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Master Thesis

Can Equity Crowdfunding Crowd-Out Other Alternative Sources of Finance?

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Abstract

Following the financial crisis of 2007, many smaller firms had no access to capital. The Obama administration tried to change that with the passage of the JOBS Act in 2012, which would allow firms to seek financing from anonymous individuals online and offer debt or equity as securities.

In the vacuum left behind by the retreat of bank lending stepped a host of alternative lenders, crowdfunding in its many forms being one of them. As the industry grows and matures it is starting to compete with other alternative lenders[1].

It is the aim of this paper to compare equity crowdfunding to the other equity investors, those traditionally being angel investors, micro-VCs and larger VC-firms. Initially the various types of crowdfunding will be defined and how they came about, subsequently this paper will examine the various forms of private equity. Finally, the types will be compared on the global volume available to investors, the cost of financing, the median investment size made by each investor type, the role of the intermediary, the degree to which shareholders involve themselves in the company's business affairs and the legal structure of the types.

The conclusion will then determine with which other forms of finance equity crowdfunding competes the most and what the future bodes for it.

[1] (Greenhalgh, 2016)

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Abbreviations

AUM = Assets under management

BDC = Business Development Company

CFP = Crowdfunding platform

CFR = Code of Federal Regulations

DJIA = Dow Jones Industrial Average

GP = General Partner

HNW = High Net-Worth

LP = Limited Partner

pcy = per calendar year

PE = Private Equity

Reg = Regulation

ROE = Return on Equity

S.E.C. = Securities and Exchange Commission

SME = Small and Medium-Sized Enterprises

UHNWI = Ultra High-Net-Worth Individuals

VC = Venture Capital

Introduction

The sources for early-stage business financing have always been sparse. However, since the credit crisis started in 2007, small and medium sized enterprises (SMEs) have struggled to secure financing from their traditional financiers, the banks. In the wake of the credit crisis, pressure grew on legislators to enable better access to capital for SMEs, and a host of alternative sources started to fill the void. Unfortunately, this group of alternative financiers has not been able to fill the vacuum left behind by the retreat of bank lending completely. However, as these alternative sources of finance grow so will the competition between them, to back promising ventures.

The aim of this paper is to compare the newer types of early-stage financing, such as equity crowdfunding, with more traditional forms of financing such as private equity in order to determine what the future bodes for both the newer forms and the traditional forms. At a time when participation in equity crowdfunding opportunities has been opened up to a greater number of investors in the U.S., analyzing what the future holds for early-stage financing could not be more relevant. Both equity crowdfunding platforms and private equity investors will have to reevaluate their strategies in the future if these two forms of financing do indeed begin to compete. Cost is an obvious aspect on which different models often compete. With the advent of the internet and accompanying software, the world has become more transparent. Whether this change will do away with expensive fund managers, so valued for their ability to generate positive returns from opaque investment opportunities? Or has the deluge of information led to an even greater demand for knowledgeable intermediaries?

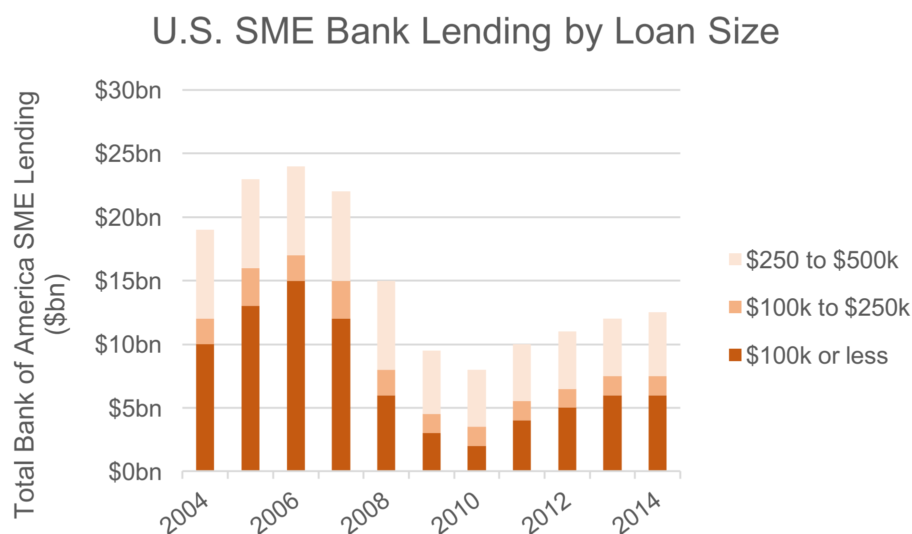
In the following chapters I will seek to find answers to the questions above and I begin by delving into the how and why SMEs saw a shortage in the amount of financing available to them. Following the brief history of the financial crisis, I will delve into the different forms and history of crowdfunding. Subsequently, I will define the various types of private equity and the two forms of financing will be compared according to their cost of capital, the composition of their investor base and the depth of both markets amongst various other metrics.

The Cause of Bank's Retreat from Small Business Loans

The two most cited reasons for the departure of the traditional lenders from the small business loan market[2] is that on the one hand banks, deemed small business loans too risky and that on the other hand regulators wanted banks, amongst other things, to improve their tier 1 capital ratio[3], which meant either to reduce the amount of lower quality loans lent or increase the amount of tier 1 capital. Regarding the regulators requirement, the banks worked on both fronts but it meant that fewer lower quality loans, which were predominantly small business loans, were originated.

Before the financial crisis banks would often lend smaller amounts, such as less than $100k, to businesses where the founders had exhausted their own savings and where an equity investment would be too expensive. As we can see in Figure 1, the number of smaller loans originated by Bank of America fell drastically during the financial crisis and has not recovered to pre-crisis levels. The pattern is the same for J.P. Morgan, Wells Fargo and other large U.S. lenders.

Figure 1: Bank of America SME Lending by Loan Size[4]



As a result of the banks retreating from this area, a 'funding vacuum' appeared where entrepreneurs could not use their own resources as these had been exhausted and they could not receive funds from professional equity investors as

[2] Defined as loans to non-financial firms up to $1m (Simon, 2015)
[3] Calculated as total tier 1 capital over total risk-weighted assets (The Federal Reserve Board, 2006)
[4] (Cole, 2014)

investments of less than $100k are usually too costly for the investors to oversee and manage.

As entrepreneurs will often seek out the cheapest form of financing when launching their business, they will usually seek out bank financing before equity financing once they have exhausted their own funds and those of their family and friends. This is known as the 'pecking order theory'[5]. However, if the entrepreneur then does seek out equity financing, often equity investors will take this as a signal that they were not creditworthy enough to receive bank lending. In such a case, the investor might view the company as a "lemon", to use Akerlof's term[6], and seek out what she perceives to be better investment opportunities.

Another reason why equity investors might be unwilling to invest is due to valuation difficulties at such an early stage in the company's lifetime. There are three main ways in which private companies can be valued[7]:

- Income Approach: Based on the present value of future cash flows or income
- Market Approach: Based on pricing multiples from sales/income from similar companies
- Asset-based Approach: Based on the value of the company's net assets

The difficulty in valuing an early-stage company using the income approach, is that future cash flows are uncertain and often there are few historical cash flows to make a prediction. Using the market approach to value smaller companies will be difficult as early-stage companies will have few public comparables as companies tend to go public when they are more mature and larger.

Finally, the asset-based approach is also unlikely to be used as smaller companies tend not to have many assets. If they do have assets, then equity investors will have a subordinated claim to them, making their valuation difficult, or they are unlikely to be assets which a bank would accept as collateral, in which case their value and the investment decision should also be questioned.

[5] (Myers & Majluf, 1984)
[6] (Akerlof, 1970, p. 489)
[7] (CFA Institute, 2013)

What is Crowdfunding?

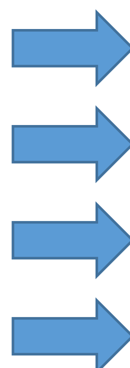
The U.S. Securities and Exchange Commission (S.E.C.) defines crowdfunding as a form of financing in which money is raised through soliciting small individual investments or contributions from a large number of people[8]. This stands in contrast to the more pervasive form of financing, raising money by soliciting large investments from a small group of sophisticated investors. In a crowdfunded venture, there are generally three parties involved: the owner of the idea, those that give the capital and the platform used to match the two parties. The owner of the idea may be an individual or a company, but usually they are not well-established.

Crowdfunding Models

There is no consensus on what constitutes a crowdfunding model, with some saying there are only three types whilst others saying there are more. I have identified the following four types:

Figure 2: Examples of the different crowdfunding models

- Debt-based
- Donation-based
- Equity-based
- Pre-purchased/Rewards-based



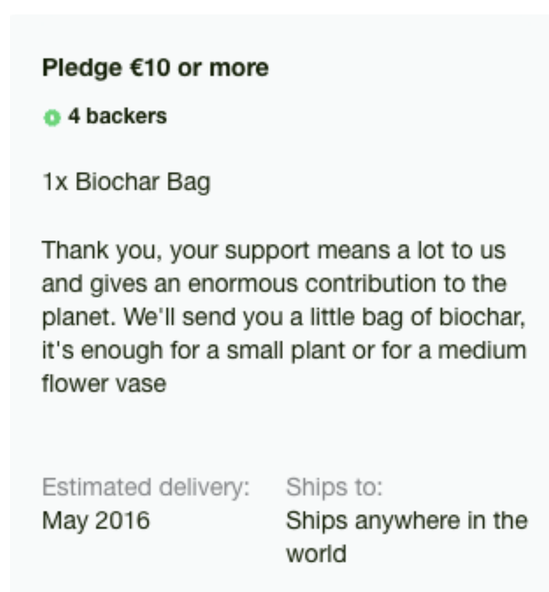
Of the models listed above, only the debt- and equity-based models offer any financial return. This is an important distinction to make because only these types of models of crowdfunding share the same type of return as that sought by private equity investors, namely that of a financial gain. On top of financial returns, only equity-crowdfunding and sometimes donation-based crowdfunding offer any decision-making power to project-backers, which is often a requirement of private equity investors as well[9].

[8] (S.E.C., 2016)
[9] (Gilligan & Wright, 2014, p.44)

Besides the type of return, the models listed above vary in their age. Whilst the term ‘crowdfunding’ only entered modern vocabulary in 2006[10] and will most likely be associated with raising funds via the internet; the concept of raising funds from a crowd of people has been around since at least the 18th Century when a German publisher decided to fund future issues of Martin Luther’s works by collecting the capital up-front in a model called “praenumeration”[11]. This type of crowdfunding would fall under the pre-purchased/rewards category and the modern manifestation can be found on sites such as Kickstarter.com, where project-backers will often be promised a copy of the finished product for a minimum contribution.

Websites such as Kickstarter however, also include the rewards-based model as project initiators might offer a T-Shirt or coffee mug instead of the final product for those project-backers who do not want or cannot afford the final-product, but would still like to see the concept realised. In Figure 3 the makers of the ‘Enki Stove’, “a camp stove which can let you cook and grill as a pro using everything you can find in nature”[12], offer those who pledge at least €10, a bag of ‘Biochar’ as a reward instead of the final product (€160).

Figure 3: Example of the rewards offered for pledges of $10 or more on "Enki Stove Wild: Cook everywhere using any kind of biomass"



[10] (Bradford, 2012, p. 11)
[11] (Quedenbaum, 1977, p. 168)
[12] (Enki Stove, 2016)

Finally, and probably one of the oldest forms of crowdfunding is charitable giving, where projects are realised due to the generosity of those who do not seek any form of compensation in return, except perhaps for the contentment that altruistic behaviour brings with it.

Of the models mentioned above, I will focus on whether the equity-based models realised on sites such as Equitynet.com or Seedrs.com, can be considered a new form of private equity. This limitation will exclude websites such as Kickstarter.com from being considered, as they rely on a rewards-based crowdfunding model and offer no-monetary compensation to project backers. In order to be considered a new form of private equity, I believe that the new models should at a minimum share the characteristic of rewarding investors financially. Additionally, although the rewards and pre-purchase models have been given a new channel of communication with the advent of the internet, the concept itself is not new and should therefore not be considered a ‘new-form’ of private equity.

I will further limit my analysis to focus on online equity crowdfunding platforms (CFPs) rather than include debt-based models, as the rights and obligations of private equity investors are most similar to investors who invest via CFPs than those who lend via loan-based CFPs.

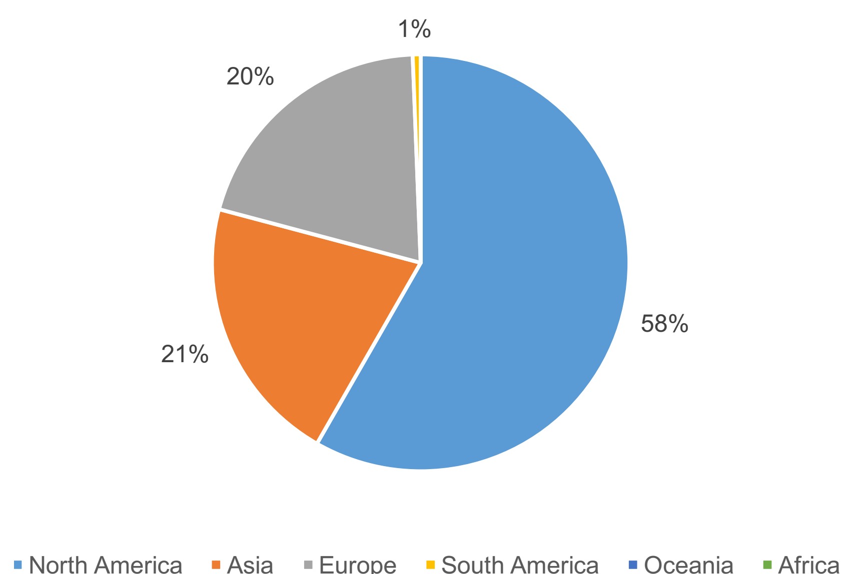
Finally, I will also exclusively examine online formats as most crowdfunding is organised online currently and any form of crowdfunding which could be considered a new form of private equity will also most likely be organised online, now and in the future.

The Beginnings of Equity Crowdfunding Models

Although more than half of projects that are crowdfunded, originate in the U.S., the first online equity-based crowdfunding model which allowed businesses to solicit the public for funds, was launched commercially in Finland in 2010[13]. Whilst discussing historical models I will therefore focus on U.S. and European crowdfunding models as this is the historical origin of online CFPs and accounts for over three-quarters of funded projects (see Figure 4).

[13] (Kukkosuo, 2009)

Figure 4: Geographical distribution of crowdfunded projects[14]



It was only at the end of 2013 that an U.S.-based equity CFP was able to allow businesses to publicly solicit funds after the passage of the JOBS Act[15] which stipulated that the SEC amend rule 506 of 'Reg D' in the Code of Federal Regulations (CFR) to eliminate the prohibition on general public solicitation[16] when raising funds from investors.

The reason why equity-based crowdfunding models did not take-off before 2013 in the U.S., is due to the cost of registering securities with the S.E.C. in accordance with the Securities Act of 1933. Even if an issuer could exempt themselves from registration, in accordance with the requirements set forth in the CFR[17], the listing of a so-called 'Reg A' offering could run into the tens of thousands of dollars[18]. This was likely more than the median funding goal of successfully funded projects on Kickstarter at the time, when that goal is less than $10k today[19]. In essence, it would have cost the project initiators more to list their securities than they would likely have wanted to raise for their project.

[14] (Wilson & Testoni, 2014)
[15] Modification of exemption, 2 Jumpstart Our Business Startups Act section 201 (2012)
[16] Exemption for limited offers and sales without regard to dollar amount of offering, 17 C.F.R. chapter 2 pt.230 section 506 (2012)
[17] Scope of exemption, 17 C.F.R. chapter 2 pt.230 section 251 (2015)
[18] (Bradford, 2012, p. 42)
[19] (Kickstarter, 2016)

Whilst some may think that equity crowdfunding could only come into existence with the internet, the emergence of this type of financing probably only came about due to the change in regulation concerning the public offering of securities. After all, it would be strange if equity crowdfunding websites only required the internet to emerge, yet the first one to properly function would emerge 15 years after websites such as eBay.com, which also rely on a network effect to function properly[20].

The logical follow-up questions to ask thus focus on the kind of de-regulation that occurred and why it occurred. For us to answer the former question, it makes sense to briefly look at the history of financial regulation. Here I will focus on the U.S. as this is where regulation initially prevented the emergence of equity-based crowdfunding models.

History of Financial Regulation in the U.S.

In the 19th Century, financial regulation was almost non-existent in the U.S., after all these were the days when stories of people striking it rich by funding the California Gold Rush prospectors were not unheard of. With these tales also came fraudsters who looked to take advantage of investor's avidity for speculative returns. It was not a mere failing on behalf of the investors to conduct due diligence, but it was also that potential investors in the U.S. would often have no way of knowing whether the data being used to pitch them a project, was reliable.

Then in 1909, the bank commissioner for the state of Kansas, Joseph Norman Dolley, started to push for Kansas to become the first state to enact wide-reaching securities laws which he successfully achieved in 1911. These new laws required brokers, brokerage companies and the new securities being offered to register with the state securities commissioner. These laws were borne mainly out of Dolley's frustration with continuously hearing about investors being swindled out of their savings when investing in a fake gold mine for example[21]. These laws became known as 'Blue sky laws' as Dolley described some of the promises made by project initiators to be as achievable as owning patches of the blue sky.

[20] (Hsiao, 2014)
[21] (Zahid, 1999, p. 47)

In the 20 years that followed the landmark passing of these laws in Kansas, similar laws were adopted by another 46 states. The regulation however was not strongly enforced and could be bypassed by simply marketing securities to out-of-state investors. Whilst the economy boomed and investing in securities became ever more popular, things came to a head on October 29th 1929, in what is now known as *Black Tuesday*, when the DJIA fell 12% and which marked the start of the Great Depression.

As a result of the ensuing decline in the standard of life of the American people and in order to protect against future crisis, the Glass-Steagall Act was passed in 1933 as well as the Securities Act of 1933 which sought to incorporate ‘Blue sky laws’ into federal law. However, the Securities Act of 1933 only covered the primary issuance of securities and because secondary trading had played such a large role in the stock market crash four years’ prior, the Securities and Exchange Act of 1934 was passed to regulate the secondary trading of securities. Theodore Roosevelt also felt that the original ‘Blue sky laws’ lacked an enforcing authority and thus the Securities and Exchange Act of 1934 led to the creation of the S.E.C.

Whilst a host of acts were passed between 1935-1940 with the intention of drawing investor confidence back to the markets[22], no new act was passed until the Sarbanes-Oxley Act was passed in 2002 and this did not repeal the restrictions on marketing securities to the public put in place by the original Securities Act of 1933. Only in 2012, with the passage of the JOBS Act were restrictions on marketing securities loosened and equity and debt crowdfunding platforms became viable business models. Why had it taken close to eighty years for the marketing of securities to loosen? Just like Black Tuesday had set the cogs turning on the eventual passage of the Securities Act of 1933, so too had the Financial Crisis of 2008 caused lawmakers to reconsider the rationale behind existing regulation.

When the Financial Crisis of 2008 occurred, SMEs in the U.S. were adversely hit as they lacked access to public capital markets and almost exclusively held lines of credit with small community banks which made up more than 85% of all for-profit

[22] Public Utility Holding Company Act (1935), the Trust Indenture Act (1939), the Investment Advisors Act (1940) and the Investment Company Act (1940)

depositary institutions that failed between 2007-2012[23]. As SMEs employ approximately half the U.S. labour force and generate over two-thirds of new American private sector jobs annually, where we define SMEs as enterprises with less than 500 employees[24], it is understandable why the Obama administration sought to improve SMEs access to capital. This ambition finally took on the form of the Jumpstart Our Business Startups Act and it was signed into law on April 5th 2012.

Jumpstart Our Business Startups Act

The act is split into seven titles, although titles II and III are the most noteworthy pieces of recent legislation for the SMEs and start-ups.

The most important element of title I is its definition of a business start-up, which it defines as an “emerging growth company” if it possesses total annual gross revenues less than $1bn for the most recent fiscal year[25].

Title II added a new exemption to Reg D of the Securities Act of 1933. The exemption, rule 506, allows companies to conduct general solicitation or general advertising which they were prohibited from doing so under rule 502(c). However, title II stipulates that only accredited investors may be solicited. Rule 501(a) of the Securities Act of 1933 defines accredited investors besides the usual financial institutions as natural persons who meet at least one of the following criteria:

- Possess, either individually or joint with a partner, a net worth of at least $1m excluding the value of their primary residence
- receive an individual income of at least $200,000 or joint-household income of at least $300,000 for the past two years and are expected to receive the same amount for the coming year[26].

Title II therefore restricted general solicitation only to high net-worth (HNW) individuals. Title II was written into law in September 2013.

[23] (DeYoung, Gron, Torna, & Winton, 2014, p. 1)
[24] ibid.
[25] Definitions, 1 Jumpstart Our Business Startups Act section 101(a)
[26] Definitions and terms used in Regulation D, 17 C.F.R. chapter 2 pt.230 section 501 (2013)

Title III went a little further, by proposing regulation which would allow for the creation of 'funding portals'. These funding portals would require greater disclosure from companies than required under title II and whilst it would allow non-accredited investors to invest in companies. They would be restricted to the greater of

- $2k or 5% of the person's income/wealth for those earning less than $100k p.a.
- and the lesser of $10k or 10% of the person's income/wealth for those earning between $100k and $200k p.a.

Individual investors who do not fall into the HNW category, thus have the amount they are allowed to invest per calendar year (pcy) capped at $10k.

Importantly for the subject of this paper, title II seems to just repeal some of the first 'Blue sky laws' as it allows companies to solicit members of the general public, albeit HNWIs, without having to register as broker dealers[27] which would notably require them to have a 'Duty of Fair Dealing'[28]. This registration exemption is relevant for the topic of this paper, as private equity firms are also exempted[29], therefore parallels can be drawn between the two forms of financing in this regard.

However, whilst similarities do exist, title II seems to go no further than effectively repeal the old 'blue-sky laws', by allowing wealthy individuals to invest with less restrictions. Therefore, whilst title II returns some early 20th-Century characteristics to modern-day capital markets, the form of financing that it enables, cannot be considered new.

[27] Exempted transactions, 15 U.S.C. chapter 2a subchapter 1 section 77(d) (2012)
[28] (SEC, 2008)
[29] (Lim & Cumming, 2016)

Funding Portals

Title III seems more promising in delivering a new model of private equity as it allows for the creation of a new type of intermediary called a 'funding portal' which does not have to register as a broker/dealer following the Exchange Act Section 15(a)(1)[30].

Registered brokers and funding platforms have to:

- Provide investors with educational material
- Take measures to reduce the risk of fraud
- Make information about the issuer and the offering available
- Create forums permitting the discussion about offerings on the platform
- And, facilitate the offer and sale of crowdfunded securities

The new rules however prohibit funding platforms from:

- Offering investment advice or making recommendations
- Soliciting purchases, sales or offers to buy securities offered or displayed on its platform
- Compensating promoters and others for solicitations or sale of securities
- Holding, possessing, or handling investor funds or securities

When signing up as an investor for an equity crowdfunding platform, in this case www.equitynet.com, the only information that is initially required is an email address and a confirmation of one of the following:

- that one earned at least $200k in income (or $300k jointly with a spouse) for the past two years and expects to earn the same in the current year
- that one has a net worth of $1m (either alone or with a spouse) excluding the primary residence
- that one invests on behalf of a business in which all of the equity owners are accredited
- that one invests on behalf of a bank, partnership, corporation, non-profit, or trust with total assets in excess of $5m whose purchase is directed by a sophisticated person

[30] Registration and regulation of brokers and dealers,15 U.S.C. chapter 2b section 780 (2015)

It should be noted that these requirements were relaxed on May 16th 2016, when entrepreneurs could raise up to $1m from any investors via equity crowdfunding sites[31]. However, beyond this amount the requirements are that one is an accredited investor although one does not need to possess the sophistication of the investors found in private equity, which we will examine in the next chapter.

[31] (Crowdsourcing.org, 2016)

What is Private Equity?

According to the British Private Equity and Venture Capital Association, private equity (PE) is an asset class consisting of equity securities and debt in companies which are not publicly traded on a stock exchange[32].

InvestEurope, the European trade association for private equity, goes on to add that it is a medium to long-term investment characterised by active ownership. Additionally they define venture capital (VC) as a type of private equity which focusses on start-up companies and that VC funds back entrepreneurs with innovative ideas, regarding a product or service and who need investment and expert help in order to grow their business[33].

Usually, there are two to three parties involved: the entrepreneur with an idea /company being invested into, those providing the funds and sometimes a party which will match the two parties such as an investment bank.

The entrepreneur/company seeking external financing in the private equity model, can be similar to the one mentioned in the crowd-funding models, however if it is a larger firm then crowdfunding is currently unlikely to be able to raise the capital required, which will be discussed in detail later. Therefore, a distinction should be made regarding the size of investments made by each form of private equity. Those providing the funds for private equity are typically professional investors such as angel investors, venture capitalists and larger buyout funds. However, for very early-stage funding friends and family members may sometimes commit funds and be given equity in exchange.

In the following table, a non-exhaustive list of some of the many forms of private equity investor types that currently exist has been compiled. The types of private equity investor are categorised by the uses of investment proceeds, the size of investment sought and the company's stage of the business life-cycle that they invest in.

[32] (British Private Equity & Venture Capital Association, 2013)
[33] (Invest Europe, 2015)

Table 1: Investor sub-categories under the private equity term

Investors[34]	***Investment Type***	***Investment SIze***[35]	***Companies***
• 3Fs (i.e. 'Friends, family & fools') • Angel/Super-Angel Investors • Micro-VCs	Seed funding/Product development	\$0-\$1m	• Start-ups with founder/potentially co-founder • Usually less than 10 employees
• Normal VC funds • Smaller PE funds	Venture capital/Expansion	\$0.5m-\$5m	• Growth firms • Companies seeking series A to pre-IPO funding
• Larger VC and PE funds	Buyout/Restructuring/Public to Private	\$5m-<\$200m	• Mature/declining industries • Infrastructure

CFPs have been intentionally left out of the list above as they are not a type of investor per se and secondly it is the aim of this paper to clarify which type of private equity investor the CFPs share most in common with, now and in the future.

Defining the 3Fs, Angel Investors and Micro-VCs

One might imagine that the 3Fs, or better well known as 'friends, family and fools' is usually the first source of funds for an entrepreneur besides their savings. Due to the securities law discussed earlier, the entrepreneur cannot just simply solicit the general public for funds and so the 3Fs need to be delineated from members of the public by way of a legal definition. Rule 506 of Reg D provides for a separate investor class between members of the public and accredited investors as an issuer can rely on funds from 35 non-accredited investors under paragraph (b)(2)[36]. However, non-accredited investors need "knowledge and experience in financial and

[34] (Hower, 2010)
[35] (Bain & Co., Inc. , 2016)
[36] Exemption for limited offers and sales without regard to dollar amount of offering, 17 C.F.R. chapter 2 pt.230 section 506 (2012)

business matters" so that they are capable of "evaluating the merits and risks of the prospective investment" under paragraph (b)(2)(i). As there is no objective method to determine their expertise, this would most likely be determined in a court of law if this were necessary. For the sake of simplicity, we will therefore define the 3Fs as any non-accredited investor, as it can be assumed that angel investors and Micro-VCs are classed as accredited investors under Reg D.

Angel investors are natural persons and thus only have to meet one of the following criteria in order to be considered accredited investors by regulators[37]:

- Individual net worth or joint net-worth with spouse, in excess of $1m
- Individual income in excess of $200k in each of the two most recent years or joint income with that person's spouse in excess of $300k, with the expectation of achieving a similar level of income for the coming year

Relatively little research has gone into how large the total amount is invested by angel investors, however research conducted in 2007 indicates that by the year 2000 already £1bn was being invested into UK companies by UK angel investors annually[38]. The most conclusive survey to date on the returns to UK angel investors was conducted on 158 angels in late 2008 and so the returns are likely to be higher than in the years following the Great Financial Crisis (GFC) which started in August 2007 but was felt on a more massive scale after 2008.

Respondents reported that 56% of ventures failed to return any capital, but that about 9% returned x10 the initial investment. As the returns generated by the exits with a positive ROE exceeded the losses of the failed ventures, the average ROE of exits was 220%. However, as investors typically held their investment for just under 4 years, the average internal rate of return (IRR) was around 22%.

On average, and particularly for earlier stage opportunities, angel investors with more entrepreneurial expertise were more successful than those without it. Likewise, investors who poured funds into ventures where they possessed industry knowledge suffered less setbacks than those who had no such background.

[37] ibid.
[38] (Turville, 2007)

Although the success of the venture initially increases with the amount of involvement that the investor has, there comes a tipping point where the angel's involvement reduces the venture's chance of success. The success of ventures where the investor had made follow-on investments, was also markedly lower in comparison to ventures where no follow-on investment occurred however this seems intuitive if one assumes that often follow-on investments occur when the investor is 'throwing good money after bad'.

Micro-VCs are a relatively new phenomenon which are not specifically identified in the regulation, however they are said to invest in emerging growth companies and have a fund size usually smaller than $50m, which invests between $25k to $500k into the seed funding round[39].

Whilst Micro-VCs are not specifically mentioned in Reg D, they can be defined as accredited investors under the far reaching definitions provided by the Small Business Investment Act of 1958, Investment Advisers Act of 1940 and Investment Company Act of 1940, which Reg D relies on under rule 501 paragraph (a)(1) and (2)[40]. According to rule 501,

- *"any Small Business Investment Company licensed by the U.S. Small Business Administration under section 301(c) or (d) of the Small Business Investment Act of 1958"*
- *"any private business development company"* as defined in the latter two acts,

can be regarded as an accredited investor. Under section 2(a)(48) of the Investment Corporation Act, a business development company (BDC) is one which is

- *"operated for the purpose of making investments in securities"*
- and, *"which makes available significant managerial assistance".*

Although most assets managed by BDCs are controlled by larger BDCs such as Apollo Investment Corporation, micro-VCs can be included in this definition as long as they abstain from electing themselves not to be defined as a BDC.

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[39] (Dykes, 2014)

[40] Definitions and terms used in Regulation D, 17 C.F.R. chapter 2 pt.230 section 501 (2012)

According to Samir Kaji, a managing director at First Republic Bank which has most of its operations on the West Coast of the U.S.A., Micro-VCs appeared because start-ups became more capital efficient meaning that smaller investment sums were required that were too small for traditional VC firms and too large for angel investors[41]. Traditional VC firms are unwilling to finance these smaller investments as they would have to oversee a much greater number of portfolio investments, which would increase their fund administration costs and reduce their fund performance substantially.

The size of traditional VC firms is not entirely self-determined, but also formed as a consequence of their own funding sources as they rely on institutional investors (e.g. pension and endowment funds) which are also constrained by minimum investment sizes. Unlike traditional VC firms however, Micro-VC firms possess different limited partners. A Micro-VC firm might only have ultra high-net-worth individuals (UHNWI) and family offices as backers.

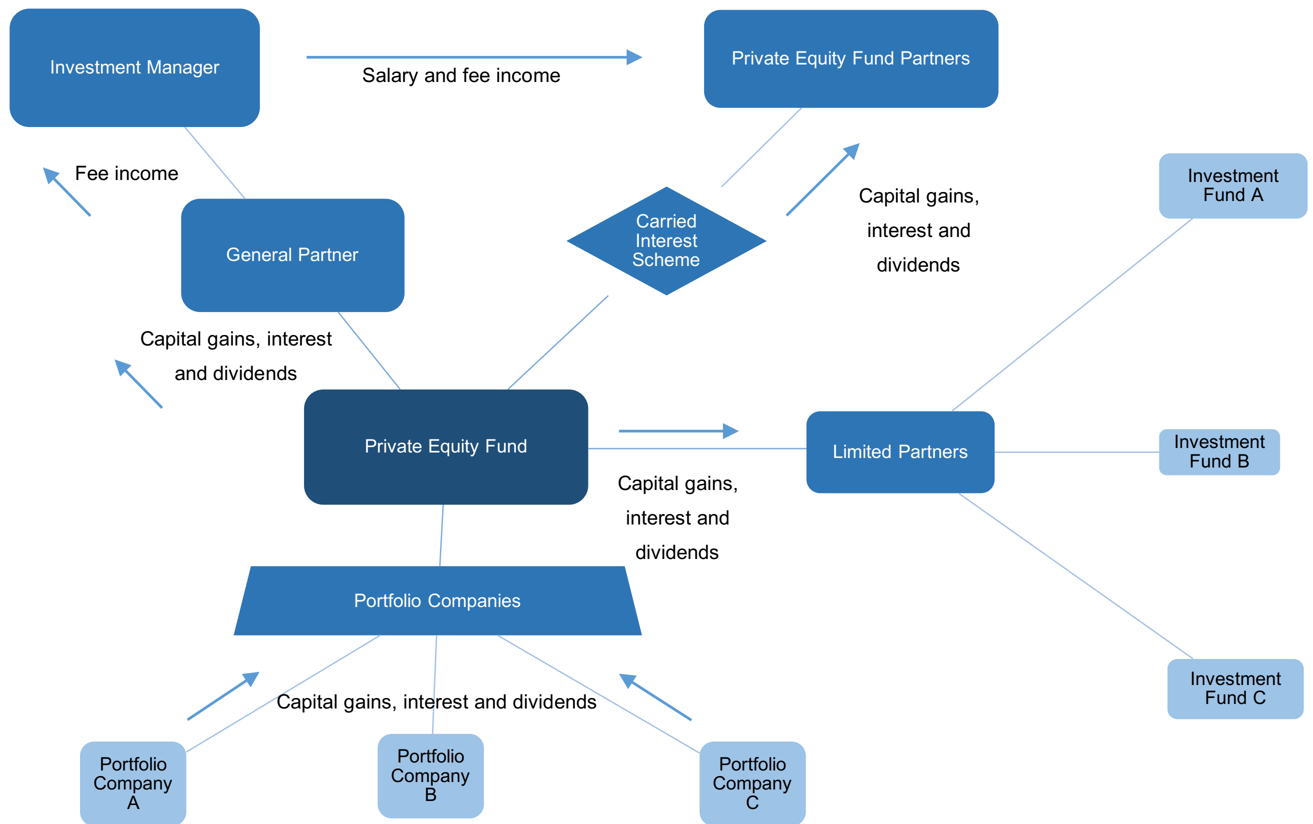
Defining Traditional VC and Larger PE firms

Currently, for larger private equity financing rounds, larger and more sophisticated firms are the only source of capital. These firms are structured in a way which involves at a minimum, the following four groups:

- The lenders
- The general partners (GPs)
- The limited partners (LPs)
- The portfolio company

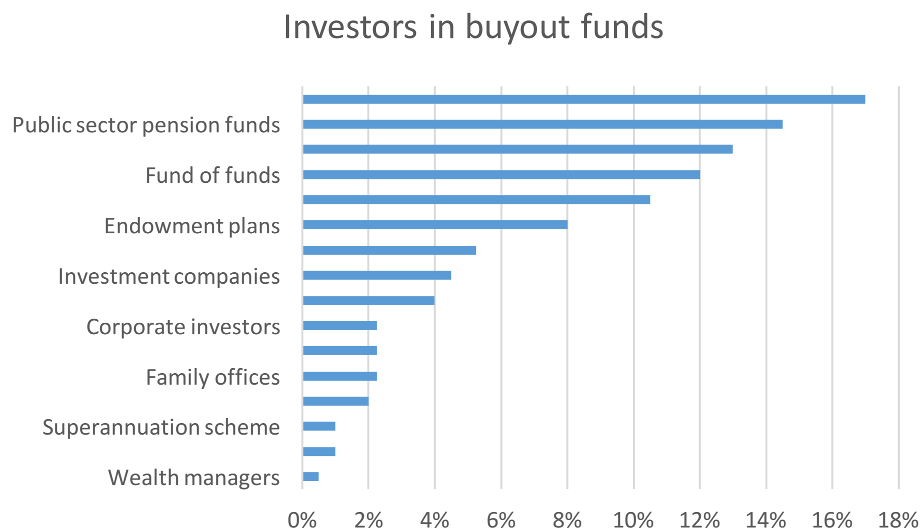
[41] (Kaji, 2014)

Figure 5: A typical private equity fund structure[42]



Starting with the investors, most of the funds in a private equity fund come from institutional investors such as pension funds, endowment funds, insurance companies, funds-of-funds and family offices (see Figure 6).

Figure 6: Investors in US Buyout Funds (2014)



42 (Gilligan & Wright, 2014, p.38)

The fund manager might manage one or several funds and most funds have a predetermined lifetime. An industry standard is one known as the '10+2' whereby a fund will typically make new investments for six years, be wound up after a total of ten years but will have a clause in the agreement which would allow the fund to be extended for two years beyond the first ten. The reason for the LP and GP structure is to reduce the tax liability of individual institutional investors by treating them as one investor instead of creating multiple tax charges. It should be noted that this structure is not designed to avoid tax but to avoid paying tax on the same income twice.

In normal conversation, the term GP can be used to mean the fund manager, however technically the GP will often be a limited company or partnership which the fund manager invests into in. This layer is added as the GP can be held liable for an unlimited amount, and so to cap the liability the GP will be represented by a limited company or partnership.

As mentioned earlier, traditional VC firms are largely funded by institutional investors, who act as limited partners, and to a small degree by the general partners. This is also true for larger PE funds, with the main difference being the size of the AUMs and the motives for the transactions. Whilst larger PE funds might pursue a buyout strategy, smaller VC firms will invest in order to kick-start a business and larger VC firms will invest in order to develop the product, increase revenue or increase profitability[43].

For the sake of simplicity, the simple rule to delineate micro-VC firms from traditional VC firms will be that the former invests exclusively in the seed round (i.e. start-ups) whilst the latter will only start to invest in Series A rounds (i.e. rapid growth phase)[44].

In U.S. regulation, VC firms are specifically defined under section 275 rule 203(l)-1[45]. In short, the SEC defines any fund a VC fund as long as it:

- *"Represents to investors a venture capital strategy*
- *Does not hold more than 20% of the funds aggregate capital contributions and uncommitted capital in non-qualified investments*

[43] (Ernst & Young, 2014, p.11)
[44] Series A rounds are so-called due to the name given to the class of stock issued to investors in this round and it is often convertible into common stock if the company undergoes an IPO.
[45] Venture capital fund defined, 17 C.F.R. chapter 2 pt.275 section 203(l)-1 (2011)

- *Does not incur more than 15% of the fund's aggregate capital contributions and uncommitted capital in leverage*
- *Only issues securities which allow the holder to receive pro-rate distributions and only in exceptional circumstances does it allow the withdrawal, redemption or repurchase of securities*
- *Is not registered under section 8 of the Investment Company Act of 1940*[46] *and has not elected to be treated as a business development company pursuant to section 54 of that act"*[47]

Larger private equity funds are very loosely regulated and were even more loosely regulated before the Dodd-Frank Wall Street Reform and Consumer Protection Act. As such, the most concrete definition of what constitutes a PE fund is provided by the glossary of the Form PF[48], which defines it as:

- *"Any private fund that is not a hedge fund, liquidity fund, real estate fund, securitized asset fund or venture capital fund and does not provide investors with redemption rights in the ordinary course."*[49]

This definition is obviously very broad, however the Form PF differentiates large private equity funds from smaller ones by compelling advisors to report identifying information, financing and investments if they and their related persons collectively managed at least $2bn in private equity assets[50].

[46] Registration of investment companies, 15 U.S.C. chapter 2d subchapter 1 section 80(a)-8 (2011)
[47] Election to be regulated as business development company, 15 U.S.C. chapter 2d subchapter 1 section 80(a)-53 (1987)
[48] 'Reporting Form for Investment Advisers to Private Funds and Certain Commodity Pool Operators and Commodity Trading Advisors' (S.E.C., 2012)
[49] (S.E.C., 2012, p. 7)
[50] (S.E.C., 2012, p. 3)

Global Volume

Whilst the global crowdfunding industry was $6.1bn in 2013, it more than doubled to $16.2bn in 2014, with this figure more than doubling again for 2015 ($34.4bn) according to an industry report by Massolution[51]. By contrast, this is larger than the estimated $30bn invested by venture capital firms annually, it should be noted that Massolution's figure includes donation- and rewards-based CFPs[52]. The equity- and lending-based models however, invested $27.6 (80.3%) of the amount invested by CFPs, with lending-based models investing $25.1bn alone. It is therefore easy to imagine that these two platforms alone will soon be investing more in start-ups than the amount invested by VC firms globally, with 2016 perhaps being the first year for this to occur.

So has the VC industry seen its global investment sum fall as a result of the rise of CFPs? The short answer is no. Rather it has been traditional banks who have been partially replaced by CFPs. Between 2008 and 2013, new bank loans to European small businesses, fell by 35%[53]. In the U.S., the ten largest banks lent 62% to small businesses in 2014 than what they lent in 2006[54], which indicates that the drop in small business lending was of a similar size to that seen in Europe.

In absolute numbers, lending in the U.S. fell from $72.5bn to $44.7bn ($27.8bn drop) whilst it fell from €1tn to €650bn in Europe (€350bn drop). Clearly the fall in bank lending has not been replaced with funds invested by CFPs and there has been a real drop in the volume of funds that small businesses have been able to access[55].

One reason why the VC industry has not seen its global investment sum fall with the rise of CFPs, is that the reduction in small business loans made by banks has left a vacuum so large that CFPs and VC firms are not forced to compete to extend financing. Another reason why VC firms have not been competing with CFPs as much is also the type of securities invested in by CFP participants and VC firms. Most of the proceeds invested via CFPs are namely invested via lending-based

[51] (Massolution, 2015)
[52] (Emerson, 2015)
[53] (Emerson, 2015)
[54] (Simon, 2015)
[55] (The Economist, 2014)

models whereas VC firms will take an equity stake, the motivation around investing are thus different. Whilst VC firms will want some control over the business, CFP lenders are usually happy to just let the business owner manage their own business as long as they continue to honour their debt obligations.

Comparing Equity Crowdfunding Portals with Other Alternative Financiers

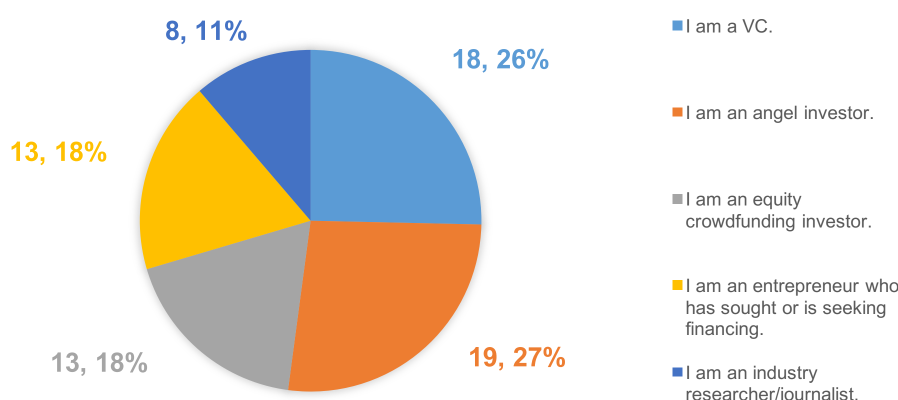
In order to contrast the newer forms of financing, such as equity CFPs, to the older forms, such as angel and VC financing, we need to set out a few dimensions according to which we can measure the differences. Through conversations with people knowledgeable on start-up financing, the author has been able to outline a few dimensions.

The author was also able to secure research access to CrunchBase's extensive database on more than 100,000 completed start-up fundraisers across the globe. In addition to analyzing CrunchBase's data, the author designed and sent out his own survey to venture capitalists, angel investors, equity CFP investors, entrepreneurs seeking funds and industry researchers. A total of seventy-one respondents were surveyed and their responses will be analyzed in conjunction with the CrunchBase data below.

Survey methodology

The survey was created on SurveyMonkey.com (see Appendix) and was distributed to respondents via personal contacts of the author's and was conducted anonymously with respondents having the option at the end of the survey to share their contact details with the author. Below is a breakdown of the occupation of respondents.

Figure 7: Occupation of Survey Respondents



Fees and Cost of Capital

The first dimension along which the newer and older forms of financing will be compared is cost, a common characteristic of competition.

For private equity funds, there has long been a two and twenty fee structure, whereby investors pay the managers a two per cent of AUM fee and pay them twenty per cent of the performance generated. The latter can be conditional to a 'high-water mark' clause, whereby a manager can only claim the performance fee if the fund's AUM are above a a historical high. This ensures that the manager is not rewarded for strong performance in one year if he has lost the fund money in previous years.

Equity CFPs have a different fee structure however. According to Jean-Baptiste Vermersch[56], entrepreneurs pay three types of fees when raising funds via equity CFPs:

- Entrance flat fees (avg. $1700)
- Capital raise-linked fees (avg. 6.35%)
- Legal and other success fees (avg. $2400)

As described earlier, equity CFPs are not legally considered brokers, however when seeing this fee structure, it reminds one of the fee structure used by the ECM departments in investment banks. There the gross spread lies between 5.5-6.2% for offerings over $100m, which makes equity CFPs relatively cheap when compared to the 7-9% gross spread that banks charge for offerings under $100m[57]. Rather than being a new form of private equity, could an equity CFP be a new form of investment bank?

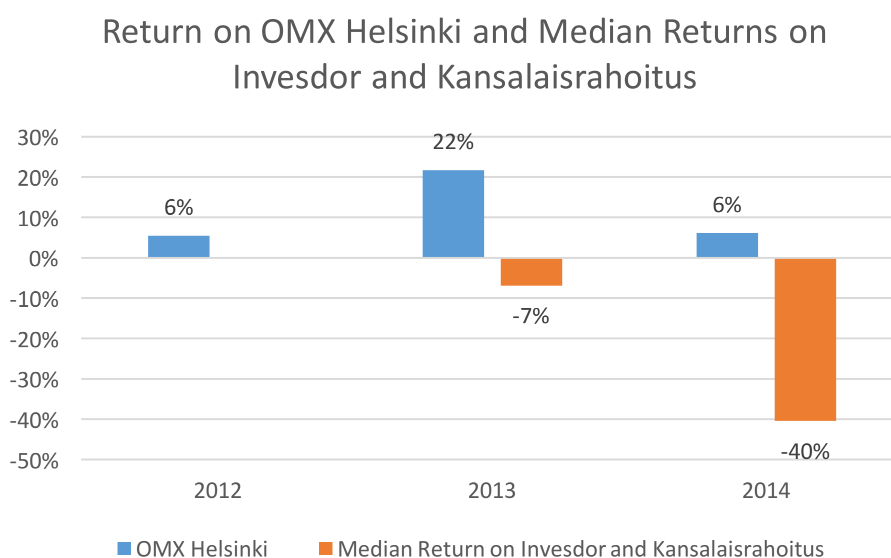
To answer this question in brief, the answer would be no. Raising funds via an equity CFP falls under less regulation and therefore the legal costs will always be lower. Furthermore, as soon as firms seek larger individual investments, investors are going to want greater transparency. Navigating the regulations of public offerings and organizing roadshows will therefore still be a competence monopolized by the

[56] (Vermersch, 2015, p. 20)
[57] (Astheimer, 2011)

large investment banks for time to come. Equity CFPs should therefore be understood as being akin to the lowest rung of the equity exchange ladder, with alternative exchanges such as the AIM being a rung higher and the most well-known ones such as the LSE being even higher.

Apart from the direct fees, where equity CFPs seem to be cheaper than the traditional exchanges, how does the cost of equity for this source compare to more traditional forms of financing? One study conducted in Finland looked at companies that had raised money via Invesdor, a CFP, and Kansalaisrahoitus, a company where brokers raise funds from retail investors on behalf of start-ups. The author filtered companies by excluding those with no financial data and where revenues were less than EUR 10k. The author then compared the ROE of the companies he found with the return on the OMX Helsinki, the Helsinki stock exchange. For the time period analyzed (see Figure 8), the OMX Helsinki consistently delivered positive returns whilst equity investors who had invested via CFPs suffered significant losses.

Figure 8: Return on Helsinki Stock Exchange and Median Return of Equity Crowdfunding Platforms[58]



Despite the analysis only covering two years, the median return of the eleven companies tracked was never positive and indeed massively negative in the second

[58] (Safarov, 2016); Return on Equity was calculated by dividing Net Income by Shareholder's Equity

year. These returns stand in stark contrast to the average IRR of 22% achieved by UK angel investors mentioned earlier[59].

Using the returns on a country's stock-exchange is probably not the most relevant indicator to use when benchmarking the returns of crowdfunded ventures due to the huge differences in the underlying firms. However, for countries with smaller financial markets such as Finland it is perhaps the only reliable benchmark.

Additionally, private equity investments made on equity CFPs should not be seen as substitute investments for equity traded on the traditional public exchanges. In fact, equity CFPs such as Seedrs explicitly state that the investments made via their site are 'not safe'. They also suggest that investors put most of their capital in safer and more liquid assets such as "mutual funds, bonds and bank deposits"[60].

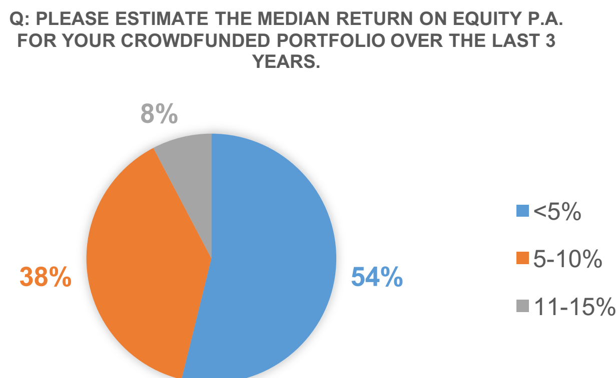
Safarov's method of calculating ROE as net income over shareholder's equity can also be questioned as it assumes that the accumulated net income is reflected in the value of the equity when it is sold on, assuming no dividends are paid out. Whilst none of the firms paid any dividends, without knowing how much the equity stakes were sold for in secondary sales, it is impossible to know whether this assumption holds. The fortitude of this assumption should especially be questioned for CFPs when close to sixty per cent[61] of platforms give entrepreneurs free reign in valuing their company, trusting that the 'wisdom of crowds' will arrive at an efficient valuation. However, the crowd must draw most of its conclusions from data provided by the entrepreneur therefore the likelihood that the valuation is efficient is not very high.

To best calculate the realized ROE, one would require information on the secondary sale of equity stakes to be kept by equity CFPs such as EquityNet.com, however, this is presently not recorded. This is understandable given that equity crowdfunding is still in its infancy and the first exit by a crowdfunded venture on the world's most popular equity CFP only occurred in June 2015[62]. Additionally, very few if any firms on equity CFPs pay dividends, it is therefore not possible to find out the ROE

[59] (Turville, 2007)
[60] (Seedrs Ltd., 2015)
[61] (Vermersch, 2015, p. 25)
[62] (Monro, 2015)

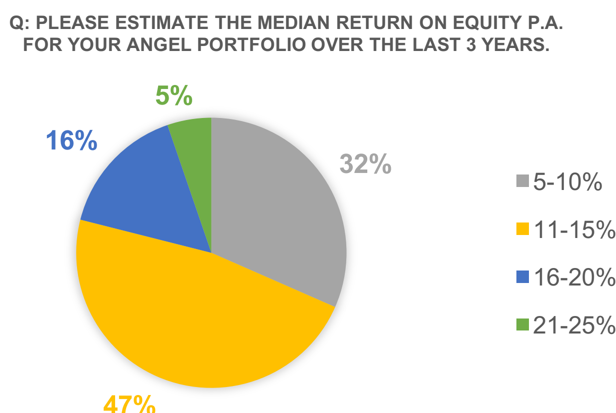
realized by Equity Investors from the CFPs themselves, but we can rely on our survey data for this.

Figure 9: Median ROE for Equity CFP investors (Respondents: 13)



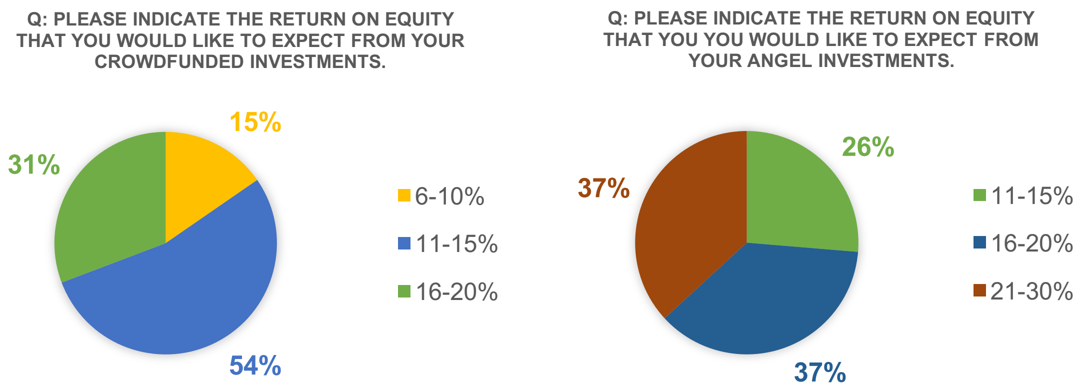
From this small sample (see Figure 9) more than 90% of equity CFP investors estimated that they achieved less than 10% returns per annum, with most achieving less than 5% returns.

Figure 10: Median ROE for Angel Investors (Respondents: 19)



According to the nineteen angels surveyed (see Figure 10), they estimated that their returns were significantly better than those reported by equity CFPs and the possibility of negative returns amongst those surveyed can be excluded.

Figure 11: Expected ROEs for equity CFP and angel investors (Respondents: 13 and 19 respectively)



Whist angel investors seem to have a better ROE, it would seem that the realized returns do not live up to expectations for both groups and that for both equity CFP and angel investors, the realized cost of capital is too low (see Figure 11).

Do equity CFP and angel investors have too high expectations or is the realized ROE indeed too low for the risk borne? Using the survey data from the VC respondents, we can see how expected returns from more professional investors compare.

Figure 12: Targeted IRR for VC firms which invested in the seed and first rounds (Respondents: 12)

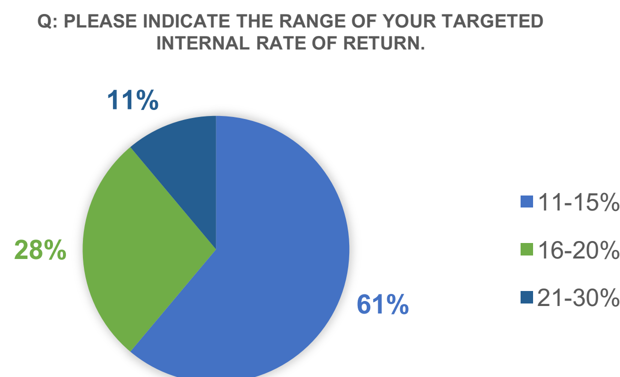
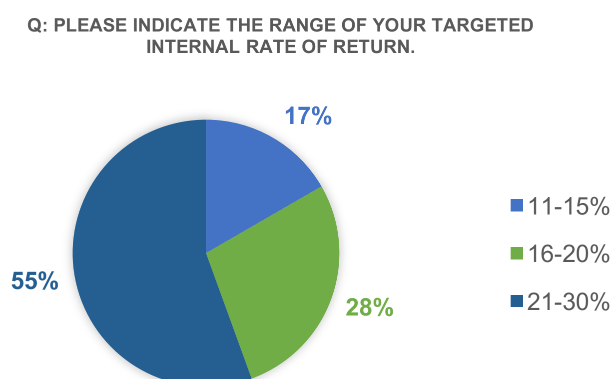


Figure 13: Targeted IRR for VC firms which invested in 2nd and later rounds (Respondents: 6)



In order to gauge the cost of equity for those seeking VC financing, the question was posed slightly differently to VC firms as many had expressed reservations about revealing their realized IRR, even if they could answer the survey anonymously[63]. From the charts above (Figure 12 and Figure 13), it is clear that VC firms have vastly different expectations of the cost of equity capital than equity CFP investors or Angel investors, despite investing at later stages where the risk of failure is likely to be lower. We can therefore conclude that realized ROE in our sample is probably too low for the risk that the equity CFP and angel investors take.

So why do start-ups continue to receive funding from equity CFP and angel investors? Also, why would start-ups choose this form of financing if consistently underperforming is only going to aggrieve investors? Could it be that start-ups are not looking to seek follow-up financing from these investors, and investors are willing to be disappointed most of the time in order to be receive returns beyond their wildest expectations some of the time? Evidently, the supply and demand of capital equilibrium is not found simply on a cost-basis.

In order to clarify my findings, I turned to Mr. Rupert Hart, a family friend, former consultant with Bain & Co. and current advisor to start-ups in Silicon Valley. He confirmed that the cost of capital is not the main criteria which leads entrepreneurs to choose equity crowdfunding platforms over angel investors or VC firms.

[63] However, the author does not believe that the target IRR will deviate massively from the realized IRR as investors are unlikely to support a fund for a long time if it continuously disappoints them.

He added that whilst small businesses would often prefer financing from investors who can also add expertise, these investors are hard to find. Websites like AngelList try to pair start-ups with syndicates consisting of angels, VC firms and co-investors. However, much like online dating, the process is not entirely efficient. In search of further answers, I came across Doug Monro, co-founder of a job search engine, who had detailed his experience with equity crowdfunding online and which I have summarized below.

Adzuna: A case study

Adzuna is a job search engine which states that it searches, or ‘crawls’, thousands of websites in order to collate millions of job advertisements so that users merely have to turn to Adzuna as the nexus of online job postings. It has such a wealth of information that it provided real-time data to the prime minister to be used as an indicator of the UK’s economic health[64].

The idea came about in 2010 after the founders, who had previously met whilst working at Gumtree in 2005, decided that jobseekers in the UK were not being well served by websites existing at the time. The founders included a social dimension, by allowing Facebook and LinkedIn plug-ins which meant that users could be referred by previous employers or friends. Adzuna generates revenue by receiving compensation on a cost-per-click basis for directing web traffic to the sites that were initially ‘crawled’. A further revenue stream is situational advertising, which appears on the site itself and can be deemed a classic revenue stream.

In Europe, the firm sees itself as unrivalled but thinks there are some US-sites, such as Indeed.com which also have a vertical-search engine business model, that offer a similar user-friendly experience. Rather than being viewed as a job-posting board like Monster.com, the firm sees itself more as the Google of job searching[65].

Doug Monro, one of the founders, raised £2m for Adzuna via Crowdcube, the largest equity crowdfunding site in Europe. He admits that he believed that crowd-funding was for ‘losers’, even if it was cheaper, up until a year before he crowd-funded the

[64] (Robinson, 2012)
[65] (Wired.co.uk, 2012)

£2m but that he now thinks that raising funds via CFPs is preferable in certain instances[66].

He states that investors on an equity CFP platform are more likely to purchase the final product than angel and VC investors. Therefore, the pitches incorporate a sales-element and do not just focus on the business case and financial metrics. Unlike pitching to VCs, where their relative sizes and investment strategy are common knowledge, it is harder to prioritize anonymous CFP investors according to these criteria and as a result more pitches are likely to occur. Doug sees this as beneficial to a firm's success as entrepreneurs can raise funds and market their product at the same time.

In Munro's case, his small team spent eight weeks writing emails and making phone calls in order to raise £2m. However, they had received commitments for 50% of their target beforehand and for which they merely used Crowdcube as a facilitator so he warns of relying solely on "anonymous people who will just come to you with their cheque books open"[67]. The most difficult period for Munro was between weeks 2 and 6, when they only managed to raise 25% of the target and which he labels "The Valley of Death". The final 25% he says, were raised within 2 weeks and he blames 'herd behaviour' for the final surge. He guesses that in the end almost £1.5m was raised from people that the team brought to the CFP.

With VC investors usually being more sophisticated, Munro believes that their approval is a better indicator of "your real progress and chance of success"[68] and is viewed as a badge of honour by entrepreneurs. His theory is that the more sophisticated the investor, the more intense the pitch's scrutiny will be and therefore the more resilient the final concept will be to failure once improvements have been made, following the critique. However,

In conclusion, Doug Munro states that VC firms should be preferred to CFPs when the following four factors are required:

[66] (Monro, 2015)
[67] (Monro, 2015)
[68] (Monro, 2015)

1. Scale – As a high number of individual investors is required for a large fundraising, which is capped at EUR 5m anyway in Europe[69]
2. Board members, business connections or legitimacy – VC employees can act as board members and will bring an extensive business network with them
3. Fundraising network – If you cannot raise 50-75% of the target from your existing network like Doug Munro's team did, then VC funding might be the only solution
4. Follow-on capacity – If the start-up is likely to require several funding rounds, then it you might prefer your initial investors to have deeper pockets

VC firms can sometimes be populated with ex-founders and thus will be able to share their experience of starting up a company which could save the entrepreneur from making costly mistakes. So how do Doug's statements match up to those survey respondents who identified themselves as entrepreneurs?

The Entrepreneur's Perspective

Although only three of the thirteen respondents who identified themselves as entrepreneurs, had any experience with raising funds on an equity crowdfunding site, two of them stated that when they raised funds 11-40% of their funds came from anonymous investors. The other had managed to raise 40-70% of the funds from people she didn't know.

Including the entrepreneurs that had no experience of equity CFPs, all identified their business as being in the start-up phase and were looking to raise between $25k and $250k, with most wanting to raise between $50k and $100k. Interestingly, more than half of the entrepreneurs surveyed did not know their cost of capital whilst one-fifth estimated it to be between 16-20% and the rest believing it to be between 20-30%.

When it came to financing preferences, close to sixty per cent would prefer VC financing. The most cited reason for this was because they didn't believe they could raise the amounts they wanted to from other sources and because they were likely to require follow-on investment. A lesser cited reason was that they were looking for board-members and legitimacy. Of those that thought raising funds via equity CFPs

[69] (European Commission, 2016, p.22)

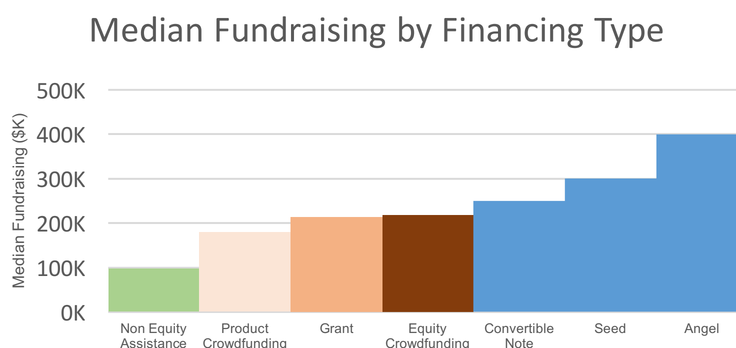
would be more preferential, the most cited reasons for this were that they ‘preferred less shareholder involvement’ and believed it to be a great way to market their product.

In conclusion, founders most probably still prefer VC financing to equity CFPs as the cost of equity does not seem to be the most significant factor influencing their decision where to obtain capital. Whilst I disagree with Doug’s statement that VC firms are more sophisticated investors, after all half the funds on the world’s largest peer-to-peer lending platform originate from hedge funds[70], I agree with his opinion on the most significant factor influencing entrepreneur’s source of capital, namely the amount of financing sought.

Median Fundraising Sought and Financing Round

The size of the fundraising sought is much more of a determinant for which type of investor an entrepreneur seeks out, as the following chart illustrates (see Figure 14).

Figure 14: Median Fundraising by Financing Type (Source: CrunchBase Excel Export v3.22)



From the chart above, it quickly becomes clear that between non-equity assistance (i.e. the owner’s own funds and sometimes from the 3Fs) and convertible note financing, a common tool for smaller angel investors, there is little financing available besides grants and CFPs. The difference between the median fundraising size for non-equity assistance and convertible notes equates to a $152K (See Table 2) ‘funding gap’, the range that used to be covered primarily by small bank loans but into which CFPs have stepped. In this regard, equity CFPs are unlike the more traditional sources of private equity and compete more closely with institutions

[70] (Gapper, 2016)

handing out grants. However, entrepreneurs will most likely prefer taking a grant over equity CFP funds if they are able to secure it.

Table 2: CrunchBase Excel Export v3.22 (Sorted by median investment size; Underlying Entries: 109,329)

Type	# of deals	Total invested	Min.	10th Percentile	20th Percentile	30th Percentile	40th Percentile	Average	Median	60th Percentile	70th Percentile	80th Percentile	90th Perc
Non-Equity Assistance	111	$49M	-	$14K	$25K	$33K	$60K	$444K	$98K	$125K	$204K	$492K	
Product Crowdfunding	441	$655M	-	$13K	$32K	$80K	$125K	$1M	$180K	$300K	$510K	$1M	
Grant	2441	$9,523M	-	$22K	$40K	$70K	$120K	$4M	$214K	$490K	$1M	$2M	
Equity Crowdfunding	1291	$1,093M	-	$7K	$33K	$76K	$147K	$847K	$219K	$303K	$500K	$841K	
Convertible Note	2004	$2,897M	-	$40K	$70K	$100K	$128K	$1M	$250K	$400K	$640K	$1M	
Seed	27300	$21,505M	-	$25K	$50K	$100K	$160K	$788K	$300K	$500K	$800K	$1M	
Angel	5451	$4,513M	-	$56K	$110K	$200K	$275K	$828K	$400K	$500K	$750K	$1M	
Debt Financing	7279	$129,910M	-	$115K	$250K	$465K	$748K	$18M	$1M	$2M	$3M	$5M	
Venture	58061	$701,382M	-	$500K	$1M	$2M	$4M	$12M	$5M	$8M	$10M	$15M	
Post IPO Equity	825	$79,589M	$11k	$1M	$3M	$5M	$9M	$96M	$13M	$22M	$35M	$65M	
Private Equity	2176	$188,644M	$2k	$1M	$4M	$7M	$12M	$87M	$20M	$35M	$61M	$100M	
Post IPO Debt	187	$33,240M	$70k	$924K	$3M	$6M	$10M	$178M	$22M	$32M	$52M	$150M	
Secondary Market	33	$2,647M	$2k	$406K	$4M	$6M	$17M	$80M	$40M	$60M	$81M	$108M	

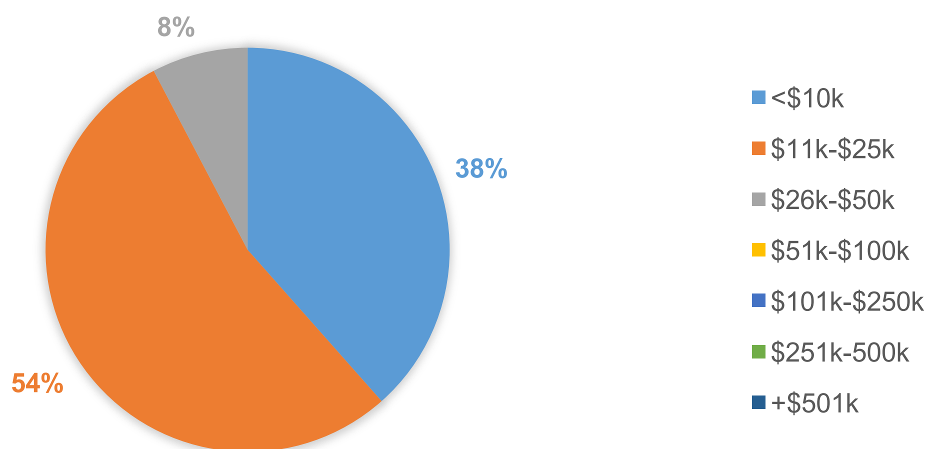
The median size of fundraising sought and the round of financing that the entrepreneur is engaged in, are almost identical criteria as rounds of financing can usually be distinguished by the median amount raised. In the survey, eighteen respondents self-identified as venture capitalists (see Figure 7), of which fourteen stated that they typically invested in the series A rounds and the rest indicated that they typically invested in the seed round.

Thirteen respondents to the survey identified themselves as equity CFP investors and the following chart illustrates the range of median investment size made by each of the respondents (see Figure 15). Close to ninety-percent of respondents usually invest less than $25k whilst most invest between $11k and $25k. Although this is not a statistically large enough sample size for us to be truly confident of this result, it is not hugely different from the £2.5k average investment size reported by Seedrs[71], an equity CFP, for the year 2014. Whilst it is unclear whether equity CFP investors normally invest thousands or tens of thousands, they do not seem to invest hundreds

[71] (Lang, 2015)

of thousands like individual angel investors might do. Therefore, for equity CFPs to start operating in the same financing rounds as angels and VC firms, they need to ensure that the Unless the number of individual investors and/or their average investment size increases.

Figure 15: Median Investment Size of Equity CFP Respondents



More equity CFP investors per fundraise will undoubtedly lead to a greater degree of shareholder fractionalization and an increase in the average investment size per equity CFP investor might lead to an increase in their involvement. These two dimensions will be analyzed below.

Shareholder Fractionalization

Earlier it was mentioned that PE investors usually own a "substantial or controlling stake in the business"[72]. VC firms on the other hand will insist less on control but might occupy a seat on the board. Angel investors will often not have much say in the running of the business and will be more passive in their approach. Whilst the concept of equity CFPs allows firms to raise funds from many smaller investors, the average number of investors per fundraise is not published by the platforms.

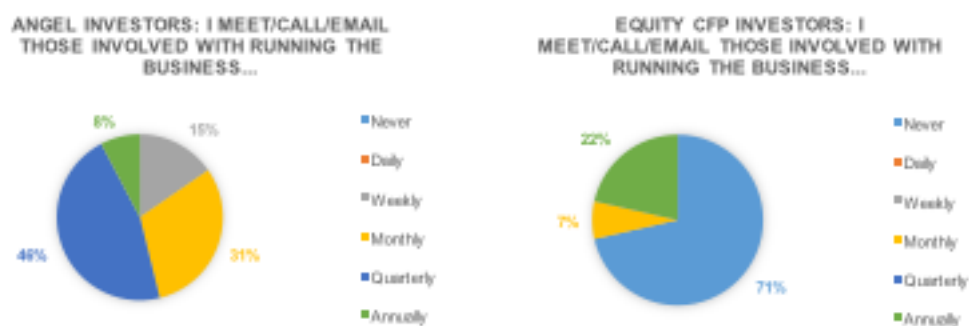
The Crunchbase dataset does include information about the number of investors per fundraise, however for equity CFPs the individual investors are represented by the

[72] (Gilligan & Wright, 2014, p. 44)

equity CFP and they appear as one investor. It was possible however to work out the average number of investors in an equity CFP ‘syndicate’ once the average investment size and the average size of fundraise on a platform is known. Seedrs reported the average investment size to be £2.5k in 2014. Using the Crunchbase dataset, I was able to filter all reported fundraisings conducted solely via Seedrs for the year 2014. In total, just over £1.1m was reported from nine transactions, making the average fundraise close to £123k. Using an average figure of £2.5k, fourty-nine individual investors would be required to raise the aforementioned amount during that year.

Obviously, having close to fifty investors represented by one shareholder is similar to the structure of private equity firms seen earlier in the chapter “Defining Traditional VC and Larger PE firms”. Before we delve into the legal similarities between equity CFPs and traditional PE firms though, I will briefly compare the degree of

Figure 16: Degree of Involvement Reported by Angel Investors and Equity CFP Investors



involvement in their investments, that survey respondents reported (see Figure 16).

Judging by the survey responses, it seems that investors on equity CFPs barely get involved with their investment. Given the size of the average investment, it’s too small for an active approach to be worthwhile. Angels on the other hand seem to take a much more active role with almost half the respondents interacting with their investments at least quarterly. Could it be that equity CFP investors do not feel the need to become active because they have delegated many of the traditional shareholder activities to the platform? This and a comparison between the legal structures will be examined in the next chapter.

Legal Structure, Shareholder Involvement and Legal Enforcement

In a private equity fund structure, the main parties are: the investors, the general partners, the sponsor, the investment advisors, the investment fund and the portfolio companies (see “Defining Traditional VC and Larger PE firms”). The investment fund is a pool of capital with no direct operations and investors purchase interests in the investment fund, which makes the actual investments in portfolio companies on their behalf.

The general partner (GP) has the legal power to act for the investment fund, whereas the investment advisers which are affiliated with the GP are appointed to provide investment advisory services to the fund[73]. The fund is the entity which employs the investment professionals, evaluates potential investment opportunities and incurs the expenses associated with the administration of the fund.

The sponsor of a private equity fund typically creates an SPV to control and administer the fund. Taking the example of US statutes, an LP is controlled by a GP and an LLC is controlled by a manager. The sponsor will also establish an investment advisor entity which will enter into an agreement with the fund, its GP or manager. Under the agreement, the fund pays management fees to the investment adviser to employ the investment professionals, evaluate potential investment opportunities and undertake the day-to-day activities associated with investment advisory services.[74]

Unlike the GPs, the limited partners (LPs) are not personally liable and thus their obligations and liabilities to contribute capital or make other payments to the fund are limited to their initial capital commitment. The interaction between LP and portfolio companies however, is also fully delegated to the GP.

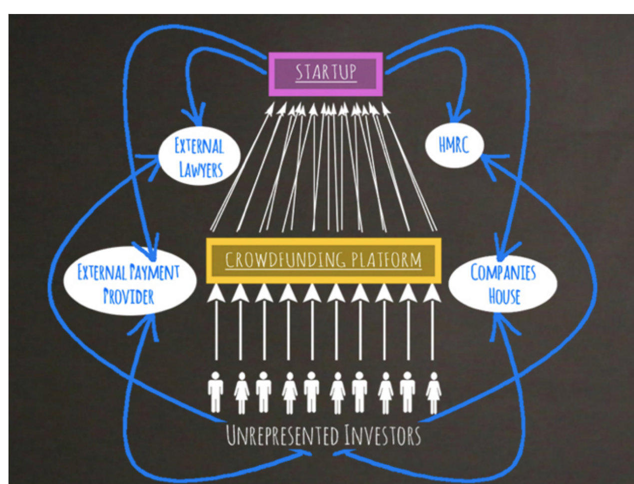
For equity CFPs there are two types of shareholder structure: unrepresented and nominee represented[75].

[73] (Naidech, 2012)
[74] (Naidech, 2012)
[75] (Seedrs, 2014)

Unrepresented

With an unrepresented shareholder structure (see Figure 17), the company needs to interact with each shareholder individually. This means that they can be burdened with requests for information by every shareholder. Additionally, the company needs to mandate external lawyers for the shareholder agreements and needs to file HMRC/company registration documents separately. For the investors, this usually means no voting shares (similar to limited partner's rights in private equity) and few investor protections.

Figure 17: Unrepresented CFP shareholder structure (Source: Seedrs)

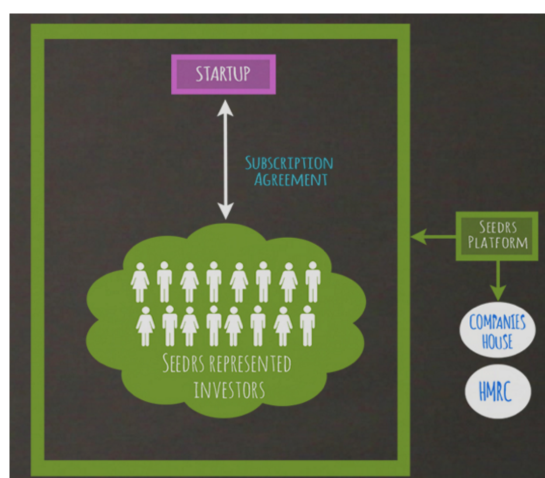


Nominee represented

With a nominee represented shareholder structure (see Figure 18), the company needs only to interact with one legal shareholder (in this case Seedrs). This reduces costs as the platform will complete the legal and tax paperwork on a whole-sale basis. It should be noted that whilst the nominee carries out due diligence of the companies and deals with the tax arrangements, activities also carried out by a private equity fund, they do not get as involved in the management of the company as a GP in the private equity structure would.

Regarding the investor's rights, on the one hand they are not able to burden the company with information requests, but they have voting rights and greater protection against dilution in the form of tag-along and drag-along clauses.

Figure 18: Nominee represented CFP shareholder structure (Source: Seedrs)



The nominee represented structure requires less time to be devoted to shareholders, is a more standardized model and benefits investors who only desire a passive involvement. If we recall the responses yielded by the survey, most equity CFP investors hardly interacted with their investments. This was due to the fact that the investment sums are usually quite small and are therefore not worth following too intensely. The nominee structure is therefore ideally suited to most equity CFP investors.

The passive tendency of most equity CFP investors, supports the claim that they are most similar to LPs in the private equity structure whilst the platforms could be a type of less active GP. However, as the median investment size and industry grows, so might the responsibilities of the the platform. The process of booking accommodation, which was disintermediated to a large extent by AirBnB, has already seen a new form of intermediary emerge: the AirBnB property manager[76]. Equity crowdfunding could see a similar trend emerge if investors increase their average investment size and demand greater oversight in return.

Legal Enforcement

Finally, aside from the legal structure of private equity, the legal enforcement plays a large role in determining the depth of the market. Many private equity transactions are covered by English law, which is common law and so incorporates judicial verdicts on a rolling basis. On the other hand, Continental European cases are

[76] (Williams, 2016)

decided by civil law and are designed by scholars and legislators in a tradition which has its origins in the Roman Empire. Often, the origin of the legal systems can be traced back through a country's occupation or colonisation history.

According to Porta, Lopez-de-Silanes, Shleifer and Vishny, "common law countries protect both shareholders and creditors the most, French civil law countries the least, and German…and Scandinavian civil law countries somewhere in the middle" (1997, p. 4). Porta et al. state that "better [shareholder and creditor] legal protections enables the financiers to offer entrepreneurs money at better terms", which in turn they argue entices entrepreneurs to offer more debt and equity in return, thus deepening the capital markets.

The Trend of Disintermediation and Crowdfunding

In financial markets, there have traditionally been two main reasons for financial intermediaries. Primarily, the existence of transaction costs[77] reduces investor returns, but by pooling capital with intermediaries, investors can take advantage of economies-of-scale. Fixed transaction costs can thus be shared between a larger number of investors and their returns should subsequently improve.

The second significant reason for intermediaries' existence is that they are presumed to possess superior information to that of the average investor and thus investors mandate them as 'delegated advisors'. Further reasons include their ability to shift risk across time and space, the provision of liquidity to investors who would otherwise have to terminate their investments, their role as a bridge between investors with differing beliefs and their ability to offer compensation schemes that institutional investors are refrained from offering.

Intermediaries can suffer from conflicts of interest however, as the practice of front running[78] trades' shows, whereby an intermediary or agent, takes advantage of information provided to her by her principal. Of all the intermediaries' raisons d'etre listed above, the second one is diminished the most by agents acting in their own interest rather than the client's. This is because in such cases, the reason why the agent has been put into this position of power, is because the client trusts the agent

[77] (Gurley & Shaw, 1960)
[78] (Leong, 2014)

to be better informed and trusts her to use her superior knowledge to the client's advantage. If the client fails to trust the agent to use their superior knowledge in the client's interest, there seems little point in the client entrusting the agent with their funds.

Therefore, so long as clients trust the intermediary to have more expertise in generating a higher return than the client herself can and clients have faith in the intermediary acting in their best interest, disintermediation will be limited.

So why has disintermediation occurred nonetheless? Which, if any, intermediaries are the ones losing out to crowdfunding? The answers to these questions are currently unclear as the average crowdfunded raise is a lot smaller than the amount invested by small intermediaries such as micro-VCs or even angel investors. Also, non-professional investors still presume professional investors to have better a better understanding of investing than they do.

In concluding this section, one can assume that disintermediation has resulted mainly because something about the first reason for intermediation, namely transaction costs, must have changed. Broadly, this can be assumed to be true as the internet has reduced the cost of communication directly. It has become cheaper for entrepreneurs to spread their message to willing listeners and it has become cheaper for investors to source third party information as well as transfer funds, should they be willing to commit funds to an idea. Finally, in the low interest-rate environment, the opportunity cost in foregoing the minimal amounts earned through interest, is not particularly high, driving funding supply to various crowdfunding models.

Conclusion

Currently, the equity crowdfunding industry is much smaller than the debt-based crowdfunding industry however, both are not large enough to fill the funding vacuum left behind by the retreat of bank lending. Equity crowdfunding is the sole provider of capital when family and friends cannot help and when the investment size sought, lies below the minimum that angel investors deem worthwhile.

Whilst the portals are worthwhile competition vs. angel investors for larger offerings, there still exists a certain contempt for them amongst entrepreneurs. As if listing oneself on a crowdfunding site is evidence that your business model did not stand up to the scrutiny of venture capitalists, which are viewed as the ‘smarter money’. In my opinion this will change as the ‘smarter money’ uses portals to scout out investment opportunities, which it has started to do already. Currently, the survey data does indeed support the theory that equity crowdfunding investors are less sophisticated as venture capitalists expected and probably achieved better returns than portal investors. However, this could also be down to the fact that most CFPs allow the entrepreneur to value their equity themselves and faced only with the entrepreneur’s information, investors might be paying a premium for an overly optimistic scenario.

If platforms moved to independent valuations this could increase average returns and investor confidence. In such a case, investors could start to increase their investment sizes. Depending on changes in technology, independent valuations would not necessarily increase the costs incurred by the platform and platforms might even be able to take on further responsibilities allowing them to operate much like public stock exchanges do today. Although, of the angel investors surveyed none of them viewed their private equity portfolios as a substitute for their public equity portfolio meaning this scenario is a distant speck on the horizon.

Equity crowdfunding portals have the advantage of technically having a global reach. Provided that the ‘smart money’ becomes ever more active on equity crowdfunding portals and that portals find ways for companies to easily seek follow-on investments, then the portals will have achieved the same appeal that venture capital firms currently have. In such a case, we may see the two forms competing much more.

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Appendix: Survey Format

Equity crowdfunding vs. venture capital financing

Welcome!

Dear Sir/Madam,

Whether you have received this very brief survey [less than 3 minutes] from a friend or from myself, I would like to invite you to complete it as part of my research into early-stage business financing. If you are an entrepreneur with experience raising capital, or if you work in a venture capital firm, invest in businesses as an angel, invest in businesses via equity crowdfunding platforms or a generally knowledgeable on the subject matter, I would like to hear from you.

The purpose of this research is to establish the differences and similarities between venture capital financing, angel financing and equity crowdfunding. The conclusions drawn will be used to shape the strategies of both traditional investors and crowdfunding platforms for the future of early-stage financing.

For the sake of simplicity, often only one answer will be possible, in such cases please just choose the answer which best fits your situation.

Your answers will not be shared with anybody besides myself and will only be used for the purpose of aiding the conclusions made as part of my master studies in finance at HEC Paris. At the end of this survey, you will have the option of adding your contact details, in case you decide that you would be available for a brief telephone conversation to discuss your responses.

This research is being supervised by Mr Patrick Legland, Global Head of Research at Societe Generale CIB.

Yours Sincerely,

David Schneider

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Equity crowdfunding vs. venture capital financing

Questions marked with an asterisk (*) require at least one answer.

* 1. Please choose the option that applies.

Equity crowdfunding vs. venture capital financing

Venture Capital

You have previously indicated that you will answer this survey in the capacity of a venture capitalist.

Questions marked with an asterisk (*) require at least one answer.

* 2. Which financing rounds do you typically participate in?

Equity crowdfunding vs. venture capital financing

Venture Capital - Seed and first round

Questions marked with an asterisk (*) require at least one answer.

* 3. Please indicate the number of funds currently managed by your firm.

* 4. Please indicate the median fund size.

* 5. Which stage of development do you typically invest in? Please mark all that apply.

- [ ] Start-up
- [ ] Product development
- [ ] Revenue generation
- [ ] When company is already profitable

* 6. Approximately, what is the median investment size in each portfolio company?

* 7. Please indicate the range of your targeted internal rate of return.

* 8. After how many years do you typically seek to exit your investment?

Equity crowdfunding vs. venture capital financing

Venture Capital - Second and later rounds

Questions marked with an asterisk (*) require at least one answer.

* 9. Please indicate the number of funds currently managed by your firm.

* 10. Please indicate the median fund size.

* 11. Which stage of development do you typically invest in? Please mark all that apply.

- [ ] Start-up
- [ ] Product development
- [ ] Revenue generation
- [ ] When company is already profitable

* 12. Approximately, what is the median investment size in each portfolio company?

* 13. Please indicate the range of your targeted internal rate of return.

* 14. After how many years do you typically seek to exit your investment?

Angel Investor

You have previously indicated that you will answer this survey in the capacity of an angel investor.

Questions marked with an asterisk (*) require at least one answer.

* 15. Please indicate the approximate amount you have invested in start-ups over the past 3 years.

* 16. Do you have any personal experience working in the following sectors? Please mark all that apply.

- [ ] Business and financial services
- [ ] Consumer goods
- [ ] Consumer services
- [ ] Energy and utilities
- [ ] Industrial goods and materials
- [ ] Information Technology - Hardware
- [ ] Information Technology - Software
- [ ] Healthcare

Other (please specify)

* 17. Which type of sectors do you typically invest in? Please mark all that apply.

- [ ] Business and financial services
- [ ] Consumer goods
- [ ] Consumer services
- [ ] Energy and utilities
- [ ] Industrial goods and materials
- [ ] Information Technology - Hardware
- [ ] Information Technology - Software
- [ ] Healthcare

Other (please specify)

* 18. Approximately, what is the median investment size that you make?

* 19. Please estimate the median return on equity p.a. for your angel portfolio over the last 3 years.

* 20. Please indicate the return on equity that you would like to expect from your angel investments.

* 21. I meet/call/email those involved with running the business...

* 22. Approximately what percentage of investments do not live up to your expectations?

* 23. After how many years do you typically seek to exit your investment?

* 24. Do you consider angel investments a substitute to investing on the public stock markets for your investment strategy?

Equity crowdfunding vs. venture capital financing

Equity Crowdfunding Investor

You have previously indicated that you will answer this survey in the capacity of an equity crowdfunding investor.

Questions marked with an asterisk (*) require at least one answer.

* 25. Please indicate the approximate amount you have invested in start-ups over the past 3 years.

[ ]

* 26. Do you have any personal experience working in the following sectors? Please mark all that apply.

- [ ] Business and financial services
- [ ] Consumer goods
- [ ] Consumer services
- [ ] Energy and utilities
- [ ] Industrial goods and materials
- [ ] Information Technology - Hardware
- [ ] Information Technology - Software
- [ ] Healthcare

Other (please specify)

[ ]

* 27. Which type of sectors do you typically invest in? Please mark all that apply.

- [ ] Business and financial services
- [ ] Consumer goods
- [ ] Consumer services
- [ ] Energy and utilities
- [ ] Industrial goods and materials
- [ ] Information Technology - Hardware
- [ ] Information Technology - Software
- [ ] Healthcare

Other (please specify)

* 28. Approximately, what is the median investment size that you make?

* 29. Please estimate the median return on equity p.a. for your crowdfunded portfolio over the last 3 years.

* 30. Please indicate the return on equity that you would like to expect from your crowdfunded investments.

* 31. I meet/call/email those involved with running the business...

* 32. After how many years do you typically seek to exit your investment?

* 33. Approximately what percentage of investments do not live up to your expectations?

* 34. Do you consider investing via equity crowdfunding platforms a substitute to investing on the public stock markets for your investment strategy?

Equity crowdfunding vs. venture capital financing

Entrepreneur

You have previously indicated to respond to this survey as an entrepreneur.

Questions marked with an asterisk (*) require at least one answer.

* 35. Please mark the sector that best describes your business.

Other (please specify)

* 36. With which types of financing have you had experience?

37. If you have had experience raising funds from equity crowdfunding portals, what percentage of funds raised came from investors you didn't know?

- [ ] <1%
- [ ] 1-10%
- [ ] 11-40%
- [ ] 41-70%
- [ ] 71-100%

* 38. Approximately, how much are you looking to raise?

* 39. Which financing round is your business in?

* 40. Which stage of development is your business in?

* 41. Please indicate your estimated cost of equity.

* 42. Of the options listed below, which would be your preferred form of financing?

- Raising funds from venture capital firms
- Raising funds from angel investors
- Equity crowdfunding

Equity crowdfunding vs. venture capital financing

Preference: Venture Capital

Questions marked with an asterisk (*) require at least one answer.

* 43. Please select all the reasons why you prefer venture capital financing.

- [ ] Scale - I cannot raise enough via angels/crowdfunding platforms.
- [ ] I'm looking for board members and legitimacy.
- [ ] I'm looking for fundraising connections.
- [ ] I'm likely to require follow-on investment in the future.
- [ ] Other (please specify)

Equity crowdfunding vs. venture capital financing

Preference: Angel Investing

Questions marked with an asterisk (*) require at least one answer.

* 44. Please select all the reasons why you prefer raising funds from angel investors.

- [ ] It's less formal than raising funds from venture capital firms.
- [ ] I prefer dealing with only a handful of investors.
- [ ] Other (please specify)

Equity crowdfunding vs. venture capital financing

Preference: Equity Crowdfunding

Questions marked with an asterisk (*) require at least one answer.

* 45. Please select all the reasons why you prefer raising funds via equity crowdfunding portals.

- [ ] I like the fact that ordinary people can invest in my company.
- [ ] I prefer less shareholder involvement.
- [ ] I think it's a great way to market my company.
- [ ] I prefer the fact that I can raise funds solely online.
- [ ] Other (please specify)

Equity crowdfunding vs. venture capital financing

Industry researcher/Journalist

You have previously indicated to respond to the survey as an industry researcher/journalist.

Questions marked with an asterisk (*) require at least one answer.

46. Please indicate median investment sizes made by VC firms for each stage of development.

	<$500k	$501k-$1m	$1.1m-$2.5m	$2.6m-$5m	$5.1m-$10m	+$10m
Start-up	◯	◯	◯	◯	◯	◯
Product development	◯	◯	◯	◯	◯	◯
Revenue generation	◯	◯	◯	◯	◯	◯
When company is already profitable	◯	◯	◯	◯	◯	◯

47. Please indicate median investment sizes made by angel investors for each stage of development.

	<$10k	$11k-$25k	$26k-$50k	$51k-$100k	$101k-$250k	$251k-$500k	$501k-$1m	$1m-$5m	+$5m
Start-up	◯	◯	◯	◯	◯	◯	◯	◯	◯
Product development	◯	◯	◯	◯	◯	◯	◯	◯	◯
Revenue generation	◯	◯	◯	◯	◯	◯	◯	◯	◯
When company is already profitable	◯	◯	◯	◯	◯	◯	◯	◯	◯

48. Please indicate median investment sizes made by equity crowdfunding investors for each stage of development.

	<$10k	$11k-$25k	$26k-$50k	$51k-$100k	$101k-$250k	$251k-$500k	$501k-$1m	$1m-$5m	+$5m
Start-up									
Product development									
Revenue generation									
When company is already profitable									

49. Please indicate the range of targeted internal rates of return by sector expected by VCs.

	<1%	1-5%	6-10%	11-15%	16-20%	21-25%	26-30%	31-35%	36-40%	41-50%	+51%
Business and financial services											
Consumer goods											
Consumer services											
Energy and utilities											
Industrial goods and materials											
Information Technology - Hardware											
Information Technology - Software											
Healthcare											

50. Please indicate the range of targeted internal rates of return by sector expected by angel investors.

	<1%	1-5%	6-10%	11-15%	16-20%	21-25%	26-30%	31-35%	36-40%	41-50%	+51%
Business and financial services	◯	◯	◯	◯	◯	◯	◯	◯	◯	◯	◯
Consumer goods	◯	◯	◯	◯	◯	◯	◯	◯	◯	◯	◯
Consumer services	◯	◯	◯	◯	◯	◯	◯	◯	◯	◯	◯
Energy and utilities	◯	◯	◯	◯	◯	◯	◯	◯	◯	◯	◯
Industrial goods and materials	◯	◯	◯	◯	◯	◯	◯	◯	◯	◯	◯
Information Technology - Hardware	◯	◯	◯	◯	◯	◯	◯	◯	◯	◯	◯
Information Technology - Software	◯	◯	◯	◯	◯	◯	◯	◯	◯	◯	◯
Healthcare	◯	◯	◯	◯	◯	◯	◯	◯	◯	◯	◯

51. Please indicate the range of targeted internal rates of return by sector expected by equity crowdfunding investors.

	<1%	1-5%	6-10%	11-15%	16-20%	21-25%	26-30%	31-35%	36-40%	41-50%	+51%
Business and financial services	○	○	○	○	○	○	○	○	○	○	○
Consumer goods	○	○	○	○	○	○	○	○	○	○	○
Consumer services	○	○	○	○	○	○	○	○	○	○	○
Energy and utilities	○	○	○	○	○	○	○	○	○	○	○
Industrial goods and materials	○	○	○	○	○	○	○	○	○	○	○
Information Technology - Hardware	○	○	○	○	○	○	○	○	○	○	○
Information Technology - Software	○	○	○	○	○	○	○	○	○	○	○
Healthcare	○	○	○	○	○	○	○	○	○	○	○

* 52. Please select all the reasons why an entrepreneur might prefer venture capital financing.

- ☐ Scale - They cannot raise enough via angels/crowdfunding platforms.
- ☐ They're looking for board members and legitimacy.
- ☐ They're looking for fundraising connections.
- ☐ They're likely to require follow-on investment in the future.
- ☐ Other (please specify)

* 53. Please select all the reasons why an entrepreneur might prefer raising funds from angel investors.

- ☐ It's less formal than raising funds from venture capital firms.
- ☐ They prefer dealing with only a handful of investors.
- ☐ Other (please specify)

* 54. Please select all the reasons why an entreprenuer might prefer raising funds via equity crowdfunding portals.

- [ ] They like the fact that ordinary people can invest in their company.
- [ ] They prefer less shareholder involvement.
- [ ] They think it's a great way to market the company.
- [ ] They prefer the fact that they can raise funds solely online.
- [ ] Other (please specify)

* 55. Do you believe that in the future, most angel investors will invest via equity crowdfunding platforms?

* 56. Do you believe that investing via equity crowdfunding platforms could become a substitute to investing via the public stock market for wealthy individuals?

57. Additional comments (Optional)

Thank you!

Thank you for taking the time to complete my short survey. If you wish to share your contact details, please follow the instructions below. Please note that by sharing your contact details, you declare yourself prepared to be contacted by myself, David Schneider, in order to discuss some responses given.

58. Contact details (Optional)

Name ________

Company ________

Country ________

Email Address ________

Phone Number ________