidaan tehdä monia keskeisiä löydöksiä, siitä miksi yritykset valitsevat osakepohjaisen joukkorahoituksen rahoitusmuodokseen, miksi venture capital rahastojen rahoittamat yritykset nostavat jatkorahoitusta osakepohjaisella joukkorahoituksella, miten venture capital -sijoittajat näkevät osakepohjaisen joukkorahoituksen vaikuttavan heidän liiketoimintamalleihinsa ja miten osakepohjainen joukkorahoitus tarjoaa vaihtoehtoisen tavan nostaa rahoitusta yhtiöille, joita venture capital -rahastot eivät tavallisesti rahoita. ICO-anti ja STO-anti ovat uusi joukkorahoituksen muoto, joka ilmestyi 2013. Tämä tutkielma tarkastelee ICO-antien ja STO-antien etuja ja haittapuolia verrattuna tavalliseen osakepohjaiseen joukkorahoitukseen.

Yksi tämän tutkielman keskeisistä havannoista on, että osakepohjaista joukkorahoitusta, ICO-anteja ja STO-anteja voidaan käyttää erityyppisten yhtiöiden rahoitukseen ja projekteihin, jotka eivät ole venture capital yhtiöille sopivia sijoituskohteita, johtuen venture capital yhtiöiden tiukoista sijoituskriteereistä liittyen yrityksen toimialaan, kasvuun ja yhtiön skaalautuvuuteen. Venture capital sijoittajat eivät näe osakepohjaista joukkorahoitusta uhkana heidän toiminalleen, vaan pikemminkin venture capital -rahoitusta täydentävänä rahoitusmuotona ja työkaluna venture capital -rahastoille, jonka avulla voidaan nostaa jatkorahoitusta heidän portfolioyhtiöilleen. Toinen tämän tutkielman keskeinen havinto, on, että yritykset, jotka järjestävät ICO-annin tai STO-annin ovat sisällyttäneet tokenin yrityksen strategian ytimeen, käyttämällä tokenia maksutapana, maksaakseen osinkoja, ostamalla takaisin tokeneita, palkitsemalla työntekijöitään tokeneilla sekä kannustamalla yhteisöä toimimaan tavalla, joka on hyödyllinen yritykselle.

Avainsanat osakepohjainen joukkorahoitus, venture capital, lohkoketju, kolikkoanti, digitaalisten arvopapereiden liikkeeseenlasku, start up rahoitus

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LIST OF ABBREVIATIONS

B2B	Business-to-Business
B2C	Business-to-Consumer
DLT	Distributed Ledger Technology
FMCG	Fast Moving Consumer Goods
GDP	Gross Domestic Product
GP	General Partner
ICO	Initial Coin Offering
IPO	Initial Public Offering
LP	Limited Partner
n.d.	no date
NVCA	National Venture Capital Association
SAFT	Simple Agreement for Future Tokens
STO	Security Token Offering
VC	Venture Capital *or* Venture Capitalist
VCF	Venture Capital Firm

1. INTRODUCTION

Equity crowdfunding has been growing, developing and maturing substantially in recent years. The companies raising money through equity crowdfunding in 2019 are more mature than they were few years ago. In an equity crowdfunding round a company seeks funding from a relatively large group of investors who invest relatively small amounts in exchange for shares in the company (Howe, 2008).

Venture capital (VC) investing is concentrated in big technology hubs and VC firms are by their definition looking for investment opportunities in scalable, potentially fast-growing technology companies. This has resulted in a situation where non-tech companies are having difficulties to obtain equity investments into their operations. As a partial solution, phenomenon called crowdfunding emerged in early 2010s as an option for technology and non-technology companies to raise equity funding. (Stevenson et al., 2019). From an entrepreneurial financial perspective, equity crowdfunding and crowdfunded corporate loans have been labeled as a novel form of financing, enabling entrepreneurs to raise financing globally from individual investors. This has especially answered the needs where the underdeveloped financial sector in less technologically developed or overall smaller market countries, that do not provide enough opportunities for startup companies to raise venture capital finance or other type of equity financing (Schröder, 2011). This originates from a situation when the financial crisis of 2007-2008 led to tighter banking regulations and the banks had to tighten the terms on corporate loans for companies (Sapir & Wolff, 2013). As a result, crowdfunding and equity crowdfunding were seen offering a new form of financing to entrepreneurs looking to finance the growth of their ventures.

Since then, the VC industry has grown substantially. In 2019 VC investors invested $301.5 billion compared to 2014 when only $89.4 billion was invested. (Venture Pulse Q4 2019, 2020). Venture capital firms are facing challenges to generate sufficient returns and entrepreneurs have new options to raise finance from new type forms of financing, such as equity crowdfunding and initial coin offerings, that will be discussed later in this study. According to Mulcahy et al. (2012) venture capital model is broken, which is supported by a report, which suggests that most venture capital companies failed to generate returns that beat a public market returns after fees (Mulcahy et al., 2012).

In the past few years, the models have evolved and the initial coin offerings (ICOs) and security token offerings (STOs), a new form of crowdfunding have gained popularity, particularly with startups working in the blockchain technology sector. ICOs and STOs are a novel topic of lack scholarly investigation and there is confusion as the technology-driven funding trends to rise and fall rather quickly. In comparison to traditional equity crowdfunding where investor gets equity in the company, Fisch (2019) states that in an ICO, an investor gets newly issued tokens or cryptocurrency. These tokens are often meant to act as an only medium of exchange in the company's own ecosystem (Fisch, 2019). Financial phenomenon of ICO is a capital raising method used by startup companies first used in 2013 by Mastercoin and became very popular in 2017 and 2018. Momtaz (2018) states that if ICO is approved by a financial authority it is often called STO (Momtaz, 2018).

Not only is equity crowdfunding maturing but evolving rapidly. New technologies (e.g. blockchain technology) enables to solve the illiquidity problem of startup companies by offering companies to raise finance in an ICO or in a STO. The cryptocurrency or token issued in an ICO are often meant to function as a medium of exchange for the project they finance or as a store of value in the future. The main challenge surrounding the topic seems to be related to regulations as ICOs are unregulated in most countries and this has raised the interest of the national regulators. The unregulated environment with financial speculation has brought immense fluctuation to the prices of tokens which, in turn, has led to more attention from investors, funding tool developers, regulators and also the general public (Economist, 2017).

The growth of this entrepreneurial finance field has been extremely rapid. According to a report entitled 'Token Sales: Q1 2018' (2018), in 2016, blockchain startups raised $400 million from venture investors and $270 million in ICOs, of which $168 million was raised by the decentralized venture fund called DAO. Initial coin offerings have rapidly increased their volume in 2017 raising $9 billion dollars in 2017 alone, over 33-fold increase over the previous year (Token Sales: Q1 2018).

These ICOs and simple agreements for future tokens (SAFTs) seem largely to be an attempt to fund risky ventures while bypassing SEC scrutiny (Kim et al., 2018). Overall, it seems that ICOs offer compelling opportunity for startups in the cryptocurrency space to raise capital quicker and easier than before (Chohan, 2017).

In summary, equity crowdfunding, ICOs and STOs offer an alternative way for startup entrepreneurs to raise funding for their ventures. Venture capital companies are facing more competition from other venture capital companies and equity crowdfunding ICOs and STOs offer an alternative way to fund early stage ventures. In recent years VC companies have invested into equity crowdfunded companies and the portfolio companies of VCs have raised follow-on rounds by organizing an equity crowdfunding round. However, there is not a significant amount of research about how equity crowdfunding, initial coin offerings and security token offerings will affect into venture capital companies in the future.

To answer lack of scholarly knowledge associated with this topic, the study aims to explore, firstly, how equity crowdfunding will evolve in the future, secondly, how it will effect to the operation models and business models of venture capital companies, how blockchain technology will influence in equity crowdfunding and, finally, what are the advantages of initial coin offerings and security token offerings compared to traditional equity crowdfunding. It does this by interviewing entrepreneurs who have raised funding in an ICO, by organizing an equity crowdfunding round or venture capital and venture capital investors, whose portfolio companies have also raised equity crowdfunding.

1.1. Research gap and problem

Early stage entrepreneurs often have a problem attracting outside capital for their ventures, due to lack of cash flows and evidence that their business model works (Cosh et al., 2009). Financial industry and especially venture capital industry are underdeveloped in several countries, which restricts the development of new promising innovative startup companies. According to a report entitled Entrepreneurship at a Glance 2017 (2017), in 2016 venture capital investments as a percentage of GDP were highest in Israel (0.38%), United States of America (0.36%) and Canada (0.16%), while in other OECD countries the share of venture capital investments were below 0.10% of the GDP (Entrepreneurship at a Glance, 2017).

Since 2012 equity crowdfunding has been grown rapidly in Europe, aiming to provide a partial solution to this problem. According to a report entitled 'Equity-based crowdfunding transaction value in Europe (excluding the UK) from 2012 to 2017 (2019)', in 2012 equity crowdfunding volume in Europe (exc. United Kingdom) was 18.4 million euros compared to 211 million euros raised in 2017 (Equity-based crowdfunding transaction value in Europe (excluding the UK) from 2012 to 2017, 2019). Equity crowdfunding can offer better terms to the company than a venture capital investor, who has more negotiation power in comparison to equity crowdfunding where terms are set before the funding round for a large group of retail investors. Some companies are not suitable for venture capital investors who are looking for highly scalable high-risk high-return type of investments, but these companies can be interesting for retail investors who are willing to invest in companies with lower risk and lower returns.

ICOs, a core topic of this study, are a form of crowdfunding used by startup companies especially in the blockchain technology industry. In an ICO process, a company issues new tokens, which it sells to investors in exchange for another cryptocurrency (Howell et al., 2018). Blockchain technology enables startups to issue tokens that can be used in several different ways in the core operations of the company.

Currently there are more funding options for companies than ever before, equity crowdfunding has matured and there are more and bigger equity crowdfunding rounds than few years ago, where companies prepare for an initial public offering (IPO) and VC companies are participating in equity crowdfunding rounds of their portfolio companies. According to Chohan (2017), ICOs are banned in China and South Korea, unregulated in several countries such as Canada and France, whereas Hong Kong, New Zealand, Australia, Gibraltar and UAE have given guidance regarding initial coin offerings (Chohan, 2017). When governments set regulations for initial coin offerings and security token offerings it may attract more entrepreneurs to organize an ICO or STO, attract more investors to invest into startup companies and provide liquidity for startup investments that have traditionally been illiquid assets. Utermann (2019) argues, that blockchain technology *"may generate some utility in the form of improved security and reduced transaction costs and may even prove to be transformative at some stage."* (Utermann, 2019). Overall, there is growing variety of funding options available for entrepreneurs and companies can raise capital from different sources at different stages of venture's lifecycle. This, the complexity of funding and rapidly evolving field of tech-venture finance, is also a justification why it is necessary to shed more light into this field in a scholarly manner.

Unsurprisingly, venture capital has been an area of interest of researchers in the past e.g. (Sahlman, 1990; van Pottelsberghe de la Potterie & Romain, 2004; Cosh et al., 2009; Stevenson et al., 2019) and research about equity crowdfunding has been published in the recent years e.g.

(Mollick, 2014; Stangler & Litan, 2009; Ahlers et al., 2015). However, according to Fisch (2019) due to the novelty of initial coin offerings there has not been a lot of research published yet. Preliminary academic research has appeared regarding the relationship between equity crowdfunding and venture capital funding and how it will affect on venture capital companies, such as the study from (Kleinert et al., 2018).

To bridge the gap within the scope of master thesis research, this research seeks to investigate this relationship, from both entrepreneur's and VC investor's perspective to the rapidly evolving field of tech-driven venture funding. More precisely, study seeks to investigate how equity crowdfunding will evolve in the future, what are the impacts of growing equity crowdfunding industry to venture capitalists, how blockchain technology will influence on equity crowdfunding and what are the advantages and disadvantages of ICOs and STOs compared to equity crowdfunding. The following research objectives and questions frame this further.

1.2. Research objectives and questions

To begin with, the main objective of the study is to find out how equity crowdfunding will evolve in the future. More precisely, by adopting an explorative study approach, the aim is to explore how equity crowdfunding will affect venture capitalist's operation models and business models. Narrowing this further, this study will seek to investigate the possible influence of blockchain technology to traditional equity crowdfunding and investigate what are the advantages and disadvantages of ICOs and STOs compared to traditional equity crowdfunding.

To summarize, the previous introductory sections, this study attempts to answer the following research questions, with a main research question that is investigated through three sub-questions:

How equity crowdfunding will evolve in the future?

1) What is the future impact of equity crowdfunding to venture capitalist's operation models and business models?

2) How blockchain technology will influence equity crowdfunding and fundraising of startup companies?

3) What are the advantages and disadvantages of initial coin offerings compared to a traditional equity crowdfunding?

In order to explore the objectives mentioned above, interviews were conducted with entrepreneurs who have organized an equity crowdfunding round and raised venture capital funding, entrepreneurs who have organized or were planning to organize an ICO and VC investors. The entrepreneurs who have organized an ICO might have different perspective to the phenomenon than the entrepreneurs who have raised funding in a traditional equity crowdfunding round. VCs are the third group that will be interviewed for this research. The aim is to find out how venture capitalists see equity crowdfunding, ICOs and STOs as funding methods for startups and how this will affect to their operating and business models.

1.3. Context and scope of the study

The literature review sheds light on the core literature, and the literature review and the empirical part focuses on the role of equity crowdfunding in startup funding. This study is an explorative study, which focuses on understanding the role of equity crowdfunding, in comparison to venture capital and explores the possibilities of blockchain technology, initial coin offerings and security token offerings.

All the interviewees of this study were Finnish, and the geographical area of this study is solely Finland. The interviews were organized between December 2018 and July 2019. The interview questions evolved during the interviews and were slightly different for entrepreneurs who had organized an equity crowdfunding round, entrepreneurs who had organized an ICO and venture capitalists. The interview questions are listed in the appendices of this study. The scope of the study is limited to equity crowdfunding, venture capital, ICOs and STOs in Finland.

Companies organizing an equity crowdfunding round are more mature than they were few years earlier and the size of an average equity crowdfunding round considerable bigger than few years ago. Given the scope of this study, only venture capitalists were chosen to be interviewed due to their involvement in later stage companies, although business angels are also active in equity crowdfunding rounds and also making first investments into companies in an equity crowdfunding rounds to diversify their portfolios.

The results of this study may differ if this study would be conducted in another country where the maturity and state of equity crowdfunding, venture capital, ICOs and STOs are different.

2. LITERATURE REVIEW

The purpose of this chapter is to illustrate the core literature around the key themes and research questions. We begin this with the common assumption that small companies without significant assets often have difficulties to obtain bank finance. Early stage startup companies without significant assets or profits may get venture capital funding, but venture capital markets are often underdeveloped, and rejection rate of venture capital investors is high. van Pottelsberghe de la Potterie & Romain (2004), define venture capitalists as intermediaries in capital markets that provide funding for startup companies that have potential for high growth (van Pottelsberghe de la Potterie & Romain, 2004). In order to obtain venture capital, company does not need to have high profits, but they are important to obtain capital from leasing firms, trade customers, suppliers, partners and shareholders (Cosh et al., 2009).

VC investments have typically concentrated in regional hubs, where most technology startups are established. Governments fund early stage entrepreneurs with grants, loans and equity, but the amounts are often insufficient. Equity crowdfunding has become an alternative option to raise funding for technology startups and non-technology companies, which are typically the type of companies that VCs do not fund and might be located outside of regional hubs. These type companies often have difficulties attracting investments from professional investors, such as business angels and venture capitalists (Stevenson et al., 2019). From its definition, crowdfunding is a phenomenon that has emerged rapidly in 2010s. Mollick (2014) defines crowdfunding as:

> *The efforts by entrepreneurial individuals and groups ... to fund their ventures by drawing on relatively small contributions from a relatively large number of individuals using the internet, without standard financial intermediaries.*

Equity crowdfunding has been growing rapidly in the recent years. Equity crowdfunding offers a new alternative funding method for companies who are not able to raise equity funding from business angels or venture capitalists to raise equity funding from large group of individual investors. For example, according to Giudici (2016) Scottish beer maker Brewdog raised £4.25 million from 8124 investors and HAB, a design-led housing firm raised over £1.9 million in their equity crowdfunding campaigns (Giudici, 2016). The backdrop for this is a situation, where given company is not suitable for business angels and venture capital companies, due to

their industry, lack of scalability, lack of innovation or other reason. Another popular form of crowdfunding is to launch a product by selling the product beforehand to consumers by raising funding for a working prototype or to test the market demand for the product or service.
There has been recently published some research about the relationship of venture capital and equity crowdfunding e.g. (Ahlers et al., 2015; Agrawal et al., 2016; Hornuf et al., 2018: Kleinert et al., 2018). This study will try to find out how equity crowdfunding will evolve in the future, how it will affect to operation models and business models of venture capitalists and how blockchain technology, initial coin offerings and security token offerings will effect equity crowdfunding and venture capital. Blockchain technology, ICOs and STOs have been suggested to have the potential to effect into the financial sector and especially to fundraising, which is why more research needs to be conducted in this area. In the following sections, the literature review will explore the previous research on venture capital, equity crowdfunding, blockchain technology, ICOs and STOs.

2.1. Venture capital

Venture capital (VC) financing is primarily used to finance young, innovative and risky companies. The most innovative companies such as Google, Apple and Microsoft have all been backed by venture capitalists (Gornall & Strebulaev 2015). Maula (2001) mentions that venture capitalists are looking for high growth potential in their investments and thus, only small minority of the companies are suitable for a VC investment (Maula, 2001). Venture capital is a risky asset class and due to that, a high return is expected (Sahlman, 1990). According to Puri & Zarutskie (2012), 40% of the companies backed by venture capitalists fail.

According to Botazzi & Da Rin (2002), VC is perceived as the most helpful form of financing. Venture capitalists provide expertise, their network of contacts and strategical advice to the companies of their portfolio (Botazzi & Da Rin, 2002). Besides network of contacts and strategical advice, Davila et al. (2003) mentions that without these connections these companies might not be able to reach out to these professional managers of potential customers. Venture capitalists also have a reputation, which expedites growth (Davila, et al., 2003).

Venture capital firms raise funds from limited partners (e.g. family offices, wealthy individuals and pension funds) and invest those funds into young innovative companies selected through a careful screening process. The gain from these investments is typically realized when the most successful investments are listed in a stock exchange (Gompers & Lerner, 2000). According to Schwienbacher (2010), other typical exit strategy is to sell the company to a larger established company and other less used exit methods are management buy-out and refinancing (Schwienbacher, 2010).

Companies financed by venture capitalists often have difficulties attracting other kind of financing due to their riskiness (Gompers & Lerner, 2001). According to Zider (1998) VC fills the gap between traditional lower cost bank financing and the early stage financing from entrepreneur's friends and family. To receive financing from traditional bank, company needs to have assets to attain debt financing, which early stage startup companies do not usually have (Zider, 1998).

Moreover, VC firms differ from each other by the industries they invest, investment size, the involvement of the venture capital firm in the companies and venture capital firms invest in different lifecycle stages of the company (Elango et al., 1995).

According to van Pottelsberghe de la Potterie & Romain (2004), the research shows that there is some evidence that VCs contribute to economic impact in Germany and USA, but there is no substantial amount of research about it (Potterlsberghe de la Potterie & Romain, 2004). Alemany & Marty (2005) and Potterlsberghe de la Potterie & Romain et al. (2004) state in their research that venture capitalists impact on economy by introducing new products to the market and by better exploiting the research of public and private institutions (Alemany & Marty 2005; Romain et al., 2003). VC funding is a significant driver of innovation and companies backed by VCs are creating new jobs, but the research regarding economic impact of venture capital is limited due to the confidential nature of the venture capital industry (Alemany & Marti 2005). To highlight the growth of this funding sphere, table 1 illustrates the growth of VC funding in Finland.

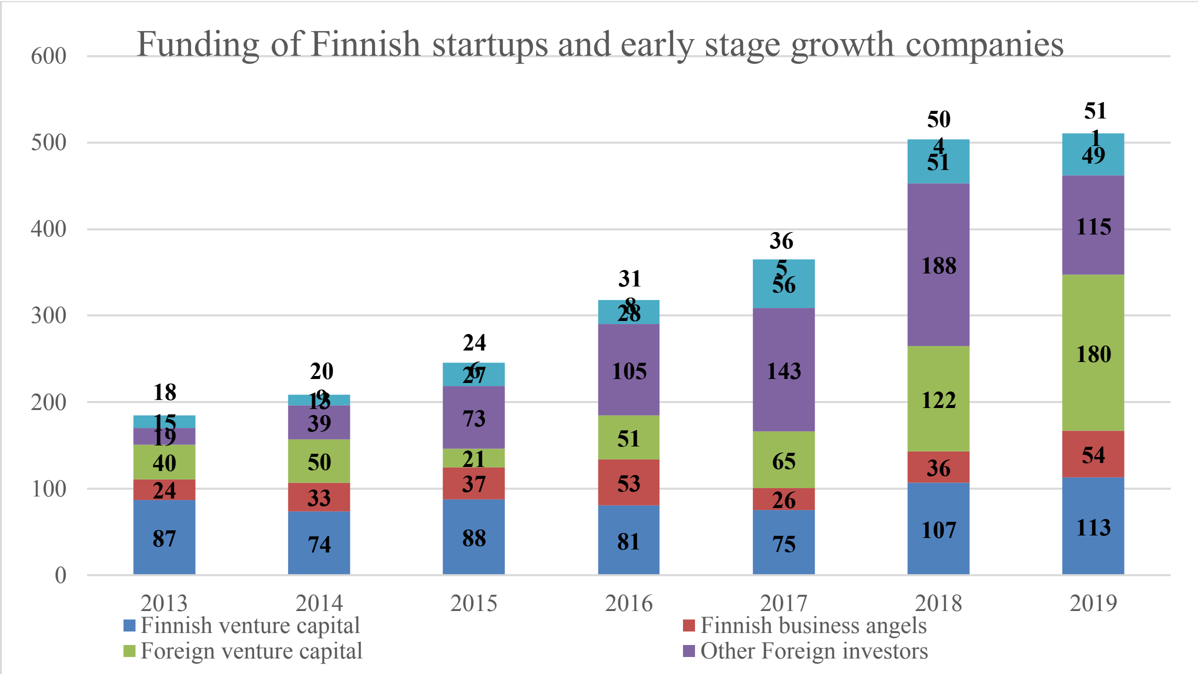

Table 1. Funding of Finnish startups and early stage growth companies (FVCA, 2020)

2.1.1. Venture capital as a business model

A typical venture capital company is structured as a management company, where the venture capital company manages several funds. The most common economic lifetime of a fund is ten years and typically, the capital of each fund is invested in the first three to five years, after which only few follow-on investments are made. After the investment period, the focus of the fund changes to convert these companies into successful exits and distribute the profits to partners. Usually there is an option to continue the lifecycle of the fund for few years in order to execute the exits (Sahlman, 1990).

In the typical venture capital model venture capitalists, the general partners (GPs) of a venture capital company raise funds from limited partners (LPs). Limited partners do not actively participate in the management of the fund, but according to Sahlman, (1990):

> *Limited partners are almost always permitted to vote on key issues such as amendment of the limited- partnership agreement, dissolution of the partnership before the termination date, extension of the fund's life, removal of any general partner, and valuation of the portfolio.*

During the investment period of 3 to 5 years, venture capital company charges typically a 2.5% management fee to pay the operating costs of running the venture capital fund, such as the salaries of the general partners and the salaries of the support staff, office space and other general expenses. In a typical venture capital fund structure, the general partners receive 20% of the profits, while the limited partners receive 80%. The range of the distributed profits to general partners varies from 15 to 30% (Sahlman, 1990).

2.2. Crowdfunding

Crowdfunding is a term derived from crowdsourcing, a term coined by Jeff Howe and Mark Robinson, who used the term "crowdsourcing" for the first time in the June 2006 issue of Wired Magazine (Kleemann et al., 2008). Crowdfunding is a method to raise financing from individuals for a variety of new ventures. Individual backers backing for-profit, cultural or social projects often receive future products or equity in return (Mollick, 2014). Mollick (2014) defines crowdfunding as:

> *The efforts by entrepreneurial individuals and groups ... to fund their ventures by drawing on relatively small contributions from a relatively large number of individuals using the Internet, without standard financial intermediaries.*

The definition of Belleflame et al. (2014) is similar to Mollick's (2014) definition and Belleflame et al. (2014) define crowdfunding as:

> *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 in order to support initiative for specific purposes.*

Bradford (2012) divides crowdfunding into five different types: the donation model, the reward model, the pre-purchase model, the lending model and the equity model. The donation model is primarily used by non-profit organizations and the contributors do not receive anything in exchange. In the reward-model the contributor usually gets something in exchange for the contribution but does not get interest or earnings in the project. Similar to reward model, pre-purchase crowdfunding model does not offer any interest or earnings of the project, but rather the participants get the product or a discount from the product that the company is making. In the lending model contributors lend money temporarily and expect repayment for their contribution and often interest. In the equity model, contributor gets shares of the company or a loan that is convertible to shares of the company (Bradford, 2012).

In later studies, Moritz & Block (2016); Short et al. (2017) and McKenny et al. (2017) note that crowdfunding is generally divided into four types: donations-based, reward based, lending based and equity-based. The pre-purchase model has been merged into to the reward model as one category of crowdfunding (Moritz & Block 2016; Short et al., 2017; McKenny et al., 2017).

Franke & Klausberger (2008) found out that when consumers see the crowdfunding project as being fair for them and the project is linked to the business model of the company, they are more likely to participate in the project. Participants considered the campaign fairer, when they have something to say to the design selection. Another important factor is the way in which participants obtain rewards. Often these rewards are intangible and low cost to produce (Franke & Klausberger, 2008). According to Gerber et al. (2012) other reasons to organize a crowdfunding round besides raising funds are to receive validation, connect with an audience, and expand awareness and to replicate other's successful experiences (Gerber et al., 2012).

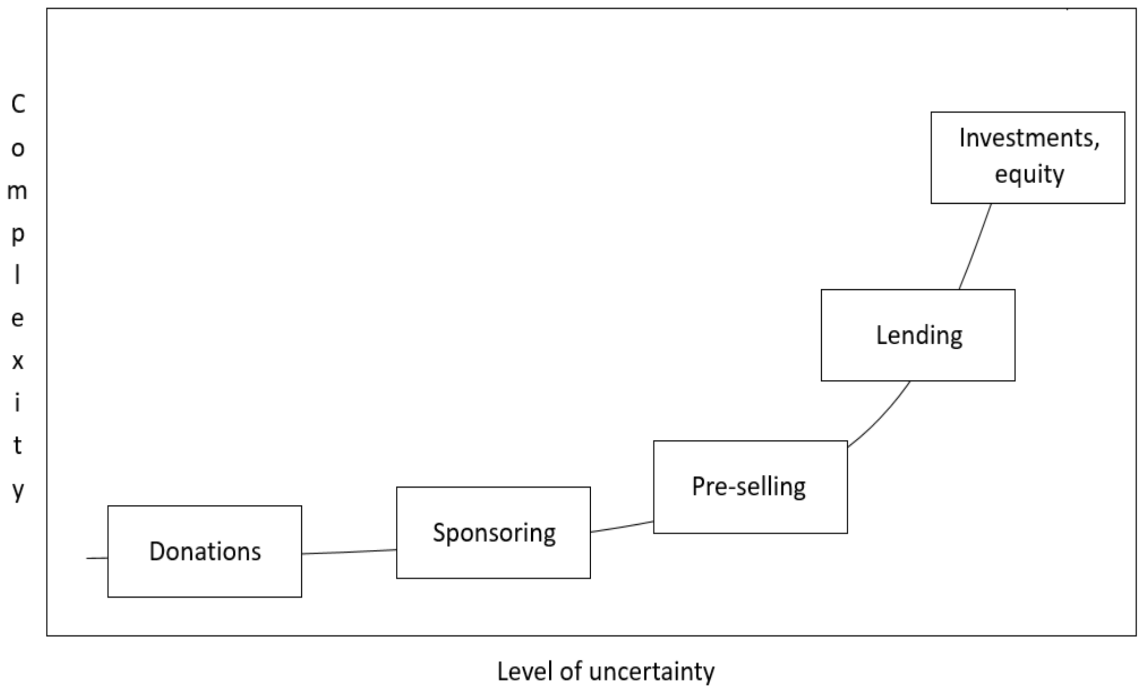

Figure 1: Complexity and Uncertainty of Crowdfunding by Hemer, (2011)

The figure above illustrates the complexity and level of uncertainty of crowdfunding instruments. The crowdfunding instruments can be ranked from the simplest form of crowdfunding, donations to the more complex and regulated investments such lending and equity. Furthermore, based on the previous literature in this chapter, it seems crowdfunding has become an attractive way to raise financing for early stage companies in recent years. Internet has allowed founders to fund their projects by raising relatively small contributions from a relatively large number of individuals. In the figure below, Lukkarinen et al., (2016) have distinguished the key features of different type of funding forms.

Table 2. Key features of equity crowdfunding and related forms of funding (Lukkarinen et al., 2016).

Features	Reward-based crowd-funding	Equity crowdfunding	Business angels	Venture capital
Typical funder background	Various, many have no investment experience	Various, many have no investment experience	Former entrepreneurs	Finance, consulting, industry
Source of funds	Investing own money	Investing own money	Investing own money	Investing other people's money
Funding in-struments	Non-financial, e.g., products	Shares	Shares	Shares
Deal flow	Through web platform	Through web platform	Through social and/or angel networks	Through social networks and proactive outreach
Due diligence	Very limited; may be conducted by an individual, if at all	Conducted by an indi-vidual, if at all	Conducted by individu-als based on their own experience	Conducted by staff in VC firm with potential assis-tance from outside firms
Geographic proximity of funders	Investments made online: funders often distant from venture	Investments made online: funders often distant from venture	Most investments local	Invest nationally (or internationally with lo-cal partners)
Post-funding role of funders	Most remain passive	Most remain passive	Active (hands-on)	Active (strategic)
Return on investment	Financial return not relevant	Financial return im-portant (but not the only reason for investing)	Financial return im-portant (but not the only reason for investing)	Financial return critical

Table 2. Key features of equity crowdfunding and related forms of funding by Lukkarinen et al., (2016)

2.2.1. Equity crowdfunding

According to Ahlers et al. (2015) previous research has not clearly defined the term "equity crowdfunding" (Ahlers et al., 2015). Bradford (2012) mentions that equity crowdfunding is a process where investors get equity or equity-like instrument (e.g. profit sharing) in exchange for their investment into the company (Bradford, 2012). Equity crowdfunding (often defined as crowd investing), has been developing slower than other forms of crowdfunding. According to Wilson & Testoni (2014):

"Equity crowdfunding is more complex than other forms of crowdfunding and requires proper checks and balances if it is to provide a viable channel for financial intermediation."

Equity funding for young startup companies is in an important role for societies in terms of creating economic growth and job creation (Wilson & Testoni, 2014). Equity crowdfunding is in an important role in providing funding for startup companies and creating jobs (Stangler & Litan, 2009).

According to Kuratko (2016), equity crowdfunding has three essential parts: The entrepreneur who proposes the funding round for the company, the platform, which provides the platform for the funding round and the investors who provide capital to the seeking company in exchange for shares of the company (Kuratko, 2016). In an equity crowdfunding round, a company usually organizes their funding round on an equity crowdfunding platform (e.g. Crowdcube, Seedrs, Invesdor) as an open call to sell specific amount of shares of the company to large number of investors. The investment platform provides legal framework, marketing, and payment solutions for the investors (Ahlers et al., 2015).

Further, according to Ahlers et al. (2015) the investors who are investing an equity crowdfunding round do not have the ability to do comprehensive research, *(due diligence)* and evaluation of the investment into the company. Companies need to clearly demonstrate their value to investors in order to attract investors to invest (Ahlers et al., 2015).

Equity crowdfunding volume has grown in the recent years and it presents considerable amount of the total funding of Finnish startup and growth companies. FVCA (The Finnish Venture Capital Association) (2020) reported that in 2016 the total funding volume of Finnish startup and growth companies was 318 million euros. A report by Alakiuttu & Jokinen (2020) reported that in 2016 equity crowdfunding volume was 38.2 million euros, which represented 12.0% of the total funding volume of Finnish startup and early stage growth companies. In 2017 the total amount of funding according to FVCA was 365 million euros, while the total equity crowdfunding volume was 62.8 million euros (17.2%), in 2018 479 million euros and 58 million euros (12.1%) and in 2019 58.3 million euros and 511 million respectively (FVCA, 2020), (Alakiuttu & Jokinen, 2020). The table below illustrates visually the equity crowdfunding volume in Finland between 2016-2019.

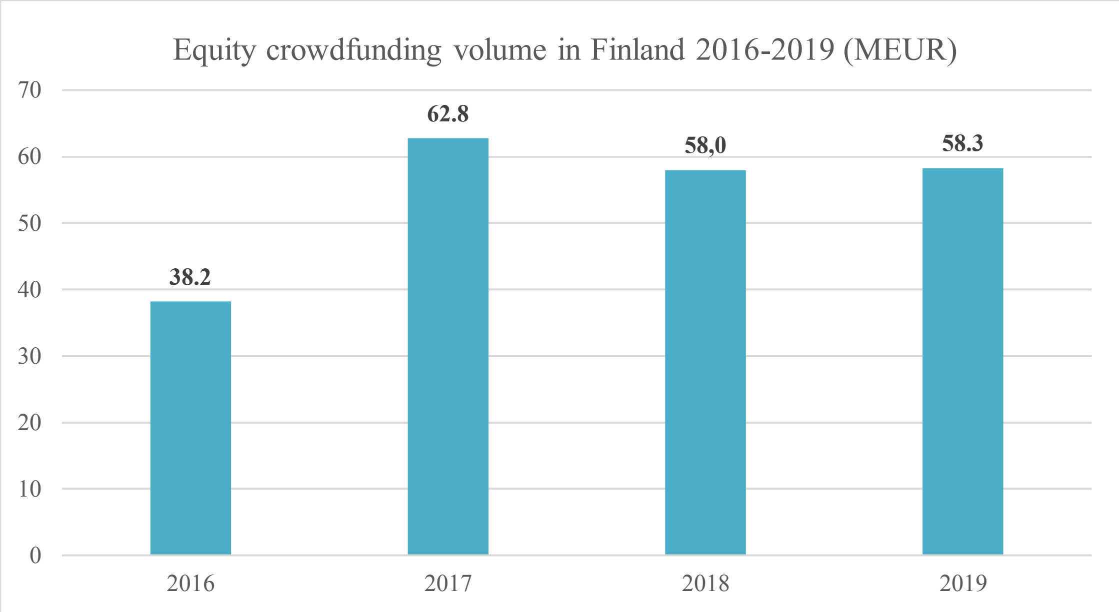

Table 3. Equity crowdfunding volume in Finland 2016-2019 by Alakiuttu & Jokinen, (2020)

2.2.2. Crowdsourcing

Crowdsourcing is relatively new phenomenon. According to Kleemann et al. (2008), Jeff Howe and Mark Robinson used the term "crowdsourcing" first time in the June 2006 issue of Wired Magazine. In an article published in 2008 Howe defines crowdsourcing as:

> *Act of taking a task traditionally performed by a designated agent (such as an employee or a contractor) and outsourcing it by making an open call to an undefined but large group of people.*

Kleemann, et al., (2008) highlight that companies use crowd mainly for cost-reduction reasons and define crowdsourcing as outsourcing specific tasks to crowd as open call in the internet. Users who contribute in the product design and improvement create value for the company allowing reducing the length of product development and costs. According to Kleemann et al. (2008) companies have taken consumers as significant part of their production process by bringing consumers as co-workers, but the control is still in the hands of a commercial enterprise. Amazon for example utilizes crowd in their product reviews and rating private sellers in their platform (Kleemann et al., 2008).

New ventures have created new kind of business models by exploiting crowdsourcing as an integral part of their business model. These ventures are transforming industries by capitalizing participation and collaboration of the crowd. The company behind the crowdsourcing captures a part of the value created as profit (Kohler, 2015). The author presents: 'This business model innovation represents a fundamental shift in the way business is done' (Kohler (2015). The advantages of crowdsourced business models compared to company-centric business models are evident as Kohler (2015) sums up the article by Hienerth et al. (2011):

> *Company-centric business models often fail to systematically and continuously meet changing user needs. Crowdsourcing-based business models are increasingly considered to be the answer to fast-changing user needs, shorter product life cycles, and an increasingly competitive climate.*

Other advantages of crowdsourced business model are that consumers are an integral part of the system for value creation and consumer can influence to the product development, which helps to create a product that the consumers really want (Kohler, 2015).

2.3. Blockchain technology

Proceeding further with funding models, recently they have been more technology infused. One commonly known technology is blockchain. Blockchain technology was first time introduced in 2009 in an application called Bitcoin (Nakamoto, 2009). Bitcoin allows transferring currency (bitcoin) without a centralized entity by using a publicly verifiable open ledger (blockchain), thus users do not need to trust in to a third party when transacting currency (Zyskind & Nathan, 2015). Blockchain technology enables anyone to inspect transactions of the blockchain creating shared and trusted public ledger that no single participant controls. The ledger is controlled by strict rules and updated by the participants collectively. The ledger keeps a track of transactions and prevents double-spending creating a trustworthy record (Berkley, 2015).

According to Narayanan (2016), blockchain is distributed database in essence. The author presents that:

> *Like many innovations, blockchain technology merges older technologies. Essentially blockchain establishes an auditable and indisputable record of information that is more secure, faster and cheaper than any centralized system (Narayan, 2016).*

The decreasing cost of auditable and indisputable record of information, (e.g. ownership rights, transaction history) blockchain technology offers the possibility to list smaller companies into exchanges. It also enables to supersede banks and other institutions who have been charging big fees for listing securities into public stock exchanges.

According to Mattila (2016), blockchain is used in several different things, therefore the definition of blockchain is obscure. The buzz around blockchain technology has increased during the past couple of years and therefore, the terminology around blockchain is still unclear. Mattila (2016) presents that the word blockchain was not used in Satoshi Nakamoto's 2008 whitepaper of bitcoin. The technologies behind bitcoin have existed already in 1980s and 1990s, but Nakamoto's innovation was to combine these technologies in a way that these technologies created an establishment for cryptocurrency system. Since 2008 other companies have looked what else blockchain technology could be used to do. In essence, blockchain is "nothing more than a mere data structure with distributed multiversion concurrency control" (Mattila, 2016).

According to Swan (2015, pp. 11), blockchain has potential to be decentralized public ledger for registration, inventory and transfer of all assets. The author presents that blockchain could be used for example in property records and intangible assets (Swan, 2015 pp.11). In addition to property records and intangible assets, Tirri (2015) mentions global payments, insurance, deposits, lending, capital raising, investment management and market provisioning. According to Tirri (2015), distributed ledger technology (DLT) (more commonly called "blockchain") *"has a great potential to drive simplicity and efficiency through the establishment of new financial services infrastructure and processes."* The author writes that blockchain technology has the potential to bring transparency between the market participants (Tirri, 2015).

One of the current limitations of blockchain technology is scalability. Scalability is one of the main limitations of itcoin and other cryptocurrencies and currently there is a debate about how to improve the scalability of blockchain technology (Croman et al., 2016). According to Eyal et al. (2016), there is "trade-off between performance metrics and security goals of the system." The authors present that "scaling is key in allowing for blockchain technology to fulfill its promise of implementing trustless consensus for a variety of demanding applications including payments, digital asset transactions, and smart contracts — at global scale" (Eyal et al., 2016).

Blockchain can be divided into different blockchain architectures. Permissionless blockchains have open access to everyone and anybody can be a participant. The users of the blockchain do not know each other and the trust emerges from game-theoretical incentives. There are lot of advantages if the users of the blockchain are known to each other and can be trusted to vote honestly. With a permissioned blockchain, there is no need to use as incentive structures to secure co-operation and thus no need to us as much computing power. By letting only permitted users to participate into voting process makes the whole process, faster, more flexible and more efficient. The negative consequences are reduced security, immutability and censorship-resistance (Mattila, 2016).

In a private blockchain, the blockchain is visible for only a specified group of people compared to a public blockchain where everyone can see the transactions. The users of a private blockchain are visible to each other compared to a public one where the users are anonymous. In a private blockchain, the transactions are secret, in contrast to a public blockchain where anyone can observe transactions (Chahbaz, 2018, pp. 45).

The hype around blockchain has made the technology more familiar to the masses. Blockchain technology is assumed to bring potentially disruptive innovations especially to the financial sector. Established companies and financial technology startups are looking for ways to implement this technology in the financial sector (Notheisen et al., 2017). According to Hughes et al. (2019) the challenges and limitations of implementing blockchain technology compared to traditional technology solutions are numerous. The authors for example mention that *'the immutable nature of blockchain means that any amendments to the smart contract, however small, are likely to be computationally expensive requiring a new block in the chain and will have a cost and time implication for all parties'*. The authors also cite the research by Drescher (2017) where the author states that the high costs and limited scalability remain as major challenges of implementing blockchain technology and Mendling et al. (2018) who mentions limitations such as increased latency, usability limitations security issues and bandwidth limitations (Hughes et al., 2019), (Drescher, 2017), (Mendling et al., 2018).

2.4. Initial coin offering and security token offering

Initial coin offerings (ICOs) are a mechanism that blockchain startups use to raise capital through the emission of newly issued currency in exchange for capital (Chohan, 2017). In 2017, ICOs (also known as token sales) have become an attractive way to raise funding for blockchain technology companies and open source projects (Li & Mann, 2018). In an ICO, startup company offers tokens in exchange for other cryptocurrencies, typically ethers or bitcoins. In return, investors receive tokens that can be determined as cryptographically secured coupons, which comprise rights and obligations (Monetary Authority of Singapore 2017). In 2017 crypto activity increased remarkable motivated by the success of bitcoin (BTC) and its successors (Kim et al., 2018).

Financial applications built on top of cryptocurrencies have potential to significantly influence on consumer and investment markets. ICOs are the most remarkable of these applications, where tokens are sold to investors (Hacker & Thomale, 2017). According to Ante & Fiedler (2019), there have been several crimes related to ICOs, which is why several companies and investors have been avoiding them. Security token offerings (STOs) are regulated token offerings where a company sells blockchain-based tokens to investors that are securities. These securities are financial instruments such as, stocks and debt (Ante & Fiedler, 2019).

Swan (2015, pp. 12) identifies crowdfunding as one of the ways blockchain technology is reinventing the financial industry. Crowdfunding campaigns are traditionally organized by centralized organization such as Kickstarter, but decentralized crowdfunding platforms enable token sale without an intermediary. In a token sale startup company offers digital tokens to early backers to raise funds (Swan, 2015, pp. 12).

According to Hartmann et al. (2018), token sales are organized directly by the entrepreneurs. The company provides tokens or coins for investors to buy in a token sale and the money invested to buy tokens is the funding amount. Token sales are an unregulated space and function out of most national laws and regulations. This enables entrepreneurs to organize any model of token sale. Some ICOs have organized a pre-sale phase (pre-ICO), where preliminary offer is made to selected investors (Hartmann et al., 2018).

Tokens bought in a token sale are often markable (similar to stocks) and allows token purchasers to sell and buy early. Tokens do not have lock-in period for the investors. This has led speculators to buy tokens in the initial coin offerings and sell them at a higher price as soon as the coin is listed in a cryptocurrency exchange (Hartmann et al., 2018). According to Zetzsche et al. (2018) most ICOs rely on loopholes in legislation and ICOs have banned investors from specific countries to invest, because of the legislation in these countries (Zetzsche et al., 2018).

The advantages of ICOs as a fundraising mechanism are evident for startups. According to Hartmann et al. (2018), it is very hard to convince venture capitalists to invest into a startup without a proven track record or composed of experienced team. ICOs have a potential to disrupt the venture capital fund business model. The capability of ICOs to form highly cost-effective and liquid assets are and advantage compared to the traditional investment instruments provided by venture capital funds (Hartmann et al., 2018). ICOs have been suggested to offer a compelling opportunity for startups in the cryptocurrency space as a way to raise capital quicker and easier (Chohan, 2017).

Interestingly, blockchain startups raised $400 million from traditional venture investors in 2016 (Tapscott & Tapscott, 2017) and $160 million by issuing cryptocurrencies through initial coin offerings (Tomaino, 2016). In 2017, startups raised $10 billion through ICOs and in 2018 companies raised $11.4 billion (Bozzi, 2019). In comparison, venture capitalists invested globally $174 billion into startup companies in 2017 and in 2018 venture capitalists invested $254 billion (Venture Pulse Q4 2018). The sums raised in initial coin offerings ($10 billion in 2017) count 6.45% of the total venture capital funding ($174 billion) raised globally in 2017, and 4,49% ($11.4 billion in 2018) of the total venture capital funding ($254 billion) raised globally in 2018.

According to Zetzsche et al. (2018), most ICO issuers provide very little financial information about the project, so the investor's investment decisions are not based on rational calculus. Minority of the ICOs analyzed by Zetzsche et al. (2018) have well documented information by lawyers who clearly have experience from the securities market. The documented information is often inadequate and describes the technology the ICO issuers are going to develop (Zetzsche et al., (2018).

On more general level, blockchain technology has been suggested to offer an affordable and an easy implementation way to list an asset, a cryptocurrency or a security into an exchange. As an example, a hotel in New York is planning to sell their ownership as a stock in a crypto coin offering for $400 million. The hotel coin offering is done in a smart contract and approved by the SEC (Belvedere, 2018).

Despite the argued benefits of blockchain technology, ICOs and STOs, a limited amount of research has been conducted ICOs, blockchain technology and business models that blockchain technology facilitates. The literature of the topic is very recent due to novelty of blockchain technology and ICOs. The potential around ICOs is markable, which is why more research needs to be conducted around the topic.

2.4.1. The role of white paper in an initial coin offering and security token offering

Whitepaper is a document where a startup company organizing an initial coin offering describes their project and how they will be using the funds raised in the initial coin offering. According to Zetzsche et al. (2018) whitepaper is a document that is:

”a simple description of the project and the structure in which tokens will be used to support it.”

In addition to whitepaper, the startup company usually has a website and a video where the project is explained to the audience and potential investors (Zetzsche et al., 2018). ICOs are under regulated space, which is why the information in white papers is often illogical and several white papers do not provide essential information of the company e.g. physical address or other contact address. The common characteristic in white papers is that the white papers describe the underlying technology and the benefits of the technology for which the funding is going to be raised (Zetzsche et al., 2018).

According to Jones (2018), the purpose of white paper is to provide key information (e.g. technical approach, business model, amount of tokens offered, set price) about the project to the investors (Jones, 2018). According to Zetzsche et al. (2018) white papers do not often have substantial amount of information about the entities issuing the tokens or the backers of the project (Zetzsche et al., 2018).

2.4.2. Tokens as a medium of exchange

Tokens are used as a medium of exchange while accessing to a provided service (Catalini & Gans, 2018). Tokens are one of the distinguishing features ICOs (Li & Mann, 2018). Tokens can be divided into several different type of tokens, but due to novelty of the ICOs, the terminology is still under development and there is no clear glossary for different type of tokens. Different authors use different terms of similar tokens and divide tokens into three or four different categories. Hacker & Thomale (2017) distinguish three archetypes of tokens:

currency, investment and utility tokens. Some tokens are hybrid forms of these tokens that combine features from two or even all three other type of tokens (Hacker & Thomale, 2017).

Zetzsche et al. (2018) divides tokens into four different types. Usage token can be used as a license to access a software program. Community token that represents a membership in a community. Financial tokens, such as currency token represents a cryptocurrency and equity token gives an access to the generated cash flow of the asset (Zetzsche et al., 2018). Hargrave et al. (2018) divide tokens into currency tokens, platform tokens and asset-backed tokens. According to the Hargrave et al. (2018):

"Asset-backed tokens are tied to an underlying physical asset like real estate, fine art, or collectibles"

According to Hartmann et al. (2018) if cryptoasset provides a utility on a platform e.g. to gain access to products or services, the cryptoasset can be determined as a utility token (also known as usage token or platform token). In this case, an ICO is quite similar to the donation-based crowdfunding mechanisms (Hartmann et al., 2018). Tokens without a direct utility can be seen essentially as a security, therefore ICOs are more similar to the investment crowdfunding mechanisms (Hartmann et al., 2018). Security tokens can be divided into currency tokens and equity tokens (Zetzsche et al., 2018).

2.4.3. Investigating beyond the hype: ICO risks and regulation

The number of ICO scams and frauds has increased drastically in 2017 due to the emergent nature of ICOs and inadequacy of regulation and laws of this new fundraising mechanism (Hartmann et al., 2018). According to Chohan (2017), over 10% of the ICOs have had Ponzi schemes, phishing and scam-artistry. Legitimate ICOs are high risk investments, because the companies organizing an ICOs are at an early stage of development (Chohan, 2017). After an ICO, founders have disappeared with the money collected (Hartmann et al., 2018). Conducting a due diligence on a growing number of ICOs is very time-consuming and expensive for investors. ICO evaluation platforms are gaining ground as a solution to due diligence, although it is unclear how reliable these websites are and how they are evaluating the ICOs (Hartmann et al., 2018).

Multiple financial regulators have given warnings about the risks of ICOs. British Financial Conduct Authority (FCA) published a statement in a report called 'Initial Coin Offerings' (2017) in September of 2017 warning about the risks involved in ICOs and stated that, ICOs are unregulated space without investor protection, are vulnerably to potential fraud, have inadequate information, prices are volatile and ICOs are at an early stage of development. Other financial regulators (e.g. MAS of Singapore, SEC of USA, BaFin of Germany and ESMA of European Union) have also given warnings about the high-risk nature of ICOs and fraudulent activities attached to them (Wöckener et al., 2017).

In a research done by Zetzsche et al. (2018), the researchers analyzed over 450 white papers of ICOs and alarmingly noticed that:

> *The informational situation with most ICOs is uncertain at best. In 17.96% of our sample the white papers provide merely technical information about the product or process to be developed. In 31.04% of the cases the white papers do not provide any information at all about the initiators or backers. In 23.28% of the cases the white papers do not offer any description of the project's financial circumstances, i.e. nothing about how the capital collected is to be used and in what stages, etc.*

According to Kaal & Dell'Erba (2017), ICOs enable the sale of a stake in a crypto project that raises funds in an early stage of development. They minimize transaction costs and democratize finance while banks and other institutions are not required to raise funding. Recently, ICOs have involved cases of abuse, lacking quality and governance concerns precipitating calls for increased regulation (Kaal & Dell'Erba, 2017).

ICOs have raised concerns among regulators of government officials in different countries due to the unregulated nature of the process (White, 2017). ICOs are currently unregulated in most countries and banned in China and South Korea. Chinese government banned initial coin offerings in September 2017 calling them a "form of unapproved illegal public financing behavior" (Chohan, 2017). After China's ban, Financial Services Commission of South Korea announced in September that all ICOs would be banned (White, 2017). On the contrary, some countries have been affirmative towards ICOs for instance Switzerland, whose economics minister announced that Switzerland wanted "to be the crypto-nation" (Atkins, 2018). Australia, United States and some other countries have stated that a case-by-case approach may be the most suitable for ICOs. ICOs require accountability and regulation in the traditional sense (Chohan, 2017).

Li & Mann (2018) summarize the regulation discussion by presenting that regulators are in need of rule-based ICO regulation framework to prevent fraudulent ICOs and in order to develop a regulation framework, regulators need to understand how ICOs create fundamental value (Li & Mann, 2018).

2.4.4. Community and airdrops in an ICO process

Compared to traditional crowdfunding, one of the distinct features of ICOs is a community around the company. While a company is raising funding by organizing an ICO, it gathers a community around the financing round who work as ambassadors of the financing round. After the funding round the ambassadors promote the company and the company may acquire potential customers, developers and employees from the community.

As example, messaging app company Kik chose to organize an initial coin offering instead of raising venture capital funding to incentivize developers to build features on top of the Kik's chat. According to the author: *"Kik wants a community that can earn money for creating apps and services that get user attention and create value"* (Roof & Russel, 2017).

According to Li & Mann (2018), dispersed community can have useful insights about the platform's possibilities and organizing an ICO can help to utilize these insights of the crowd. According to the authors Ryan Zurrer, Principal & Venture Partner of Polychain Capital described ICO as community fostering tool and according to him "tokens act like rocket fuel for network effects". The authors present that in the core of an ICO is to incentivize community to participate into the project.

In order to grow the community before the ICO, minority of the companies organizes an airdrop where the early adopters get small number of tokens for free (Howell et al., 2018). Airdrops are used to get attention from the crowd, to grow the community and to spark network effects (Berg et al., 2018).

2.5. Synthesis of the literature review

This section will summarize the main findings from the literature review. The aim is to summarize what is equity crowdfunding, how venture capital firms operate, what is blockchain and what are initial coin offerings and security token offerings.

Firstly, equity crowdfunding is rapidly growing industry that has been maturing in the past few years. The underdeveloped financial markets and especially the underdeveloped venture capital industry in several countries do not provide enough capital for startup and growth companies that are in an important role in economic growth and job creation (Wilson & Testoni, 2014).

Secondly, venture capital companies invest in young innovative, scalable and high-risk companies in order to grow them faster, develop them and sell their ownership in a successful exit. Venture capital investments are high risk, high reward investments, where the investors (Limited Partners) of the venture capital fund typically expect 25%-35% returns for their investments (Zider, 1998). Venture capital firms typically look for 40% Internal Rate of Returns (IRR) for early stage investments and lower IRRs for later stage growth companies.

Thirdly, blockchain technology has been one of the most hyped technologies in various industries in the past few years. The potential of blockchain technology to disrupt various industries, particularly the financial industry (Notheisen et al., 2017). According to Zhu & Zhou (2016) blockchain technology has been used in crowdfunding of startup companies very successfully in recent years. The authors mention that blockchain technology may be used as a low-cost reliable solution for registration of stocks and stock transactions of crowdfunded companies (Zhu & Zhou, 2016). Currently one of the biggest challenges of equity crowdfunding is the illiquidity of the stocks of the crowdfunded companies. Blockchain technology may be a solution for this problem.

As a whole, it has been suggested that blockchain technology has enabled cost effective and lucrative way for startups to raise finance globally by organizing an initial coin offering. In an ideal setting a startup can raise capital by organizing and initial coin offering or security token offering from individual investors around the globe and give tokens in exchange to the investors.

The VC industry has generally been one of the old-fashioned industries that has not

changed much in the recent years. In the recent years new alternative funding methods have emerged, for instance equity crowdfunding and initial coin offerings, but there is not significant amount of research about initial coin offerings due to their novelty. Blockchain technology, ICOs and STOs have potential to disrupt the financial industry, for instance Telegram raised 1.7$ billion in its ICO and EOS cryptocurrency raised more than 4.1B$ in its ICO in 2017. The volume of ICOs has increased exponentially in the recent years. In 2015 there were only 10 ICOs and the volume of initial coin offerings was only $9.9 million, whereas in 2016 there were 49 initial coin offerings that raised $100 million in total and in 2017 552 initial coin offerings raised already 7.0$ billion in ICOs. (Diemers et al., 2018). A report entitled 'Crypto Token Sales Market Statistics' (2019), in 2018, 1075 initial coin offerings raised 21.5$ billion (Crypto Token Sales Market Statistics 2019).
As a result, the growing volume and rapid rise of equity crowdfunding and ICO field of funding indicates that there is a promising potential, that crowdfunding will affect into startup funding in the future. There has been substantial amount of research about equity crowdfunding, but due to the novelty of ICOs, STOs and blockchain technology there has not been published sufficient amount of research about them yet, which is the main justification of this research, to provide objective analysis of the crowdfunding sphere within the boundaries of this study. According to Swan (2015, pp. 87), blockchain technology and ICOs have the potential to disrupt the corporate finance industry, that has stayed quite unchanged in the recent years. Main reason for this is, the restrictive legislation in several countries hinders the potential of the phenomenon (Swan, 2015 p. 87). To conclude the literature review of the thesis, the following framework below summarizes the key concepts, their relations and the research questions.

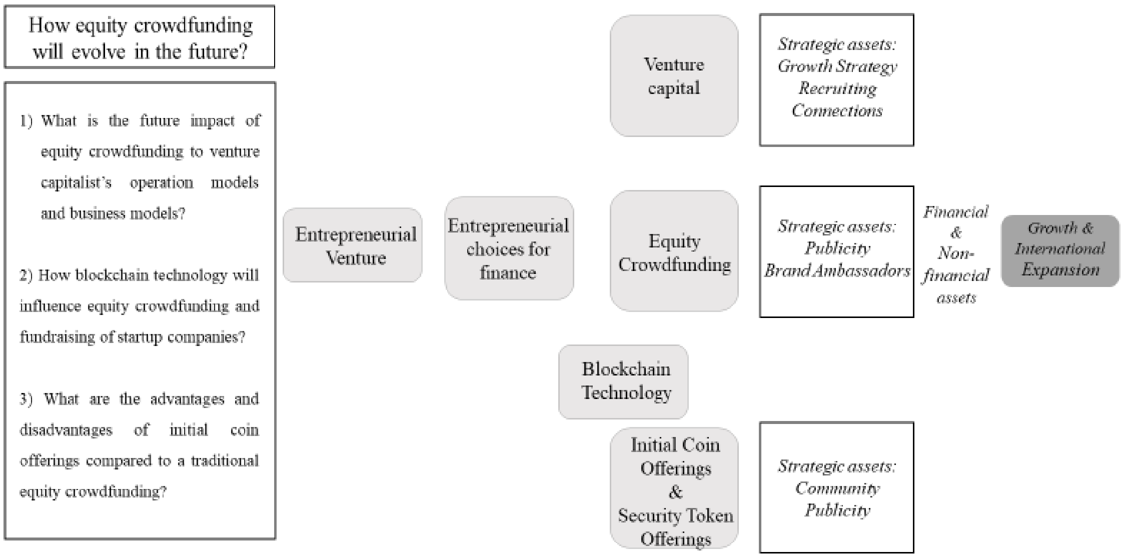

Figure 2. Theoretical Framework

3. METHODOLOGY

The overall aim of this chapter is to present the methodology of the study. The subchapter 3.1. explains the research approach and method, and the reasons why they were chosen. The second subchapter 3.2., elaborates the data collection methods. The third subchapter 3.3. discusses about analyzing the gathered data after which the subchapter 3.4. will evaluate the trustworthiness of the study and finally in the subchapter 3.5. the ethical issues of this study are considered.

3.1. Research approach and method

The goal of the study was to find out how equity crowdfunding will evolve in the future. Equity crowdfunding has been growing rapidly, evolving and maturing as an alternative way to finance young innovative and scalable companies. One of the research goals in this study was to find out how venture capitalists see equity crowdfunding and ICOs to influencing in their business- and operation models.

Due to novelty of the topic, the study applies explorative qualitative research as a research method. According to Eriksson & Kovalainen (2008, pp.64) when the research topic is relatively new, a qualitative research is seen as an approach that is more suitable to conduct research (Eriksson & Kovalainen, 2008, pp.64). According to Fossey et al., (2002):

"Qualitative research aims to address questions concerned with developing an understanding of the meaning and experience dimensions of humans' lives and social worlds."

As mentioned, qualitative exploratory research is the research methodology in this study. Dudoviskiy (2016) states that the aim of exploratory research is to explore the research topic rather than draw solutions to the problem. Exploratory research allows researcher to change the direction of the study when new insights and data appear during the research (Dudovskiy, 2016). The design of exploratory study is suitable for this research, because the objective of the study was to find out the perceptions of venture capitalists and entrepreneurs of the effect of equity crowdfunding and ICOs to entrepreneurial finance. It is important to note that, the main research question is "How equity crowdfunding will evolve in the future?" The novel approach, exploring technology's future role to more traditional field of venture funding, why this approach is particularly suitable for the study. It allows deeper exploring of two previously unknown fields and also acknowledges the more rapidly changing role of technology, similarly to Heikkilä (2013) who explored the less studied intersection of HR management and IT systems (Heikkilä, 2013).

Regarding the personal journey of conducting the research, the assumption was that the research topic might evolve during the study and the direction of the study might change during the research process, given the nature of the rather unknown phenomenon. This why exploratory study was chosen instead of other methods. The disadvantages of exploratory research were acknowledged, such as information being subjected to bias.

Compared to conclusive research, exploratory research can give different causes and alternative options for specific problem. On the other hand, conclusive research aims to a final solution to a specific problem, which was not an objective of this study (Sandhusen, 2000, pp. 191).

The literature review related to venture capital, equity crowdfunding, ICOs and STOs consists mostly from academic articles. Due to the novelty of ICOs, there has not been published substantial amount of research about the phenomenon (Lipusch, 2018). The space is evolving rapidly, and it was a challenge to find quality literature for this thesis.

According to Saunders et al., (2009 p. 125-126) deductive and inductive are the two main research approaches. The deductive approach aims to develop a theory when the hypothesis are tested. The goal of inductive approach is to develop a new theory differs from the deductive approach, by aiming to develop a new theory by collecting and analyzing the data gathered in the study (Saunders et al., 2009 p. 125-126). In this study, the aim is to understand the problem better by interviewing entrepreneurs who have organized an initial coin offering or equity crowdfunding round and venture capitalists. The inductive approach is therefore more justified for the purposes of this study, because the goal of the study is not to develop a theory per se.

3.2. Data collection process and further reflections on the researcher journey

This section presents the data collection process and sheds light particularly to the personal researcher journey that was affected by the novelty, rapid change and hype of technologies.

According to Newcomer et al. (2004, pp. 418) one key element of data analysis is research design and appropriate data targeting for responding to the research questions. Another key element of data collection is that the main research questions must be divided into smaller defined questions. (Newcomer et al., 2004, pp. 418)

The data collection was organized as ten semi-structured qualitative interviews with entrepreneurs who had organized an ICO, entrepreneurs who had raised an equity crowdfunding and venture capital funding. In addition to six entrepreneurs, four venture capitalists were interviewed, whose portfolio companies had raised equity crowdfunding. In the beginning of the study, it was assumed that in the interviews might come several different points of views, which might lead to change the questions or add more questions. Semi-structured interviews were chosen to facilitate the flow of the interview. According to Fossey et. al. (2002) semi-structured interviews are useful to find out about issues emerged during the first interviews (Fossey et al., 2002). During the interviews, more detailed questions were asked based on the answers as well as new questions were asked after the interviews by email. After each interview, the interviews were transcribed, and the answers analyzed. While analyzing the interviews it was noticed that there were some questions that could have been asked and added those questions to the list of questions for the next interview.

For illustrating the research process, the original plan was to interview 4-5 entrepreneurs who had organized an initial coin offering, 4-5 venture capitalists, 1-2 industry experts and a financial authority of Finland who handles regulation regarding ICOs. Four entrepreneurs were interviewed who had organized an ICO or were planning to organize an ICO. The original plan was to interview four venture capitalists who had been following ICOs and one regulator from Finnish financial supervisory authority FIVA. After the first five interviews it was evident that there was not enough quality literature about ICOs and STOs and the VCs who were asked for an interview did not understand enough about ICOs, which was rather surprising given the expertise of VCs. To explain this further, the original research questions of this study were:

How initial coin offerings will affect entrepreneurial finance?

1) *How initial coin offerings will affect to the business models of venture capital firms in the future?*

2) *What are the benefits of having a community when organizing an initial coin offering?*

3) *How blockchain technology will influence traditional crowdfunding?*

After conducting four interviews with entrepreneurs who had organized or were planning to organize an initial coin offering, one interview with a VC and after talking to multiple VCs on the phone there was an urgent need to revise the topic of study. It became evident that the understanding about ICOs, STOs and blockchain technology was limited in Finland, the scope nation of the study. In addition, the literature about ICOs and STOs limited due to the novelty of the phenomenon. For those reasons above, the research questions were changed to:

How equity crowdfunding will evolve in the future?

1) What is the future impact of equity crowdfunding to venture capitalist's operation models and business models?

2) How blockchain technology will influence equity crowdfunding and fundraising of startup companies?

3) What are the advantages and disadvantages of initial coin offerings compared to a traditional equity crowdfunding?

The interviews were all held in Finnish and the interviews lasted 30-70 minutes. Most of the interviews happened in person and two of them were phone interviews. All of the interviews were booked through cold calls and some of the interviewees were known through personal connections. As a result of the novelty of the topic, three VCs declined to be interviewed due to their lack of knowledge of ICOs. The interview questions developed during the interviews and some questions were added to the questions list based on the answers in the earlier interviews.

The interviews were divided into six main themes with entrepreneurs who had organized an initial coin offering or were planning to organize one, four different themes with entrepreneurs who had raised money in an equity crowdfunding round and funding round from venture capitalists and five different themes with venture capitalists. The themes with the entrepreneurs who had organized an ICO or were planning to organize an ICO were:

1. Overview and background – Background and role in the company, overview of the company and differentiation
2. Company – Company background, customers, company structure, challenges and vision
3. Fundraising – Fundraising in general, fundraising from professional investors, reasons to choose venture capital, equity crowdfunding or initial coin offering, how tokens can

be applied into a company's strategy

4. Equity crowdfunding – Knowledge about equity crowdfunding, what type of companies are suitable for equity crowdfunding and how equity crowdfunding will evolve in the future

5. Blockchain technology – Knowledge about blockchain technology, investments in blockchain companies, use cases of blockchain technology and blockchain technology used in startup financing in the future

6. Initial coin offerings – Initial coin offerings as a funding method, regulation of initial coin offerings, role of the community and token models and tokens applied into strategy

Overview of the main themes of the interviews with venture capitalists:

1. Overview and background – Background of the investor, investment strategy, differentiation and specialization

2. Deal flow – Sources of deal flow, quality and quantity of deal flow, competition in the investment market, relationships with other investors and investing abroad

3. Equity crowdfunding – Knowledge about equity crowdfunding, what type of companies are suitable for equity crowdfunding and how equity crowdfunding will evolve in the future

4. Initial coin offerings – Knowledge about initial coin offerings, initial coin offerings as a funding method, benefits and pitfalls of initial coin offerings, initial coin offerings as exit strategy, regulation of initial coin offerings, long term impact of initial coin offerings, benefits and pitfalls of community around the company, best time for initial coin offerings, tokens models and tokens in the strategy of the company

5. Blockchain technology – Knowledge about blockchain technology, investments in blockchain companies, how blockchain technology will change finance of startup companies

Overview of the main themes with entrepreneurs who had raised money in an equity crowdfunding round and from venture capitalists:

1. Overview and background – Background and role in the company, overview of the company and differentiation

2. Company – Company background, customers, company structure, challenges and vision

3. Fundraising – Fundraising in general, fundraising from professional investors, reasons to choose venture capital, equity crowdfunding or initial coin offerings

4. Equity crowdfunding – Knowledge about equity crowdfunding, what type of companies are suitable for equity crowdfunding and what are the benefits and pitfalls of equity crowdfunding

Name (Pseudonym)	Expertise	Years of experience	Duration of the interview
1	Entrepreneur	1	1:08:00
2	Entrepreneur	5	41:29
3	Entrepreneur	3	46:11
4	Entrepreneur	2	40:20
5	Investor	20	59:33
6	Investor	10	33:14
7	Entrepreneur	6	27:14
8	Entrepreneur	24	54:00
9	Investor	23	40:48
10	Investor	13	22:41

Table 4. Coded interview profiles

3.3. Data analysis

This section explains how the gathered data was analyzed. To begin with, after the interviews, the interviews were transcribed, and the data was cleaned. After transcribing, the data was read through multiple times and the most important parts of each interview were highlighted. After highlighting the most important parts, the findings were looked through and the answers categorized for each section for empirical findings sections. After transcribing and categorizing the answers, they were analyzed and reviewed that what other questions could have been asked in the interview. Some of the interviewees were emailed after the interviews to get answers to the questions that raised while the answers were analyzed.

The data-analysis were done by using a guide provided by Auerbach & Silverstein (2003 p.43). The authors provide a six-step guide for data-analysis that are divided in to three subsections.

Making the text manageable

1. Explicitly state your research concerns and theoretical framework
2. Select the relevant text for further analysis. Do this by reading through your raw text with Step 1 in mind, and highlighting relevant text

Hearing what was said

3. Record repeating ideas by grouping together related passages of relevant text

4. Organize themes by grouping operating ideas into coherent categories

Developing theory

5. Develop theoretical constructs by grouping themes into more abstract concepts consistent with your theoretical framework.
6. Create a theoretical narrative by recalling the participant's story in terms of the theoretical construct

Developing framework

5. Develop theoretical constructs by grouping themes into more abstract concepts consistent with your framework.
6. Create a narrative by recalling the participant's story in terms of the framework

According to Saunders et al. (2009 p. 482) qualitative interviews consist of words and non-verbal data qualitative data-analysis. The data-analysis was a continuous process throughout the writing process. After four interviews with entrepreneurs in the blockchain technology industry, one venture capitalist and calls with five venture capitalists, it seemed that the knowledge of venture capitalists about blockchain technology, ICOs and STOs was not comprehensive enough. This is why it the topic of the study was changed from how ICOs will affect to startup funding to how equity crowdfunding will evolve in the future.

3.4. Trustworthiness of the study

This section sheds light to the trustworthiness of the study. According to Simons, (2009, pp. 117) the results of the research may vary depending on the researcher’s own past experiences and intuitive methods. This may result into different outcomes that different researchers get from their research (Simons, 2009, pp. 117). Different type of venture capital investors were chosen for interviews, who have different type of investment thesis and companies in different stages and different financiers in order to prevent these type of problems and get a wider picture of the topic.

In order to evaluate the trustworthiness of the study, four evaluation criteria’s are used, which were recommended by Lincoln & Guba (1985) and cited by Eriksson & Kovalainen (2008, pp. 304), which are objectivity and conformability, credibility, dependability, generalizability and transferability (Eriksson & Kovalainen, 2008, pp. 304: Lincoln & Guba, 1985).

Objectivity and conformability were taken into account by explaining the researcher's background, which enables the reader to take the prejudice into account. Credibility of the research consists of comprehensive literature review and ten interviews with venture capitalists and entrepreneurs familiar with the topic. In order to get inclusive answers from VCs, the interviews were organized with VCs who are investing in different type of companies in different stages and who have different type of attitudes towards equity crowdfunding. Two of the entrepreneurs, who were interviewed had raised both venture capital funding and equity crowdfunding and their companies were in different stages, when they raised equity crowdfunding.

Generalizability and transferability are the third element mentioned by Lincoln & Guba (1985). The interviews of this research where conducted only with Finnish entrepreneurs and Finnish venture capitalists and the results are likely to be different this study was conducted in another country where the stage of venture capital, ICOs and equity crowdfunding is different.

Dependability is the fourth element of trustworthiness mentioned by Lincoln & Guba (1985). In order to make the research as trustworthy and transparent as possible all the research questions have been added to the appendices of this study.

3.5. Ethical considerations

This section evaluates the ethical considerations regarding the research. The interviews were anonymous in order to get the interviewees to talk more freely about the topic. When the interviewees were contacted and in the beginning of the interviews it was mentioned that their identities would be hidden.

To further illustrate this, Eriksson & Kovalainen, (2008) mention that Elliott, (1988) defined, that there are three different type of relationships between the researcher and researched, which are (A) detached and neutral, (B) marginally participant and (C) actively participant. According to Elliott, (1988) the three relationship types are:

A. "The researcher can be detached and remain neutral and distant to the research object; researched are subjects, data sources and respondents in the research setting."

B. “The researcher can be marginally participant (participant-observer) in the research, and research are informants”

C. “The researcher can actively participate in activities and enable changes to take place, perhaps also making changes, as facilitator, change agent or enabler. Those researched are collaborators in research.”

According to Eriksson & Kovalainen (2008, pp. 65-66) “surprisingly little attention is given to research ethics and relationship between researcher and the researched person or group in method books.” In qualitative research all these three types mentioned above are possible (Eriksson & Kovalainen, 2008, pp. 65-66; Elliott, 1988).

4. EMPIRICAL FINDINGS

This chapter presents the data analysis and findings from the ten interviews with entrepreneurs who have organized an equity crowdfunding round and raised venture capital funding, entrepreneurs who had organized an ICO and venture capital investors, whose portfolio companies have raised funding through equity crowdfunding.

4.1. Equity crowdfunding is maturing

During the interviews with entrepreneurs and venture capitalists it became clear that equity crowdfunding has evolved substantially in the past few years. Equity crowdfunding has become a notable funding method for startup companies. For example, Whorwood & Halmari (2015) estimate that about 20% of the early-stage equity funding rounds are done through equity crowdfunding platforms (Whorwood & Halmari, 2015). Equity crowdfunding started to emerge in 2010s and the first companies seeking equity crowdfunding were inferior and the investment terms were not favorable to the investors as interviewee 6 highlights about the earlier equity crowdfunding cases.

(6) *The cases what went there at all were C-class and they were with senseless terms, but after all it has developed, that little by little there has come better and better cases, and now there's starting to be companies, that do not deviate that much from the companies what venture capitalists have, but the big difference are the terms.*

In the interviews, majority of the studied interviewees stated that, the companies who are now seeking equity crowdfunding are more mature, have more revenue and the terms for the investors are better than they were in the earlier equity crowdfunding rounds couple years ago. Another observation about evolving equity crowdfunding was that institutional investors are more interested about the topic as interviewee 7 states:

(7) *Equity crowdfunding is going to the direction, where there is institutional investors like business angels and even venture capitalists in the same investment round with same terms, so it can be for later stages as well, so I would not say that there is no phase of development where company could not do equity crowdfunding round.*

Equity crowdfunding in general was seen as a positive thing for startup funding by all of the interviewees. Venture capitalists saw equity crowdfunding as a tool for them to raise follow-on rounds for their portfolio companies.

4.2. Venture capitalist's view on equity crowdfunding

The analysis of generic view is considered important in the explorative setting of this study. Through the venture capitalist's views below this study can explore the answers to the research questions.

In several of the interviews one of the topics that was often mentioned was that the financing for startups is diversifying. The opinions of venture capitalists about equity crowdfunding were variable, but in general venture capitalists saw equity crowdfunding as a positive matter for both, entrepreneurs and VCs, but particularly VCs criticized and were worried about the valuations and the terms of equity crowdfunding rounds. All the interviewees shared the opinion that equity crowdfunding has matured substantially in the recent years. According to interviewee number 5:

(5) *Crowdfunding and crowdfunding mechanisms and their significance increases further and in part of them blockchains and tokens can have meaning.*

Interviewee 5 also mentions that in the future he believes that crowdfunding is evolving to a direction where a company gathers a fund and invests that money into companies and is strongly present in the cases or the company gathers a significant amount of money from several people and there is no one entity that guides or controls the company and the company gets significant publicity from the funding round.

One of the portfolio companies of interviewee 6 had raised equity crowdfunding after they raised money from venture capitalists. According to him:

(6) *To that firm it could have been well justified, because they were in consumer product business and then they got visibility, marketing benefits and commitment from their current customers through crowdfunding and it had*

quite a big significance.

The interviewee 6 stated that, complicated B2B companies are not as suitable for equity crowdfunding, because investors are laymen and their ability to evaluate B2B companies is limited. Several interviewees stated that, B2C companies are more suitable companies for equity crowdfunding rounds, because they get substantial amount benefits in the form of publicity, marketing and brand recognition advantages by organizing an equity crowdfunding round and it is easier for the retail investors to evaluate these companies from customer's perspective.

In the literature Ahlers et al. (2015) argued that crowdfunding investors are *"arguably less sophisticated"*. (Ahlers et al., 2015). And this study seems to widely support that. Overall equity crowdfunding received quite substantially criticism from some venture capital investors as interviewee 6 highlights:

(6) *In equity crowdfunding, investors are quite indiscriminate investors, so they will accept terms that professional investors would never accept, and this is one reason why most companies go to crowdfunding, they would not get money from professional investors with any terms.*

Moving from a VC's perspective to entrepreneur's perspective, equity crowdfunding can offer more lucrative financial terms than a venture capital investment. Respondent companies have raised venture capital money earlier and raised equity crowdfunding round later and one of the companies interviewed raised equity crowdfunding before raising venture capital funding. One of the portfolio companies of interviewee 6 raised equity crowdfunding round after they raised money from venture capitalist. To illustrate this, interviewee 6 declares that:

(6) *Biggest reason for them (his portfolio company) to seek crowdfunding was that like most of the other firms have is that they do not have any other option. Professional investors did not give money to them.*

One of the entrepreneurs (interviewee 7) who was interviewed in this study had raised equity crowdfunding when the company was less than one year old and afterwards the company had raised two funding rounds from venture capital investors. According to him the shareholders who invested in the equity crowdfunding round were not a problem for the venture capital investors, because the investors of the equity crowdfunding round have a shareholders agreement that does not give them any rights and in principle you do not need to care about them. When asked about what venture capital investors thought about that they had lot of shareholders the interviewee answered:

(7) *At first it raised eyebrows, but when I told them that they have this type of silent shareholders agreement, that in principle you do not need to care about them, it was not a problem for anyone.*

VCs, who were interviewed for this study did not see equity crowdfunding as a competitive form of financing. One of the venture capital investors (interviewee 6) who was interviewed saw that there are two different investor groups: amateur investors and professional investors. According to him the in the future these markets come closer together, but he sees constitutional differences between the two investor groups and the companies who raise money from venture capitalists and the companies who raise money by organizing an equity crowdfunding. According to him:

(6) *Equity crowdfunding is meant for the amateur investors and the professional market is different, i.e. so long when there are two different investor groups, it does not affect terribly to what professional investors do, in theory over time these will convert and then of course it can start to effect, but I see that type of structural differences that I believe that for quite some time these will be separate type of markets.*

Interviewee 9 (investor) also shared the opinion that equity crowdfunding does not compete with venture capital:

(9) *Well, I believe that it is positive in a way that, it gives entrepreneur another option, but on the other hand I do not see it as competitive to the extent, because venture capital companies are active in the management and we truly work for these companies and we choose only one percent or half a percent of the deal flow that fits for us, so we are so different type or active owner, so in that sense there is no competitive situation with crowdfunding operators.*

Equity crowdfunding is a rather new funding form and there is not enough data about how the investments to these companies have evolved. Several of the venture capital investors who were interviewed were worried about the terms and valuations of the companies seeking to raise equity crowdfunding as investor (interviewee 6) describes the valuations of equity crowdfunding rounds:

(6) *Before the money starts to become back to the investors, it has not proved the entitlement of its existence.*

One of the things mentioned in the interviews was that venture capital companies could learn from the digitalization of equity crowdfunding platforms. According to Camp (2002, pp. 1-2), venture capital companies often spend significant amount of time to do due diligence and shareholders agreements (Camp, 2002, pp. 1-2). In comparison equity crowdfunding platforms where to fundraising process is streamlined as interviewee 9 describes:

(9) *Crowdfunding platforms are working flexibly, digitally, automated and venture funds are inventing the wheel again and makes heavy due diligence and spends a lot of time into shareholders agreements, so in a way I believe that there is a lot of positive learning.*

In this study, venture capitalists' opinions about equity crowdfunding were various, but mainly positive. Most of the investors saw equity crowdfunding as a tool for venture capitalists and as a great addition to the funding options for startups, but the criticism towards equity crowdfunding came from terms offered to the investors and the valuation of the companies. Venture capitalists saw that equity crowdfunded companies have evolved significantly in the recent years and that some of the companies are quite similar to what they see in their deal flow. In the future they see that equity crowdfunding can become closer to venture capital, but currently the companies raising funding in equity crowdfunding are different type of companies compared to the companies raising venture capital funding and there are the professional investors market where venture capitalists and business angels provide value for the companies and put substantial effort to get reasonable terms and valuations, where as in equity crowdfunding a company does not get any value added services. With the literature review of this study, this seems to indicate, that the additional benefits of venture capital are the expertise provided by the venture capitalists, their network of contacts and strategical advice for the portfolio company (Botazzi & Da Rin, 2002). In equity crowdfunding a company organizing the funding round besides raising funds are to receive validation, connect with audience, and expand awareness and to replicate other's successful experiences (Gerber et al., 2012). This illustrates, that the additional benefits besides capital are utterly different when venture capital funding is compared to equity crowdfunding.

Equity crowdfunding is seen as a tool for venture capitalist to raise follow-on rounds for their portfolio companies, that are not so lucrative follow-on investments or when there are some restrictions for the investment e.g. venture capital company has reached their investment limit in to the company, the ownership percentage of the company would be too high for the venture capital fund, they have already invested the capital of the earlier fund and are not able to invest to the same company from their newly raised fund, the venture capital company has committed the remaining capital to other better performing companies in their portfolio or they are not able to find suitable co-investor, because growth phase investors want to see profitability first from the company.

In general venture capitalist saw equity crowdfunding as a positive supplementary way of funding companies and as a funding tool for different type of companies that venture capitalists do not fund, as a tool to raise another funding round for their portfolio company when the company is not able find co-investors for the round or is not able to invest the required amount from their own fund for a number other reasons. The critique towards equity crowdfunding came from the valuation of the company and the terms offered to investors, which were unfavorable for the investors.

4.3. The future of use of blockchain technology in startup financing

One of the research questions was to find out about how the interviewees see blockchain technology to be used in startup financing in the future. Blockchain technology has enabled startup and scale up companies to raise several billions of dollars in the past few years. Companies raised $11.4 billion dollars in 2018 (Bozzi, 2019) compared to traditional venture capital funding of $254 billion dollars in 2018 (Venture Pulse Q4 2018).

According to interviewee 2 one of the biggest "killer app" of ethereum blockchain technology is fundraising. According to him in the near future fundraising through ethereum can be significantly bigger, more aggressive and more global and the pricing is considerably more market-based than today.

Interviewee 4 sees that traditional equity crowdfunding where companies sell securities will disappear. According to him the illiquidity of traditional shares is one of the biggest down sides of traditional equity shares and when security token offerings (STOs) become more common it will replace the traditional trade of unlisted shares almost completely. According to interviewee 5 financing vehicles will be diverse and crowdfunding and different type of crowdfunding mechanisms and their meaning will increase further and in part of them blockchain and tokens will have some meaning.

Interviewee 1 believes that initial coin offering and security token offering models have become to stay when regulative uncertainty disappears around it. He believes that there will be away where you can do public ICO that is not categorized as a security directly. Other benefit of blockchain technology is that startups and other investments become liquid after financing round. The investors can sell their tokens at any time. Companies can also be governed by the community. The governance structure can be built into the protocol level, which enables the company to be led by the community, but this is still faraway in the future.

4.3.1. Tokens and potential business model innovation enablement

One of the central findings of this study is that often companies who organize an ICOs have applied the token into their strategy by using a token as a payment method, to pay dividends, buying back the issued tokens, rewarding employees by giving them tokens and encouraging the community to act in a way that is beneficial for the company. In this section, the potential of using tokens in the strategy of the company is evaluated.

While interviewing entrepreneurs who have organized an initial coin offering or were planning to organize an initial coin offering, it came out that several of them had thought vastly about how apply the tokens into to the strategy of the firm.

The interviewees who had organized an initial coin offering or were planning to organize one, saw a significant amount of different opportunities to use tokens in the strategy of the company. Several of the interviewees saw incentivizing the community as one way to use the token structure in the strategy of the company. According to interviewee 4:

(4) *Essentially everything in my opinion what relates to communal, that if the*

community needs to manage or collective help of the community is significant in the development of the product, then tokenization can be very reasonable thing to do. That we get like 100 000 data analysts at once to the platform to make some new Artificial Intelligence models or something else like that, then tokenization is very reasonable option.

Interviewee 1 saw that already established companies can monetize their current community by providing an incentive to the existing users in the community to do something e.g. to provide content for the platform. According to the interviewee 1: an economic model can give competitive advantage to the company that incentivizes the community to participate into the action of the community and grow the community.

Token structure can also be implemented into the whole value chain of the company. According to interviewee 2: Companies can create different type of financing models with tokens. All the stakeholders (e.g. subcontractors, customers and employees) in the value chain of the company can be taken into account in the strategy or the company can create network effect if the company can tie up the tokens with users to be part of the system. On the other perspective, interviewee 5 saw that, applying tokens into to the firm's strategy in an early phase might restrict the company to make crucial changes into their model later.

Tokens can be applied into the company operations in several ways and it might bring new type of business models for companies who can utilize the network of partners, clients, suppliers and the community around it.

4.4. The overall characteristic of ICO trend

During the interview process with different interviewees, some of the interviewees stated that from 2017 to 2018 there was an initial coin offering mania that slowly slowed down from June 2018 to December 2018. According to report entitled 'Burning Billions: Tokens Cents on the Dollar Against Raised Capital' (2018), \$2.6 billion dollars were raised in February 2018 by 59 successful initial coin offerings in comparison to August 2018, when only 17 ICOs raised \$502 million dollars. According to interviewee 1 it was very wild that in the end of 2017 when projects raised more than \$100 million USD in an initial coin offering without any product or prototype of their product.

During the interviews the interviewee's described the initial coin offering phenomenon of 2017-2018 as a passing fad. Interviewee 3, who had been advising 35 ICOs described the ICO phenomenon as:

(3) *ICOs are dead, that currently there is not a lot of money moving in any direction, so they came and went away.*

Interviewee 5 criticizes that the companies who raise ICOs give very little information about what they really have, what are they going build and how it becomes useful and valuable. According to him this kind of phenomenon can arise, because the market conditions are extremely good and the enthusiasm around blockchain technology is very high because bitcoin created positive trend for other cryptocurrencies. He continues that he believes that there is place ICOs in future, but before that there needs to be a significant amount of failures in the next few years and at some point, they become into a healthy level and continues:

(5) *Currently this type of wild west is not in anyone's interest.*

Multiple of the interviewees mentioned ICOs were a phenomenon in 2017 and 2018 that became and slowed down in the 2nd half of 2018. Several of the interviewees mentioned that this type of phenomenon will not last, where companies without a product raise substantial amounts of money from investors. According to a report by Diemers et al., (2018), ICOs have matured and become more structured, transparent and the organizers have started to require know your customer (KYC) and anti-money laundering (AML) identification from their investors after the hype. Some of the funding rounds are combined with venture capital funding (e.g. pre-sale for venture capital investors) and more traditional early stages companies are looking to raise ICO, similar to a traditional crowdfunding round (Diemers et al., 2018)

4.5. The perceived benefits of ICOs compared to traditional equity crowdfunding and venture capital

Raising funding by organizing an ICO or STO can bring a several benefits compared to traditional equity crowdfunding or venture capital (Howell et al., 2018). Organizing an ICO can create a network effect that introduces the product to the masses and markets the product or service to new potential users, similar to a normal crowdfunding round, but the network effect can be much stronger. For example, interviewee 4 mentioned that, while the company was preparing for an ICO, his company was able to attract 120 000 users in three weeks without any paid marketing and interviewee 1 mentioned that they were able to grow their community to over 40 000 people when they were organizing their ICO. Early stage startup companies often have problems acquiring customers for their product offering and according to interviewee 4 one of the main benefits of organizing an ICO is attracting users to use the product and potential investors at the same time.

According to interviewee 2 their project is not building a recognizable business that is suitable for any equity owner or venture capitalist who expects returns from the project that they invest. Their business does not fit into a traditional venture capital business model. Initial coin offerings enable to fund projects that are more complex, harder and diverse chronologically while the investment horizon of venture capital fund is 5-10 years.

Interviewee 1 mentions that one of the biggest benefits of raising money through an ICO and tokenization is that the company's stock or token is liquid from the beginning. Essentially every investment can be tokenized and become liquid.

Every entrepreneur who had organized an ICO, mentioned creating community as one of the most important aspects of ICOs. According to interviewee 2 the community guides the innovation process by telling what is really needed and by testing the product. The community provides a peer review to the project team that is essential in an open source project. The project can bring people who are interested and know about the matter together.

The benefits ICOs are numerous. The interviewees mentioned that ICOs are good option for funding projects that are not necessarily a businesses for professional investors to finance, acquiring customers, attracting employees, creating community for the company and raising brand awareness.

4.6. The drawbacks of ICOs compared to traditional equity crowdfunding and venture capital

Some of the interviewees mentioned that the community members can hinder the innovation of the company and restrict the development of the business. According to interviewee 2: One of the drawbacks of the community is that the community members might hinder the innovation process and the disruption potential of the original idea. The community might be more conservative towards the innovation than the founders of the project. Interviewee 3 mentions that the community members can restrict the development of the company and hinder innovation compared to a situation what the company would do if there were no token holders.

According to interviewee 4 one of the drawbacks of ICOs is that they are not regulated in several countries and banks are not welcoming to companies who are looking to raise or have raised financing through an initial coin offering. According to him their bank Nordea, would have shut down their account if they would have raised money by organizing an ICO, which would have halted the operations of the company completely.

The lack of regulation is also one of the biggest drawbacks of raising funding with ICOs according to interviewee 1. In the first ICOs there was no know your customer (KYC) and anti-money laundering (AML) checks and attracting money from investors was very easy during the ICO mania in 2017-2018. This led significant amount of scammers to enter into the market to scam ICO investor's money into the projects that were not real.

4.7. Network effect and the role of a community in an ICO process

One of the original research questions was related to community, because one of the distinct features of ICOs is the community who invested in the ICO. Several projects have tens of thousands of community members and in this research one of the goals was to understand how the community has helped the projects to go forward and on the other side, what are the negative sides of having tens of thousands of community members following your project.

One benefit that nearly all of the interviewees who had organized an ICO mentioned the network effect provided by the community. Especially if the product is meant to consumers, the effects might be tremendous for customer acquisition. Organizing an ICO works as a great marketing campaign for potential customers. Interviewee 4 describes that they signed up 120 000 new users in 3 weeks without putting any money in marketing. You cannot get as absurd and fast network effect by organizing a traditional crowdfunding campaign. According to interviewee 4:

(4) *The biggest benefit is that you will get very active, very very active community around it that pushes the word ahead that is as the biggest benefit itself. Because*

the biggest problem of several ICO projects or at first place with a startup is that they don't have users or anybody that actively shill the project forward.

The interviewee 4 also mentioned that especially the initial support from the community is critically important for any company to succeed. The support from the community according to him can be for example word-of-mouth marketing or acquiring new users and customers. In the table below are the benefits, that were mentioned in the interviews by entrepreneurs, who had organized an ICO or were planning to organize an ICO. In the table below, the perceived benefits of ICOs are summarized.

Interviewee	Benefits mentioned in the interview
Interviewee 1	• Financing • Role of community • Recruiting • Marketing • Exposure • Feedback
Interviewee 2	• Network effect • Role of community • Word of mouth marketing • Partnerships • Customer acquisition • Feedback
Interviewee 3	• Feedback • Validation
Interviewee 4	• Loyal customers and owners

Table 5. Perceived benefits provided by the community while raising an ICO

The interviewee number 1 also mentions that the community is in a big role. According to him without the community they probably would not have finished the funding round. According to the interviewee:

(1) *The community promoted us in a big way and distributed our message. We have gotten lot of tips from our community and what way we should develop the platform. We have organized voting's for the community regarding what type of tokens we should add to use as collateral.*

Interviewee 1 also mentions other type of benefits such as they have recruited employees from their community, and they have organized a feedback questionnaire where few dozen people answered.

4.8. Rationales to choose equity crowdfunding as a funding model

The companies and entrepreneurs interviewed in this study, were entrepreneurs who had organized an equity crowdfunding round and had also raised a financing round from a VC firm. In order to understand how equity crowdfunding will evolve in the future the study seeks to understand what the reasons are why the companies have chosen equity crowdfunding instead of raising money from professional investors such as business angels and venture capitalists. The reasons mentioned in the interviews why the companies chose equity crowdfunding were various and the companies were in very different stages when they organized the equity crowdfunding round. Interviewee 7 had raised 2 rounds from business angels and organized an equity crowdfunding round when the company was less than one year old and there were multiple reasons to seek equity crowdfunding:

(7) *There were several reasons. One of them was that in a certain way it was kind of market validation as well that is it interesting, another is that my history is in making marketing and advertising and this type of crowdfunding campaign is more or less marketing campaign, so it was easy to start and the we did not have a lot of contacts to angels, but the one that we talked about was hard to get commit, because we had so many uncertainties.*

This seems to align with findings of the study of Gerber et al. (2012), where the authors claim that the other reasons of raising a crowdfunding round are to receive validation, connect with an audience and expand awareness.

Higher valuation and better terms for the entrepreneurs were one of the reasons often mentioned in the interviews by both, venture capitalists and the entrepreneurs. Venture capitalists set tight terms and want to have influence into the company they invest in, in terms of board seat, decisions about raising funding and key hires to mention a few. Venture capitalists often mentioned that equity crowdfunding can offer better terms, higher valuations, publicity, brand recognition and another option for a company if it faces difficulties to raise funding if the company has difficulties to raise follow-on funding as interviewee 9 states:

(9) *Then just purely for the money, that if for some reason company has difficulties to raise follow-on round so then it will be one follow-on funding element. So that in a way it completes next to venture funds.*

In several interviews it became clear, that one of the main reasons to choose equity crowdfunding is publicity and brand recognition. B2B companies that were interviewed did not see the benefits of the publicity as much as B2C companies. When asking about the publicity that the equity crowdfunding brought to the B2B company of interviewee 8 who had organized a funding round a year before the interview and stated that:

(8) *Not really any significance at that moment in my opinion. There was some when we were recruiting so they had googled us, and the candidates mentioned that it was nice to see that you have raised funding. Domestic customers had little effect, no positive no negative.*

The reasons to choose equity crowdfunding mentioned in the interviews were quite different depending on the type of business and life cycle of the company. The companies who were interviewed had difficulties to raise capital from professional startup investors and the negotiations with professional investors took long time. Entrepreneurs mentioned time saving as one of the most important reasons to choose equity crowdfunding as interviewee 8 describes:

(8) *We ended up choosing crowdfunding mainly for the reason that it reduces the workload. My time was quite limited last spring to run the business and I could have not in any way to do this type of roadshow with all the investors, so we tried out this kind of solution.*

Other reasons mentioned by the interviewee 8 were that their earlier investors did not want to invest the full amount and own more of the company, because they already owned over 65% of the company and the company needed the money in order to avoid endangering the business.

Growing a larger shareholder base to prepare for an initial public offering (IPO) was often mentioned in the interviews. When a company is looking to list their shares in a public stock exchange, a larger shareholder base helps to keep the stock liquid. If a company is not yet ready for an IPO, they can organize an equity crowdfunding round to raise smaller amount now, grow their shareholder base, grow the business and list itself into a public stock exchange in the next few years with a higher valuation.

Venture capitalists and entrepreneurs saw several different reasons to choose equity crowdfunding. The reasons mentioned in the interviews were that a company might not be suitable for a venture capital investment for numerous reasons or the company is not able to attract professional investors otherwise, a company gets a better valuation by organizing an equity crowdfunding round, company gets publicity by organizing a crowdfunding round and growing the amount shareholders before an initial public offering. Venture capitalists saw equity crowdfunding and venture capital as different type of markets with different type of companies, but saw equity crowdfunding as a useful tool for them in future funding rounds if the venture capital company is not willing or able to invest the whole funding round in to the company for number of reasons mentioned earlier. Venture capitalists did not see equity crowdfunding as a threat to their business, because venture capitalists work with the companies and add value for them, that equity crowdfunding does not provide.

4.9. The emergence of alternative funding solutions

One of the central findings during the interviews was that equity crowdfunding, ICOs and STOs can be used to finance different type of companies and projects that are not suitable for venture capitalists. A company might not have proprietary technology, highly scalable business model, the company might not be located in suitable geographic area or venture capitalist does not invest in specific type of company or an industry and the round is too small or too big for the venture capital firm. Venture capitalists expect high rate of returns and are very selective in their investment decisions as interviewee 9 highlights:

(9) *Venture capital has a high expected rate of return to start with, which means that we*

make extremely tight selectivity and we are extremely firm about the deal terms and we are professionals in terms of that, we ne need to make profits for the fund, in which case we set pretty hard criteria's for the valuations.

Venture capitalists are looking for high-risk high-return investments that are scalable and innovative. Several of the companies might seem like lucrative investments, but for some reason do not fit into the tight investment criteria of venture capitalists and might be more suitable for an equity crowdfunding round. The company might not fit into to the industry focus of venture capitalist or company is not scalable and innovative, does not have a clear exit opportunity or the company is not suitable for venture capitalists for number of other reasons. The companies seeking equity crowdfunding are often very different type of companies than the ones raising money from venture capitalists as interviewee 9 states:

(9) *It is awesome that crowdfunding platforms have brought totally different type of companies for investors, not venture investors, not fund investors, but for retail investors and I am referring to publication operations or clothing business, brewery's, food companies. This type of private led companies that do not fit in to the investment focus of venture funding.*

This seems to align with the findings of often mentioned benefit in other studies (Mitra, 2012). Equity crowdfunding, ICOs and STOs can be used to finance different type of companies and projects that are not suitable for venture capitalists. One of the entrepreneurs (interviewee 2) who had organized an ICO, mentioned in the interview that their project was in niche area for several venture capitalists, the company was too young and did not have clear exit opportunities in the near future.

According to the interviewee 5 the ICOs were organized by a non-profit foundation who coordinated the development of the project and the money raised in ICO. These projects usually were open-source projects, where anyone could exploit the technology developed by the community. According to him, ICO -model works best if the project is open-source and money is handled by the foundation. In these types of cases, the token holders do not necessarily wait returns for their capital, but rather they are supporting the project, because they see it as an important project.

One of the entrepreneurs (interviewee 2) who had organized an ICO mentioned in the interview that their project aimed to democratize data markets by creating marketplace that uses blockchain technology. They will be using the money gathered in ICO to develop peer-to-peer marketplace for real time data and in order to develop fully functioning product they needed financing, but the project was not suitable for venture capitalists, because they do not have clear exit opportunities. Instead of raising money from venture capitalists they chose to organize an ICO and raised over $30 million USD from over 1300 backers.

The interviewees in this study often mentioned that equity crowdfunding is more suitable for B2C companies, than B2B companies, because the retail investors do not necessarily understand the nature of business of a B2B company. It is easier for a retail investor to understand the consumer product and think about it from customer's perspective. Another benefit for B2C companies, that was mentioned multiple times in the interviews was the marketing visibility, increased brand recognition and engaging your current clients.

Venture capital investors are looking for specific type of investments that fit into their predetermined investment criteria's and can deliver high internal rate of returns as interviewee 6 describes. A company might be a good investment but does not fit into the tight criteria of venture capital investors and for these companies equity crowdfunding might be a solution to raise equity. Another matter often mentioned in the interviews was that equity crowdfunding offers non-tech companies (e.g. restaurants, retail, food & beverage (FNB) and sport & leisure) an option to raise equity funding, that they can leverage to get loans from the market.

4.10. A summary of the main findings

In this last section, the main findings of the study are explained and summarized. In recent years, equity crowdfunding has become a viable option for entrepreneurs of non-tech and tech companies to raise equity funding. The purpose of this thesis was to explore how equity crowdfunding will evolve in the future and based on the interviews we will see companies who are their later stages to raise funding but are not yet ready for an initial public offering. These companies can raise so called pre-IPO equity crowdfunding round to broaden their shareholder base and list themselves into a public stock exchange few years later, when the company has grown. Another interesting finding was that a company, who cannot find professional investors for various reasons e.g. niche industry, not scalable enough, not growing fast enough or does not have clear exit opportunities can raise funding through equity crowdfunding.

In the table below, the main findings of the interviews are summarized.

How equity crowdfunding will evolve in the future?	**What is the future impact of equity crowdfunding to venture capitalist's operations models and business models?**
▪ More mature companies ▪ Pre-IPO companies ▪ A tool for venture capitalists ▪ Viable option for companies that professional investors are not willing to invest ▪ Blockchain technology might disrupt the industry	▪ Equity crowdfunding is seen as a tool for a venture capitalist ▪ Equity crowdfunding does not compete with venture capital companies ▪ Follow-on funding rounds with an equity crowdfunding platform for the companies in venture capital company's portfolio

What are the advantages and disadvantages of ICO financing compared to traditional equity crowdfunding?	**How blockchain technology will influence traditional equity crowdfunding and finance?**
Advantages: ▪ Global audience ▪ Possibility to gather niche of people who support the project and are interested about the industry ▪ Option to integrate the token into to the strategy of the company ▪ Liquidity of the securities ▪ Possibility to fund complex projects, that venture capital companies do not fund ▪ Disadvantages: ▪ Complexity regarding legislation in several countries ▪ Scams in the industry have stained the reputation of initial coin offerings and security token offerings	▪ Blockchain technology does not need an intermediary between the buyer and seller, which reduces the costs of the transaction ▪ Blockchain technology enables liquidity for the stocks of the company ▪ Possibility to build communities around companies, which are incentivized to act by issuing tokens to the community ▪ Physical assets might become tokenized and liquid if they are assembled in to a blockchain

Table 6. Summary of the main findings

Blockchain technology might disrupt the equity crowdfunding industry in the future. During 2016-2018 blockchain technology companies raised in initial coin offerings and security token offerings $23 billion USD and in the first 10 months of 2019 the token offerings raised in total of $4.1 billion USD. (Tomaino, 2019, 6th ICO/STO Report, 2020). In the interviews with entrepreneurs who had raised an ICO or were looking to raise an ICO, a lot of advantages came up compared to a traditional equity crowdfunding round. The benefits mentioned were a global audience, the possibility to find a niche group of people who were willing to invest into the company, the liquidity of the tokens and securities. Disadvantages were the complexity of legislation in several countries, the reputation of ICOs and STOs as a result of numerous scams in ICOs.

5. DISCUSSION

This chapter will analyze the results from the interviews. The research questions, were designed to explore **how**

equity crowdfunding will evolve in the future through the following three sub-questions

1) What is the future impact of equity crowdfunding to venture capitalist's operation models and business models?

2) How blockchain technology will influence equity crowdfunding and fundraising of startup companies?

3) What are the advantages and disadvantages of initial coin offerings compared to a traditional equity crowdfunding?

The first section 5.1. will revisit the current situation of different funding options for early stage companies. The second section 5.2. explains the current situation of equity crowdfunding. In the third section 5.3. this thesis will try to answer the question how venture capitalists see equity crowdfunding and how it will change their operation and business models. The fourth section 5.4. answers to the question why entrepreneurs choose to raise equity crowdfunding instead of venture capital. The fifth section 5.5. will explore how the blockchain technology affects into traditional equity crowdfunding and venture capital industry.

5.1. The diversification of startup funding

The interview findings and the academic articles mentioned in this study conclude, that startup financing options are expanding rapidly. This is one of the main findings of this study and has a wide implication. However, we should also explore what exactly is meant by diversification. Markova, & Perkovska-Mircevska (2009) present that a startup has multiple options to raise funding including: friends and family, a loan from a bank, government-sponsored programs and grants and professional investors such as business angels, venture capitalists and corporate investors (Markova, & Perkovska-Mircevska 2009).

Since early 2010s equity crowdfunding market has grown rapidly and during 2013-2018 new forms of crowdfunding, ICOs and STOs have emerged. According to the Massolution's Crowdfunding Industry Report (2015) crowdfunding volume has grown rapidly in recent years, in 2012 the total crowdfunding volume was $2.7 billion and the equity crowdfunding volume was $118 million compared to 2015 when the total funding volume was $34.4 billion and the volume of equity crowdfunding was $2.56 billion (Massolution, C.L. 2015). Venture capital funding has grown steadily in 2010s after it slowed down in the dot-com bubble in 2000s and during the financial crisis of 2007-2008. According to Venture Pulse Q4 2019, 2019 was a record year for venture capital investments in 2010s. 301.5$ billion were invested globally compared to $45 billion invested globally in 2010 (Venture Pulse Q4 2019, 2020).

Aligned with the diversification trend, ICOs and STOs have emerged in recent years. One of the perceived benefits of these new forms of crowdfunding compared to traditional equity crowdfunding is that the investment is liquid when the tokens or securities are listed in to exchange and there is a large worldwide investor pool. ICOs and STOs are particularly popular among blockchain technology companies (Kaal & Dell'Erba, 2017). One of the biggest drawbacks of traditional equity crowdfunding mentioned in both, in the interviews (interviewee 4) and in the academia has been that the stock of the company is highly illiquid, because there is no aftermarket for the stocks of equity crowdfunded companies (Wilson & Testoni, 2014).

5.2. Equity crowdfunding is lucrative option when venture capital funding is not an option

In the past few year's equity crowdfunding has emerged as a new way to raise funding for early stage companies. Equity crowdfunding provides another viable source for entrepreneurs to raise funding from large pool of investors (Stevenson et al., 2019). The purpose of this research was to understand how equity crowdfunding will evolve in the future and to find out how venture capitalists see equity crowdfunding changing venture capital companies' operation models and business models.

In the interviews several venture capitalists stated that the companies who are seeking equity crowdfunding are often very different type of companies compared to the companies seeking to raise funding from venture capital companies. Venture capital companies often have investment domains and tight criteria for their investments and equity crowdfunding opens a funding option especially for non-tech companies that are not suitable for venture capital investments. Equity crowdfunding offers smaller companies operating in retail, fashion and food & beverage industries a viable way to attain equity funding.

After the financial crisis of 2007-2008, borrowers have begun to requiring companies to have enough equity financing in order to lend money to them and equity crowdfunding offers a way to raise equity finance in order to obtain debt. Growing companies often leverage equity funding to attain debt from lenders.
Equity crowdfunding offers a new alternative to raise equity funding for companies operating in the industries where venture capitalists do not generally invest. Especially early stage non-tech companies in traditional industries often have difficulties to attain investors and equity crowdfunding offers these types of companies a new way to raise funding. According to Baeck et al., (2014) and Brown et al., (2018) business angels and venture capitalists have been active on equity crowdfunding platforms. One of the reasons mentioned in the research of Brown et al., (2018), was that the companies do not have networks to business angels. (Baeck et al., 2014, Brown et al., 2018). In the interviews of this study venture capital firms saw equity crowdfunding as a tool for venture capital companies to raise follow on funding rounds for their portfolio companies, when the VC firm is not able to provide to full follow on round for various reasons e.g. too high ownership percentage, unable to invest from new fund, no allocable capital left in their current fund or the difficulty to find suitable co-investor from another VC firm.

5.3. Equity crowdfunding: ancillary to venture capital

Four venture capitalists were interviewed for this master's thesis. During the interviews all of them saw that the startup funding options are diversifying. In the beginning of 2010s, there were very few equity crowdfunding rounds organized and in 2019 equity crowdfunding had grown significantly. Venture capitalists saw that the companies looking for equity crowdfunding were often quite different compared to the companies raising funding from venture capitalists.

Venture capitalists who were interviewed for this study saw equity crowdfunding as a useful tool for their portfolio companies to raise follow-on funding if the venture capital company is not willing or able to invest into the company anymore. In the interviews it became clear, that venture capital companies often have restrictions how much they can invest into one company and rules that restrict them to invest into a same company from different funds they manage. VC company might also own large percentage of the company already, which the case with interviewee 8 and the VC firm is not willing to increase their share of the company or the company has not performed as well as expected and is not suitable for follow-on round of investment. In these types of situations, a venture capital company can use equity crowdfunding as a tool to raise follow-on funding round for the company, where the venture capital company only invests part of the funding round and the rest comes from the investors of the equity crowdfunding round.

The venture capitalists who were interviewed in this study saw that venture capital funding and equity crowdfunding differ from each other greatly. In general venture capitalists see equity crowdfunding as a positive phenomenon, which enables different type of companies to raise equity funding that are not suitable for venture capitalists. Often companies have difficulties to raise equity funding, especially if the financial markets of the country are underdeveloped or there are no investors in the sector where the company operates. Equity crowdfunding offers an option for companies operating in food & beverage, retail or leisure industry, to raise equity funding. Venture capital companies, private equity companies and business angels do not generally invest in these types of industries or if the company is a small one.

The critique towards equity crowdfunding from venture capitalists was mainly regarding the terms and valuations of these companies. All of the venture capitalists who were interviewed criticized the valuations and terms that companies offer in an equity crowdfunding round. Venture capitalists also noted that equity crowdfunding does not provide any other value for the entrepreneurs other than money and publicity.

One of the venture capitalists saw that some equity crowdfunding platforms and some venture capital firms might become closer to each other in the future and that venture capitalists could learn from equity crowdfunding platforms. Equity crowdfunding platforms have streamlined processes for organizing a funding round, whereas according to Camp (2002), venture capital companies spend considerable amount of time on due diligence, evaluating the company and negotiating the terms with entrepreneurs (Camp, 2002). Especially venture capital companies investing small seed round investments into several companies could reduce the amount of work by streamlining their investment processes.

The company of interviewee 8 had two venture capital companies as investors who had invested in two funding rounds and were the majority owners in the company. The venture capital investors had restrictions in their fund and were not willing to provide the full follow-on funding round and the other larger venture capital investors the company were not willing to invest yet, because the company was still unprofitable. This was the major reason why the company choose to do an equity crowdfunding round, where the two venture capital investors acted as an anchor investors.

5.4. Reasons to choose equity crowdfunding instead of venture capital

In this section the reasons and motivations of why companies choose to organize an equity crowdfunding round instead of raising venture capital are discussed and analyzed.

During the interviews it became clear that the reasons why companies choose equity crowdfunding instead of venture capital are multifold. Companies in different industries and life cycles have very different motives for organizing an equity crowdfunding round.

The company of interviewee 7 had raised two funding rounds from two business angels, after which they raised an equity crowdfunding round. While asking about the reason why they chose to do an equity crowdfunding round, he stated that there were multiple reasons such as market validation, they did not have a lot of contacts to business angels and that the business angels were not willing to invest, because they had so many uncertainties. This seems to widely support the findings by Brown et al., (2018), who mentioned that one of the reasons to choose equity crowdfunding round, is that the entrepreneurs do not have networks to business angels. After the two business angel rounds and an equity crowdfunding round the company of interviewee 7 was able to raise two considerable larger funding rounds from venture capital companies.

According to interviewee 6: The terms of financing that venture capital companies offer are not very favourable for the entrepreneur is one of the key reasons why entrepreneurs choose to do equity crowdfunding round, rather than raise money from venture capitalists. The company of interviewee 8 had raised two funding rounds from venture capitalists and an equity crowdfunding round after those two rounds, where the two VCs also participated. He mentioned increasing the number of shareholders as one of the reasons to organize equity crowdfunding round, while the company is preparing to organize an initial public offering in the future. Interviewee 8's company was not big enough to list itself into a stock exchange and by organizing an equity crowdfunding the company got capital to grow bigger and by growing the amount of shareholders, the shares of the company will be more liquid in the future, when the company lists itself into a stock exchange.

In recent years, a phenomenon where a company organizes an equity crowdfunding round on their way to a stock exchange has emerged. This type of pre-IPO equity crowdfunding round is an option when the company is not yet big enough to list itself and helps the company to grow bigger, broaden their shareholder base and able to list the company into a stock exchange with a higher valuation later on.

VCs saw better terms and higher valuation as one of the key reasons why entrepreneurs seek equity crowdfunding instead of venture capital. Another common reason venture capitalists mentioned, was that the company might have difficulties finding a professional investors to raise funding or the existing venture capital company is not willing to invest the whole amount of the funding round and the company will seek equity crowdfunding on top of the amount that venture capitalists invested.

In several countries the private capital market is underdeveloped, and companies have difficulties finding sufficient capital or the company operates in an industry or at stage where it is difficult to find suitable professional investors. Equity crowdfunding offers these types of companies one more option to raise equity funding.

5.5. New forms of crowdfunding: Initial coin offerings and security token offerings

In the beginning of the master's thesis writing process the initial research question was "How initial coin offerings will affect entrepreneurial finance". It was hard to find academic material about ICOs and STOs due to the novelty of the phenomenon. After first interviews and phone calls it was realized that venture capital investors were not enough familiar with ICOs and STOs, which is why the research topic was changed to how equity crowdfunding will evolve in the future. When the master's thesis writing process started the initial research questions were:

How initial coin offerings will affect entrepreneurial finance?

1) How initial coin offerings will affect to the business models of venture capital firms in the future?

2) What are the benefits of having a community when organizing an initial coin

offering?

3) How blockchain technology will influence traditional crowdfunding?

Four entrepreneurs were interviewed in this study who had organized or were planning to organize an ICO. After those interviews multiple venture capitalists were talked to who said that their knowledge of the space is limited and that other venture capitalists who understood the phenomenon better would be more suitable for interviewees. During the thesis writing process the ICO phenomenon was slowing down radically and due to the problem of finding reputable academic material for the theory part and finding suitable interviewee’s, the research topic was changed to “How equity crowdfunding will evolve in the future?” This section will explain the results of the four interviews with entrepreneurs who had or were planning to organize an initial coin offering are analyzed.

Currently the legal status of ICOs and STOs is unclear in several countries. According to Chohan (2017) ICOs and STOs are banned in China and South Korea and unregulated in several countries such as Canada and France (Chohan, 2017).

According to interviewee 1 currently the regulative uncertainty restricts the industry and when the regulation laws are set it might help entrepreneurs to raise funding from wider variety of investors. The interviewee also states that when the regulative uncertainty disappears there might be a way to raise an ICO that does not immediately categorize it as a security.

One of the distinguishing features of ICOs and STOs compared to traditional equity crowdfunding is the community around the company. The entrepreneurs who had organized an ICO or were planning to organize an ICO mentioned in the interviews that the community was in a big role when they organized the ICO. The community around the company helps the company to communicate about the fundraising with potential investors, helps the company to recruit new employees, and provides feedback for the company and the investors and community members promote the funding round to their acquaintances. The companies, who were interviewed in this study had rather large group of community members, ranging from 10 000 to 60 000 members and the investment amounts of the investors were relatively small. Especially companies who operate in the B2C sector and are looking to organize an ICO or STO can greatly benefit from active community around the company.

If ICOs and STOs are regulated in the future, it creates one more option for companies to raise funding from the crowd. In the first few years of ICOs there has been a significant amount of scams and frauds among ICOs. Regulated ICOs and STOs create trust to them and enable new way of raising funding from international investors globally. Too excessive regulation can also hinder innovation and new innovative ways of raising funding for a company. Regulated ICOs and STOs can create a new a tool for professional investors to raise capital for their fund, raise funding for their portfolio company or to exit their portfolio company.

6. CONCLUSIONS

The aim of this research was to be more practice-driven, which allows us to understand how equity crowdfunding will evolve in the future and how venture capitalists see the rapidly growing equity crowdfunding market, ICOs and STOs changing the operating and business models in their industry in the future. In addition, another the aim of the study was to understand how blockchain technology will change traditional equity crowdfunding and what are the advantages and disadvantages of ICOs and STOs compared to traditional equity crowdfunding. The objective of this explorative study was to gain insights about the growing equity crowdfunding market and how the blockchain technology will affect into startup funding in the future.

When comparing the findings of the study with the literature, it seems that venture capitalists do not see equity crowdfunding and initial coin offerings as a risk to their business, but rather as an ancillary tool to fund startup companies. In the literature, equity crowdfunding and ICOs were often seen as a threat to VCs, but the findings of this study do not support that. The interviewed venture capitalists see that, their strategical advice, expertise and network of connections helped the companies tremendously and VC financing was also perceived as the most helpful from of capital in the literature (Botazzi & Da Rin, 2002).

The research method was to organize qualitative semi-structured interviews with venture capitalists, startup entrepreneurs who have raised at least one funding round from a venture capital company and at least one equity crowdfunding round and entrepreneurs who have organized an ICO or were planning to organize an ICO. One of the entrepreneurs interviewed in this study had raised equity crowdfunding round before raising money from venture capitalists and one of the entrepreneurs had raised venture capital funding first and raised equity crowdfunding round afterwards. The venture capitalists who were interviewed in this study had companies in their portfolio who had either raised venture capital funding first and equity crowdfunding round afterwards or equity crowdfunding round first and venture capital funding after the equity crowdfunding round.

In the interviews one of the most important benefits often mentioned by entrepreneurs was that by organizing an ICO, the company will get an initial impulse for marketing by building a community that lures in potential users, customers, partnerships and financing from the community members at a very low cost.

6.1. Key contributions of the study

One of main findings discovered in this study was that equity crowdfunding has matured, and the companies are a lot better, than they were few years ago. Another discovery is that, venture capitalists do not see equity crowdfunding as a threat for their businesses, but rather as an ancillary for venture capital and as a tool for venture capital companies to raise follow-on funding rounds for their portfolio company if the venture capital company is not willing or able to fund the whole follow-on funding round or cannot find a suitable venture capital investor as a co-investor.

Another observation is that equity crowdfunding can be useful tool when a company is not yet ready for an initial public offering and is preparing for an initial public offering in the next few years. By organizing an equity crowdfunding round as a pre-IPO funding round, where the company broadens their shareholder base, enhances their recognizability and prepares for an initial public offering. After the equity crowdfunding round, it is more likely, that the company is able to raise debt-financing. Equity crowdfunded companies are also often different type of companies from the companies that venture capitalists usually fund and equity crowdfunding offers companies operating in retail, restaurant and FMCG industries a new alternative option to raise equity funding that was not possible earlier.

Another significant distinction between venture capital funding and equity crowdfunding, is that the venture capital companies help their portfolio companies to succeed by helping in hiring, developing a growth strategy and by planning future funding rounds. Venture capitalist provide a notable amount of additional value for the companies they invest in, unlike equity crowdfunding. Organizing an equity crowdfunding round, does not bring as much support to the company as raising funding from venture capitalists, but one of the benefits of organizing an equity crowdfunding round is the publicity the company gets from organizing the equity crowdfunding round. The two companies interviewed in this study did not get considerably amount of publicity benefits by organizing an equity crowdfunding round.

6.2. Implications for practice

Usually academic research lacks practical implications, for instance Peters & Howard (2020) criticize, that often academic researchers aim is to get their research into a leading journal. According to the authors:

> *Given that such journals insist on the primacy of theory development, we also increasingly resort to pretentious and long-winded prose to at least create the illusion of 'theory development.' The result is writing that can only be understood by those already on the inside of the debates it references. The result of these type of research, is that it can be only understood by those already on the inside of the debates it references.*

The main critique of Peters & Howard (2020) is, that *'many publications are written purely to further our careers rather than to advance knowledge'*. This thesis aimed to take this in to a consideration and the goal of this thesis was to explore the equity crowdfunding industry and how it will evolve in the future, how it will affect to venture capital industry and how blockchain technology, ICOs and STOs will affect equity crowdfunding in the future. The goal of this thesis was to be rather practical instead of aiming to artificially develop a theory.

The growing equity crowdfunding market has become viable way for tech & non-tech growth companies and companies in venture capitalists' portfolio an alternative way to raise equity financing. The findings of this research show that equity crowdfunding is not seen as a threat to venture capital companies, but rather as an ancillary to venture capital. For instance, interviewee 9 sees equity crowdfunding rather as a supplementary tool to raise follow on funding rounds for venture capitalist's portfolio companies, when the portfolio company cannot find another venture capital company to take part for the next funding round or the existing venture capital company is not willing or able to provide the full follow-on funding round, for the reason that, the capital of the current fund is committed to other investments, there is not enough capital in the current fund or the ownership percentage of the portfolio company would be too high or the VC might have restrictions such as, the VC cannot invest into a same company from a different fund they are managing.

Equity crowdfunding offers a viable solution for companies operating in FMCG, restaurant, entertainment, e-commerce, sport, leisure and tourism industries to raise equity funding for the company. Companies raising equity crowdfunding are often quite different from the companies that venture capital investors invest in and these industries are typically the type of industries where venture capitalists do not generally invest. Equity crowdfunding also provides the possibility to turn company’s customers into shareholders, create a group of loyal brand ambassadors from their shareholders and raise brand awareness for the company, especially if the company is operating in B2C industry. Companies operating in the B2B sector do not benefit as much from the publicity of organizing an equity crowdfunding round than the companies in the B2C sector. Another restrictive factor of B2B companies raising equity crowdfunding round is that the investors might not understand the business of the B2B companies as well as the business of B2C companies, and do not invest into to the company due to lack of understanding of the business of B2B companies. The research by Lukkarinen et al. (2016) had similar type of findings and this study seems to widely support that (Lukkarinen et al., 2016).

In general equity crowdfunding was seen as a positive by both entrepreneurs and venture capitalists. The critique towards equity crowdfunding came mainly from venture capitalists about the valuations of the companies offered in an equity crowdfunding round and the terms offered to the investors. According to the venture capitalists interviewed in this study, overvalued companies and inferior terms offered to investors, might backfire in the future for the whole equity crowdfunding industry, if the investors do not get decent returns from their investments.

Blockchain technology offers numerous advantages compared to traditional equity crowdfunding, for example companies can more easily attract investors and likeminded people who are interested in a specific topic globally and build a strong community around the company in addition to that the shares of the company can be sold in the aftermarket. One of the biggest fallbacks of equity crowdfunded companies currently is that there is no aftermarket for the shares of the equity crowdfunded company and blockchain technology, ICOs and STOs can bring liquidity for the shares and tokens of these companies.

6.3. Limitations and further research

The interviews were only conducted with Finnish entrepreneurs and Finnish venture capitalists, therefore the results might differ in other countries, where equity crowdfunding industry and venture capital industry are in a different stage. During the master's thesis writing process numerous other interesting research topics were found from the academic articles and from the interviews with venture capitalists and entrepreneurs.

Companies funded by professional investors generally grow faster and perform better than companies without a professional investor on board. One interesting research topic would be to research how the equity crowdfunded companies have succeeded after the funding round compared to the companies funded by venture capitalists and compare the risks of bankruptcy of equity crowdfunded companies in comparison to venture capital funded companies.

Another research topic that came up during the interviews was that what venture capitalists can learn from equity crowdfunding platforms and how venture capital companies can streamline their investment processes and reduce the paperwork of due diligence and term sheets before doing an investment. Venture capitalists use significant amount of their time conducting due diligence about the companies they are looking to invest and negotiating term sheets with potential investments while as equity crowdfunding platforms have streamlined and efficient processes of organizing a funding round. Additionally, there is only some research about the economic impact of venture capital companies, which would be interesting to research. A company organizing an equity crowdfunding round, often actively looks for investors and often finds investors from their circle of acquaintances. It would be interesting to research, how the active involvement of the entrepreneurs and management translates to succession of the equity crowdfunding round, and what is the number of investors from company's circle of acquaintances in comparison to the unknown investors who invested in the funding round and how vital is the proactive search of investors by the entrepreneurs and upper management to the success of the equity crowdfunding round.

Other interesting research topics would be to research how the prices of tokens have evolved after ICOs and STOs, and how the communities of thousands of people around the world who have invested into the ICOs and STOs have helped the companies to move forward.

One of the biggest drawbacks of traditional equity crowdfunded companies is that the stocks of these companies are not liquid. Blockchain technology offers a reliable solution for the liquidity problem of these companies, but currently the regulative legislation in several countries is lacking behind and companies can get into problems with legislators and in some countries banks have been shutting down accounts that are affiliated with crypto tokens and ICOs. The potential of blockchain technology, ICOs and STOs will reveal properly when governments start regulating the industry. The current environment of non-regulation is not in the best interest of entrepreneurs, investors or the society.

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Appendix

INTERVIEW OUTLINE

1. **OVERVIEW**
    a. Describe your background and your role in the company
    b. Describe and give an overview of the company?
    c. How do you differentiate yourself from the competition?
    d. Have you specialized in a specific sector?

2. **COMPANY**
    a. When was the company established?
    b. How did you choose the specific industry?
    c. Who is your customer?
    d. Why customers use your service?
    e. What are your biggest challenges at the moment?
    f. What is your long-term (5-year) vision?

3. **FUNDRAISING**
    a. Tell me about your fundraising?
    b. Did you have initial fundraising from the founders or business angels etc. ?
    c. Did you consider about raising money from professional investors?
    d. How much money did you raise from venture capitalists?
    e. Did you look for investors from abroad?
    f. How did you organize the Equity Crowdfunding round?
    g. How much money the VCs invested in the equity crowdfunding round?
    h. What was the most important part in raising the Equity Crowdfunding round?
    i. What kind of mistakes did you do when you were raising the Equity Crowdfunding round?
    j. What kind of right choices did you do when you were raising the Equity Crowdfunding round?
    k. Why did you choose to do an Equity Crowdfunding round?
    l. What if you need more financing in the future?
    m. How the publicity of equity crowdfunding has helped you?

4. **EQUITY CROWDFUNDING**

a. What do you think about Equity Crowdfunding?
b. How do you see Equity Crowdfunding?
c. What do you think are the biggest benefits of Equity Crowdfunding?
d. What do you think are the biggest pitfalls of Equity Crowdfunding?
e. What do you think is the biggest benefit of having a lot shareholders?
f. What do you think is the biggest pitfall of having a lot of shareholders?
g. How the shareholders of (ECR) have helped you?
h. How have you concretely benefitted from the shareholders?
i. What do the venture capitalists think about that you have a lot of shareholders?
j. When is the best time for Equity Crowdfunding? (Pre-product, Working prototype, Working product, ICO for Growth)
k. How Equity Crowdfunding can give a competitive advantage for a company?
l. What type of businesses are most suitable for Equity Crowdfunding? Why?
m. What are your fundraising plans for the future?
n. How do you see equity crowdfunding evolving in the future?
o. How do you see equity crowdfunding affecting into venture capital?
p. How do you see raising money in an equity crowdfunding before an IPO? e.g. Pre-IPO
q. What are your exit plans?
r. Are the shareholders of equity crowdfunding rounds still shareholders in the company?
s. What type of shareholders agreement the equity crowd funders have?
t. Is the anything else you would like to comment?

INTERVIEW OUTLINE

1. **OVERVIEW**

a. Describe your background and your role in the company
b. Describe and give an overview of the company?
c. How do you differentiate yourself from the competition?
d. Have you specialized in a specific sector?

2. **COMPANY**

a. When was the company established?
b. Why did you establish the company?
c. How many employees do you have?
d. How did you choose the specific industry?
e. Who is your customer?
f. Why customers use your service?
g. How is the company structure organized?
h. Could you tell me about your token structure?
i. What are your biggest challenges at the moment?
j. What is your long-term (5-year) vision?

3. **FUNDRAISING**

a. Tell me about your fundraising?
b. Did you have initial fundraising from the founders or other source?
c. Did you consider about raising money from professional investors?
d. How did you organize the Initial Coin Offering?
e. What was the most important part in raising the Initial Coin Offering?
f. What kind of mistakes did you do when you were raising the ICO?
g. What kind of right choices did you do when you were raising the ICO?
h. Why did you choose to do an Initial Coin Offering?
i. How are you currently holding the funds raised in the ICO or plan to hold them?
j. How have you applied tokens into the firm's strategy?
k. What if you need more financing in the future?
l. What are the advantages of ICO financing?
m. What are the disadvantages of ICO financing?

4. **BLOCKCHAIN**

a. What is your knowledge about the Blockchain technology/industry?
b. How long have you been working with blockchain technology?
c. Have you invested in any companies in the Blockchain space?
d. How blockchain technology will be used in 5 years?
e. How blockchain technology will be used in startup financing in 5 years?
f. How blockchain technology will change crowdfunding in 5 years?

5. **INITIAL COIN OFFERINGS**

a. What do you think about and Initial Coin Offerings?
b. How do you see ICOs as a funding method?
c. What do you think are the biggest benefits of Initial Coin Offerings?
d. What do you think are the biggest pitfalls of Initial Coin Offerings?
e. How do you see regulation in the ICO market?
f. What is the role of the community?
g. What do you think is the biggest benefit of having thousands of community members?
h. What do you think is the biggest pitfall of having thousands of community members?
i. How the community has helped you in building the product?
j. What do you think are the biggest problems in fostering the community?
k. How have you concretely benefitted from the community?
l. When is the best time for ICO? (Pre-product, Working prototype, Working product, ICO for Growth)
m. What do you think about the different Token models?
n. How companies can apply tokens into their strategy?
o. How tokens can give a competitive advantage for a company?
p. What kind of businesses are most suitable for ICOs?
q. Is the anything else you would like to comment?

INTERVIEW OUTLINE

1. **VENTURE CAPITAL, DEAL FLOW & INDUSTRY**
   a. How do you see the current competition in venture capital?
   b. How many of your investments are done with other investors?
   c. Have you considered IPO as an exit option for your company?

2. **EQUITY CROWDFUNDING**

   a. What is your knowledge about the equity crowdfunding industry?
   b. Have you invested or have you considered investing in a crowdfunded company?
   c. How equity crowdfunding will change startup financing in general?
   d. Would you consider crowdfunding to be an option for next funding round for your portfolio company?

e. After the crowdfunding round would you consider an IPO as an exit option?
f. How equity crowdfunding will change the business models and operations models of Venture Capital companies in the long term?
g. How equity crowdfunding will evolve in the future?
h. Why do you think a company chooses crowdfunding instead of Venture Capital?
i. How do you see equity crowdfunding affecting into venture capital?

3. BLOCKCHAIN

a. What is your knowledge about the Blockchain technology/industry?
b. Have you invested in any companies in the Blockchain space?
c. How blockchain technology will change finance in general?
d. How blockchain technology will change startup financing?
e. How blockchain technology will change venture capital industry?
f. How blockchain technology will change business models of Venture Capital companies?