



Crowdfunding as a tool for startups to raise capital *Why and how to use it*

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Abstract

This thesis aims to educate the reader on the different characteristics of crowdfunding, such that entrepreneurs who are considering how to raise funds for their new project can make more informed decisions. The thesis does this by extensively reviewing existing literature, both on crowdfunding and on related financing methods. The authors also examine the leading European crowdfunding markets in terms of performance, the crowdfunding platforms that operate and legal characteristics in the crowdfunding environment. Crowdfunding involves an entrepreneur creating an Internet campaign, with the aim to raise small amounts of money from a large amount of people - the crowd. The main focus of this thesis is on reward and equity crowdfunding, as these models are found most suited for startups with limited credit and performance history. Reward crowdfunding is essentially a pre-purchasing model, where future customers are invited to pre-purchase a product before production has begun. Equity crowdfunding is the offering of private companies' equity to the general public. The thesis also examines the possibilities that Norwegian entrepreneurs have in regard to crowdfunding. For the time being, the reward model seems to be more feasible for Norwegian entrepreneurs, seeing that cross-border transactions are better facilitated for this model, while the equity model faces more challenges. Two case studies of successfully crowdfunded businesses are presented, one by reward crowdfunding and one by equity crowdfunding, in order to illustrate practical aspects of crowdfunding campaigns.

Keywords: crowdfunding, entrepreneurial finance, startup, venture capital, signaling

Preface

This thesis is a part of our Masters of Science degree in Economics and Business administration at the Norwegian School of Economics, written during the autumn of 2015. The thesis is written within our major, business analysis and performance management.

This is an exploratory study on the concept that is crowdfunding. Crowdfunding is a more democratic way for consumers to express demand and influence the production of enterprises. We believe knowledge about the concept is highly relevant for entrepreneurs today. The evolvement of Web 2.0. made two-way communication with a large a crowd possible, potentially bringing valuable product feedback in addition to capital. In the Sundvolden decleration (2013), the Norwegian government expressed intention to strengthen innovation and establishment in all parts of the country, by focusing on entrepreneurs and startups. Further, the government expressed intention to establish an innovation platform to help connect entrepreneurs with private capital, while also considering to connect this with tax incentives. We believe this increases the relevance of crowdfunding today.

The work process has been challenging, as the amount of academic knowledge and information on the subject is limited due to the industry's young age. Despite this, we as authors have benefitted much, seeing that crowdfunding and entrepreneurship in general is a common interest of ours.

We would like to thank Rotem Shneor from the *Nordic Crowdfunding Alliance* for a helpful discussion on the topic of Nordic crowdfunding. We would also like to thank Sigbjørn Groven from *Future Home* and Dan Hesketh from *Someone.io* for taking the time to discuss crowdfunding campaign complications with us. Lastly, we would like to pay our sincere gratitude to our supervisor, Michael Kisser, for his guidance throughout this process. His assistance and contribution helped us complete a thesis that we believe contains informational and practical value.

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¹ All tables and figures are self-constructed and based on secondary data unless otherwise mentioned

1. Introduction

One of the main obstacles that the startup-environment faces is raising capital (Cosh, Cumming and Hughes, 2009). In their quest to change the world, many entrepreneurs who seek to start a business end up with no external support. Banks typically require collateral of the firms it issues loans to, meaning loan financing is unavailable to many startups as they rarely fulfill this requirement. Furthermore, the problem of asymmetric information for investors is enhanced due to lack of available historical data. Venture capital investments are available to some, although these institutions prefer to invest relatively large amounts and usually only do so if the potential upside is significant. In addition, venture capitalist firms seem to be adjusting their investing strategies in favor of later stage companies, due to lower uncertainty and a more precise valuation process (EY, 2013).

Crowdfunding has emerged as a rapidly growing form of fundraising. This global phenomenon accounts for large amounts of capital and is currently in an evolvement phase, where both the general population and government officials are becoming more aware of the potential that it brings. As a result, crowdfunding may develop to be an alternative source of capital for entrepreneurs in need of financing.

The focus of this thesis is on the entrepreneur and how she may take advantage of the potential benefits that crowdfunding brings. Characteristics of crowdfunders are therefore examined with the perspective of an entrepreneur, meaning the attractiveness of crowdfunding as an investment opportunity for investors is only briefly touched upon.

The thesis starts by briefly presenting applied research methods. Chapter 3 presents the concept of crowdfunding, where six different crowdfunding models are discussed individually in order to highlight unique characteristics. Chapter 4 contains a discussion on the existing literature in the field of crowdfunding, signaling and venture capital investments. The crowdfunding industry and leading crowdfunding markets are presented in chapter 5 and 6, respectively. In the industry overview, global volumes and trends are studied on an overall basis, whereas the market overview examines specific domestic

markets in regard to evolvement, volumes, trends, legislation and regulation. Chapter 7 presents an analysis of the Norwegian crowdfunding market.

Chapter 8 provides a detailed discussion on why and how an entrepreneur should use crowdfunding, including an analysis of five different crowdfunding platforms and two case studies. Lastly, chapter 9 summarizes the paper and presents the authors' final thoughts on the subject.

2. Research methods

Throughout this exploratory study, the authors have relied on secondary data to a large extent. Market and industry statistics, institutional and academic research reports, and government press releases have provided much insight in the relatively unexplored topic of crowdfunding and alternative finance. Media coverage on crowdfunding has increased in recent years. However, the authors found most online news articles outdated and uninformative, because of the frequent changes within the industry.

Furthermore, primary data has been collected through a qualitative approach. Email correspondence, informal questionnaires and minor interviews have been performed in order to gain further insight and understanding in the practical aspects of crowdfunding.

The authors have administered the resources and data with caution, assessing credibility and relevance. The cited statistics have been crosschecked in order to assess its validity, whereas the academic literature has been internally discussed in in order to ensure its soundness and relevance.

3. What is crowdfunding?

3.1. Definition

Scholars define crowdfunding in many different ways, but the essentials are usually the same: An entrepreneur or private person creates an Internet campaign, aiming to raise small amounts of money from a large amount of people - the crowd. The goal of the campaign varies between which crowdfunding model is used. The European Commission defines crowdfunding as:

"... An emerging source of financing involving open calls to the public, generally via the internet, to finance projects through donations, monetary contributions in exchange for a reward, product pre-ordering, lending, or investment" (European Commission, 2015a).

Furthermore, crowdfunding can be divided into two main subcategories: financial and nonfinancial crowdfunding. The differences are explained in the following section.

3.2. Financial & non-financial crowdfunding

Financial crowdfunding involves an expectation for the crowdfunder to make a financial return on his investment, i.e. the motivation and incentives to invest are usually financially based. Three crowdfunding models fall under this definition: equity, loan and royalty crowdfunding. However, even though there is a possibility for the crowdfunder to make a financial return, he might also care about non-financial returns, e.g. the positive feeling of helping a local corner-stone business by investing in its equity, or of helping a student pay for education by lending him money through a crowdfunding platform (CFP).

Further, financial crowdfunding enables crowdfunders to invest in private debt and private equity. This opportunity expands the market portfolio. Including crowdfunding as an investment alternative therefore gives the investor a bigger potential to diversify and to find her optimal portfolio. To the extent that the market value of the crowdfunding universe is not marginal, one can argue that the efficient frontier shifts to the upper left when adding crowdfunding as an investment alternative. One can therefore argue that it is desirable for investors to include crowdfunded debt/equity as an investment opportunity, because they would potentially gain the same return for less risk or higher returns for the same risk.

Non-financial crowdfunding is the opposite, as there is no direct possibility for the crowdfunder to make a financial return on her investment. Reward and donation crowdfunding are examples of non-financial crowdfunding, although the crowdfunder's motivation in each model might differ.

There are currently six different crowdfunding models. These will be explained in the next section. However, throughout the thesis, the main focus will be on reward and equity crowdfunding.

3.3. Crowdfunding models

3.3.1. Equity crowdfunding

Equity crowdfunding is the act of offering securities to the general public by privately owned businesses, usually through the Internet. The model allows businesses to offer a proportion of their equity for a predetermined price, so that anyone can acquire a share in the privately held company (Pierrakis & Collins, 2013).

Risk and return

Under equity crowdfunding, a crowdfunder's return is linked to the future success of the business they invest in. This gives the potential for greater reward, as the value of the equity might increase if the business becomes profitable. However, it also presents higher risk for the crowdfunder. Equity owners are typically the last to be compensated, should the business go bankrupt. Another risk regarding equity crowdfunding is the risk of dilution of ownership (Massolution, 2015). Financing conducted by venture capital (VC) firms sometimes include anti-dilution protection, so that if future equity is bought at a lower price than what the VC firm paid in the previous funding round (commonly referred to as "down round"), the VC firm's ownership share is adjusted accordingly (Kaplan and Strömberg, 2004). This is not the case for many equity crowdfunding campaigns, and therefore poses an additional risk for crowdfunders (Massolution, 2015).

A potential challenge for issuers of crowdfunded equity is having to communicate directly to hundreds or even thousands of investors. Many CFPs (e.g. Seedrs) recognize this challenge, and their solution is to raise funds in a Special Purpose Vehicle (SPV). The SPV becomes the shareholder of the entire issue and places a single party to represent the interest of all of the crowdfunders (Massolution, 2015).

An example of equity crowdfunding is presented below. Legal aspects regarding equity crowdfunding are examined in chapter 6-7.

Example: BrewDog

The Scottish craft beer brewery BrewDog has taken advantage of the possibilities that equity crowdfunding presents. The business has previously initiated three equity crowdfunding campaigns, the first one in 2010, and is currently running a fourth one. Their current campaign lasts from April 2015 until April 2016. They call their campaigns "Equity for Punks" and have more than 14 500 shareholders invested in their (private) company (BrewDog, 2015a).



Image from BrewDog's "Equity for Punks IV" prospectus

Their current campaign aims to raise approximately \$ 41 million (£ 25 million) by selling 526 316 B shares (BrewDog, 2015a). As of October 2015, they have raised more than \$ 16,4 million (£ 10 million), setting the world record of money raised through equity crowdfunding (BrewDog, 2015b). However, *All Street*, an analyst firm dedicated to analyzing crowdfunding investments, seems to think that the equity is overpriced:

"... it is difficult to see how investors will make a financial return on this deal given the high valuation of £305 million. No financial forecast has been disclosed so there is very little clarity as to how the company will hit the revenue targets required to generate a risk adjusted return for investors" (Williams-Grut, 2015).

The All Street analyst also points out that their calculations shows a price-earnings ratio of 115, substantially higher than other brewery companies (Williams-Grut, 2015). Furthermore, BrewDog states in their prospectus that they do not intend to pay any dividends in the near future, and will instead reinvest potential profits in the business (BrewDog, 2015a).

3.3.2. Loan crowdfunding

Loan crowdfunding² is a financing model where crowdfunders lend money via CFPs (e.g. LendingClub, Zopa), either directly or indirectly to potential borrowers. Loan CFPs typically permit both private persons and businesses to apply for loans.

Risk and return

The borrowers in need of funds consult the relevant platform for a loan quote. By investing, the crowdfunders receive a debt instrument that specifies the terms of future repayment. Borrowers post loan listings on CFPs, but the details of the loans (e.g. total amount, interest and duration) will be determined by the CFP and the perceived risk of the borrower (e.g. credit risk, requested amount and financial history). Crowdfunders lend their funds by reviewing the loan listings that potential borrowers have posted. They can then select the listings that meet their criteria regarding risk, duration and return. The platform itself earns its income by taking an administrative fee and/or a percentage of the loaned amount (Massolution, 2015).

² Also called peer-2-peer lending (P2P), peer-2-business lending (P2B), marketplace lending and crowdlending

Financial return is found to be the greatest motivation for crowdfunders choosing this model. Furthermore, security (i.e. that their money is secure) and risk rating (given by the CFP) are important factors (Pierrakis and Collins, 2013). However, intrinsic motivation may also be important to some (often referred to as "social lending" or "impact investors").

3.3.3. Reward crowdfunding

Reward crowdfunding offers crowdfunders non-financial benefits in exchange for their pledge (Ahlers, Cumming, Günther and Schweizer, 2015). The most common reward crowdfunding model is essentially a pre-purchasing platform. Before production has begun, future customers are invited to pre-purchase a product so that the project gets enough funding to be realized. This also provides intangible benefits to the funders. The incentive to participate in such crowdfunding campaigns is therefore the crowdfunders' desire for reward but also inner motivation (Pierrakis & Collins, 2013).

Examples

During fall 2012 the company Cloud Imperium Games launched a campaign on the reward CFP Kickstarter. They announced their plans for *Star Citizen*, a space galaxy video game that takes place in the 30th century. Within the first month they raised a record amount of more than \$6 million (Roberts, 2015). They later took the crowdfunding campaign to their own platforms, and in 2015, Guiness World Records (2015) gave it the title "most crowdfunded project (overall)" with almost \$40 million raised in march 2014. As of December 2015, the company had more than doubled that amount to \$100 million, from more than 1 million different crowdfunders (Cloud Imperial Games, 2015). This put the video game maker in line with giants such as Bungie (creator of *Halo*) and Rockstar North (creator of *GTA*) when it comes to development budget. The *Star Citizen* release-date has yet to be announced.

Another reward crowdfunding project was the "Greek bailout fund"³. The campaign starter, Thom Feeny (UK), had no relation to Greece other than the desire to assist the Greek people in the financial distress they experienced at the time. He started the campaign on the CFP

³ This campaign could be characterized as a donation campaign rather than a reward campaign, but due to funders receiving perks from contributing (e.g. feta cheese, wine, Greek holiday for two), the campaign falls under reward crowdfunding

Indiegogo, to crowdfund Greece's national debt with a goal of €1,6 billion. On July 6, 2015 the campaign ended with a raised amount of €1 930 577 in 8 days (Indiegogo, 2015b). The project did not reach its goal, so the money was returned to the crowdfunders. However, this demonstrates how quickly funds can be gathered.

Price differentiating

This financing model also gives the entrepreneur the ability to price differentiate her customers. By setting different reward levels based on the size of the pledge, the entrepreneur can identify and exploit her customers' willingness to pay. In the case of *Star Citizen*, one reward level could be prioritized shipment of the game the moment it is finished. Another level could include virtual goods inside the game. An example of this is the "Javelin Destroyer", a virtual space ship in limited supply of 200 and a price of \$2 500 each. Cloud Imperium Games sold all 200 in less than a minute, earning the company \$500 000 in funding for further development of the game (Roberts, 2015).

All-or-nothing versus Keep-it-all

When an entrepreneur starts a reward crowdfunding campaign, she must decide what kind of goal model she wants. What happens if the entrepreneur does not meet her predetermined funding goal? Does she keep the money anyway and initiate an underfunded project, or is the money returned to the funders? Two models regarding this are often referred to as the all-or-nothing (AON) model and the keep-it-all (KIA) model.

Many crowdfunding platforms only accept AON models, where the entrepreneur takes all the risk regarding whether she gets funded or not (e.g. Kickstarter, FundedByMe). If the project does not reach its funding goal, every funder is reimbursed and the entrepreneur gets nothing. In the KIA model, the entrepreneur keeps the money that is pledged even if the funding goal is not reached (Cumming, Leboeuf and Schwienbacher, 2015). Chapter 8.2.1 examines implications that entrepreneurs should be aware of when deciding between AON or KIA.

3.3.4. Donation crowdfunding

Donation crowdfunding is one of the non-financial models. Crowdfunders typically have intrinsic motivation to donate, and returns will be intangible benefits from backing the project (Pierrakis & Collins, 2013). As with all crowdfunding projects, donation projects have a predetermined goal of how much money they aim to collect. The amount different projects set to reach vary a lot in size. One can find projects where the goal is \$1 000 and projects where the goal is >\$500 000. For some crowdfunding models, CFPs typically practice that a project cannot receive more funding than its initial goal, i.e. overfunding is not possible. For donation crowdfunding, however, only the duration of the campaign limits the amount of money one can receive. Furthermore, projects of this model usually have an overall goal, e.g. to build a shelter for the homeless, to fund rehabilitation costs of a newly handicapped family member or to fund medical care for a certain amount of people in a conflicted zone.



Indiegogo started its own charity crowdfunding campaign to support the victims of the earthquake in Nepal, spring 2015. As of September 7, 2015 there are 287 ongoing campaigns related to this cause and total funding amounted to \$2.62 million.

Differences and similarities to non-profit organizations

Mentioned predetermined goals is a distinct difference between donation crowdfunding and traditional non-profit charity organizations. Charity organizations (e.g. UNICEF, Red Cross) work as umbrella organizations for several different projects and causes, where the goal is more abstract. Donated money is allocated between many projects not necessarily known by the donator. For donation crowdfunding, the crowdfunder donates directly to a specific project.

Regarding donations to both crowdfunding campaigns and to non-profits, a number of factors motivates the giver, where sympathy, empathy, guilt, happiness and identity are the strongest determinants (Gerber, Hui and Kuo, 2013).

3.3.5. Royalty crowdfunding

In royalty crowdfunding⁴, the entrepreneur receives funds from crowdfunders in exchange for a royalty fee or a certain percentage of future sales or profits from the project (Massolution, 2015).

Special characteristics

This method differs from the other crowdfunding methods in the way that it, for both parties, has more contractual freedom. Royalty crowdfunding could be a viable solution for some entrepreneurs, as they have fewer obligations to the crowdfunders until the project starts to earn income, contrary to equity and loan crowdfunding: Royalty crowdfunding circumvent traditional equity concerns, like market fluctuations. In addition, if the entrepreneur uses crowdfunded debt to finance her project, she will have an obligation to pay periodic installments with interest, regardless of the income of the project. The entrepreneur who uses royalty based crowdfunding is only obligated to pay out a predetermined percentage of her profit, or a fixed royalty fee.

By using royalty crowdfunding, the project is prone to complications between crowdfunder and the entrepreneur. Firstly, the payout for the investor is a direct result of the achievements of the project. As with equity investments, it is then important to ensure that the entrepreneur puts high effort in the project by having aligned interests with the investor. Secondly, if a business uses this crowdfunding model for an isolated project, that project's profit will also depend on how the business allocates its fixed costs. If not mentioned in the agreement, it would then be optimal for the entrepreneur to allocate a high amount of fixed costs to the project, so that she has to share less of the profits with the investor. It is therefore essential for both parties to have a good understanding of the contract that is signed.

⁴ also referred to as revenue sharing

3.3.6. Hybrid crowdfunding

Hybrid crowdfunding is a combination of different crowdfunding models. There may be benefits for both entrepreneurs and crowdfunders by using this funding model (De Buysere, Gajda, Kleverlaan and Marom, 2012). E.g. if an entrepreneur uses a combination of reward and loan crowdfunding, the crowdfunder's payoff is both financial and non-financial. This might be a good alternative for many crowdfunders regarding their initial motivation for investing (e.g. if they want to consume the product, but also desire financial return). For the entrepreneur, it provides the possibility to customize her optimal way of raising funds. Hybrid crowdfunding gives both crowdfunder and entrepreneur flexibility, but the model currently accounts for only a small part of the total crowdfunding volume (Massolution, 2015).

4. Literature review

It is uncertain if crowdfunding supports or challenges existing theories about how startups raise capital. This uncertainty is emphasized in a report by EY & University of Cambridge (Wardrop, Zhang, Rau and Gray, 2015), which claims that the phenomenon is under-studied and often misunderstood. This chapter provides a literature review on crowdfunding and venture capital investments. Both topics share certain similarities, and it is therefore meaningful to discuss venture capital when assessing the characteristics of crowdfunding.

4.1. Literature review: Crowdfunding

4.1.1. Financial perspective

Belleflamme, Lambert and Schwienbacher (2013) argue that crowdfunding should be considered a distinct form of financing that centers on funding from the crowd rather than professional investors (i.e. individuals who specialize in making risky investments) or individuals who have a personal link (family and friends) to the entrepreneur. Furthermore, in their theoretical research they examine the characteristics of reward and equity crowdfunding. For reward crowdfunding, they summarize three characteristics:

First, a reward crowdfunding campaign often involves pre-purchasing a good that is yet to be available on the market. The entrepreneur presents the traits of the final good and offer several different reward levels that the crowdfunder can choose from. Second, mentioned reward levels reveal consumers' willingness to pay and let the entrepreneur price discriminate between two groups: Consumers who enjoy higher utility from consuming the good will be ready to pay more to secure additional community benefits arising from crowdfunding, than other consumers, who will wait until the product is available on the market at a lower price (Belleflamme et al, 2013). This contradicts the economic perception that if one purchases something in advance, before knowing the quality of the purchased good, one ought to be compensated with discounts (Dana Jr., 1988). Third, crowdfunders identify themselves as members of the production process and may participate in community-based experiences. This ranges from the act of pledging money to direct involvement in the production. Belleflamme et al. (2013) call this "community benefits", and is an advantage of crowdfunding over traditional funding, as this involvement can enhance the crowdfunders' experience with the good. They argue that community benefits exist for both reward and equity crowdfunding. For equity crowdfunding, community benefits are linked to the investment experience, while for reward crowdfunding, they are linked to the consumption experience (Belleflamme et al., 2013). Examples of investor community benefits may be the feeling of belonging to a group of individuals who contributed to the very existence of the product, while consumption community benefits may be voting rights regarding the design of the product. If such additional benefits for the crowdfunder (consumption or investment benefits) exist, they should be focused on and amplified by the entrepreneur in order to maximize the potential of crowdfunding.

Further, Belleflamme et al. (2013) argue that the size of the entrepreneur's capital requirement affects the optimal choice of crowdfunding model (they only consider reward versus equity crowdfunding). If the capital requirement is large, the surplus from price discrimination, and therefore also reward crowdfunding, is reduced. The entrepreneur is then forced to distort the optimal pricing structure to attract more people to pre-order; if not, she may not be able to raise enough money to begin production. The larger this distortion, the smaller is the additional payoff from price discrimination. Belleflamme et al. (2013) argue that if the capital requirement is large, profit-sharing (e.g. equity crowdfunding) is the better alternative. This is because they assume individuals are heterogeneous with respect to community benefits under pre-ordering, i.e. individuals experience different increase in utility, but homogeneous under profit sharing, i.e. individuals experience identical increase in utility. The entrepreneur can then more easily exploit community benefits with profit sharing than with pre-ordering (Belleflamme et al., 2013). Their work is based on theoretical analysis. Hence, in order for their results to occur, many assumptions have to be made that might not always fit the real crowdfunding world. Even so, when an entrepreneur considers which crowdfunding model to go for, the findings of Belleflamme et al. (2013) could prove useful.

4.1.2. Motivation and deterrents

As mentioned, crowdfunders might differ from traditional investors in many ways. This is likely to apply to the funder's motivation, whether it is regarding the decision to donate, pledge, invest or lend to a crowdfunding campaign. Unfortunately, there is limited research by scholars in this area. One exploratory study by Gerber and Hui (2013)⁵, examines what motivates and deters entrepreneurs and crowdfunders from participating in reward crowdfunding. For entrepreneurs, they find that one of the main reasons for initiating a crowdfunding campaign is raising funds. Other important factors are to expand awareness of the entrepreneur's work, to form connections with supporters, desire for approval, to maintain control of the project, and to learn new fundraising skills (Gerber and Hui, 2013).

For crowdfunders, a strong motivation to pledge seem to be collection of rewards. However, while many supporters are motivated to collect, others are motivated to "give", the researchers point out. Helping others (i.e. the entrepreneur) seems to be another strong motivation for reward crowdfunders, both for family and friends (F&F) and supporters not known well by the entrepreneur. Third, being part of a community of like-minded individuals and interacting with them and the entrepreneur, motivated some interviewees (Gerber and Hui, 2013), consistent with suggestions by Belleflamme et al. (2013) that community benefits exist. Finally, supporting a cause motivated some, i.e. the desire to help a project be realized and see it succeed (Gerber and Hui, 2013).

Furthermore, Gerber and Hui (2013) also find potential deterrents to start or fund a reward crowdfunding campaign. For entrepreneurs, the belief of being unable to attract supporters, e.g. that the product's target crowd was too small or that the the crowd was unlikely to visit a CFP, or being unable to develop satisfactory rewards, were concerns in the funding decision progress. Other entrepreneurs feared public failure and exposure, e.g. ruining chances of future investment, personal embarrassment or other people stealing their ideas. Some felt angel investors and venture capitalists could be less likely to fund future ventures if the entrepreneur had already failed in crowdfunding. Lastly, the time and resource commitment necessary to achieve crowdfunding success was considered a barrier to some, e.g. having to reply to a large group of supporters (Gerber and Hui, 2013). Interviewed crowdfunders were mainly concerned about waiting for and not receiving rewards and ineffective use of funds. One crowdfunder also mentioned she disliked the KIA (keep-it-all) model, and that the AON (all-or-nothing) model provided a sense of security, as the risk of

⁵ Their research consists of qualitative data collection through interviews of 83 US-based participants from three different CFPs; Kickstarter, Indiegogo and RocketHub (Gerber and Hui, 2013)

the entrepreneur initiating an underfunded project would be removed (Gerber and Hui, 2013).

Gerber and Hui's qualitative investigation of crowdfunding sheds light on some questions regarding crowdfunding. However, their research is solely based on entrepreneurs and funders from the reward crowdfunding segment, and only from three different reward CFPs. Entrepreneurs and crowdfunders on other CFPs, and especially in other crowdfunding models, might have different motivations to start or support a venture.

Another study on motivation of crowdfunders is that of Cholakova and Clarysse (2015)⁶. In addition to analyzing the motivation of investors on reward and equity crowdfunding campaigns, they explore the impact of having a project on both types of campaigns simultaneously on investors' decision to support the project. Their analysis of investor motivation is built on the mentioned findings of Gerber and Hui (2013), i.e. collect rewards (extrinsic), help others, be a part of a community and support a cause (intrinsic), in addition to the need to trust the entrepreneur (Cholakova and Clarysse, 2015). Their survey has three steps: (1) the respondents are asked to decide whether they want to pledge to a presented reward crowdfunding campaign and why. (2) the respondents are informed that the same project is also available on an equity CFP, and are asked whether they would invest and why. (3) The respondents are given the opportunity to reconsider their investment decisions so far and decide again the amount they want to keep in the project as a pledge (if any) and the amount they want to invest as equity (if any) (Cholakova and Clarysse, 2015).

The researchers find a significant relationship between desire to collect reward and decision to pledge (i.e. extrinsic motivation). The need to trust the entrepreneur is also found to be a significant motivator. However, contrary to what some of the interview objects of Gerber and Hui (2013) said motivated them to pledge, Cholakova and Clarysse (2015) find no significant relationship between the intrinsic motivators (help others, be a part of a community and support a cause) and the decision to pledge. I.e. community benefits among

⁶ They surveyed all registered investors from Symbid, a CFP from the Netherlands that accepts both reward and equity crowdfunding campaigns, as well as a mix of the two. 155 out of 454 responded to their survey (Cholakova and Clarysse, 2015).

crowdfunders (Belleflamme et al., 2013) are not found. The findings of Cholakova and Clarysse (2015) applied to both reward and equity crowdfunding, i.e. pledging and investing.

Therefore, for an entrepreneur who is considering to launch a reward crowdfunding campaign, a balance between attractive reward and trust seems important in order to achieve crowdfunding success.

Furthermore, they find that after the respondents have been given the option to replace their investment into either reward, equity or a combination (step 3 in the survey), having invested for equity at step 2 had a significant positive relation to also keeping a pledge into the project at step 3. As Cholakova and Clarysse (2015) point out, this contradicts predictions of cognitive evaluation theory (Deci & Ryan, 1985) and research by Heyman and Ariely (2004), who have shown that when individuals are presented monetary and nonmonetary incentives simultaneously, they tend to favor a monetary perspective despite the presence of nonmonetary information. This suggests that the respondents should have, when presented the option to reinvest, redirected all their money into equity rather than as a pledge or a combination (Cholakova and Clarysse, 2015). Reasons for this need further research, but one might argue that once an individual has ownership in a company, buying products from that company indirectly increases the value of his equity. An entrepreneur considering crowdfunding might benefit from such an effect.

One limitation to the research of Cholakova and Clarysse (2015) is that they only surveyed registered investors from a single CFP (Symbid). Equity crowdfunding campaigns dominate this platform, which might indicate that most of surveyed investors already had a moneydriven decision-making approach. The finding that intrinsic motivation was insignificant was therefore more likely, as predicted by mentioned research of Heyman and Ariely (2004). If one were to survey crowdfunders from another platform where reward crowdfunding is dominant, e.g. Kickstarter, the results might differ.

4.1.3. Signaling

Equity crowdfunding

The primary target investors of startups on equity crowdfunding platforms are often unsophisticated investors. Unsophisticated investors do not have the expertise to comprehensively research and evaluate potential investments, and as their invested amount typically is small, their cost of doing so could quickly surpass the benefit. The interpretation of signals sent from the entrepreneur, then, might differ from what is predicted by traditional signaling theory (e.g. Spence (1973)). At worst, if the small investor cannot interpret any credible signals, he has no way of differentiating low quality ventures from high quality ventures. This could create the problem of adverse selection (Akerlof, 1970). A potential consequence might be that the equity crowdfunding market enters a "market for lemons" state, as described by Akerlof (1970).

One empirical study on the area of signaling in a crowdfunding context is that of Ahlers et al. (2015). The data of their research is gathered from ASSOB (Australian Small Scale Offerings Board), one of the largest equity CFPs. They examine which crowdfunding signals and attributes of venture quality that are most likely to induce investors to commit financial resources during equity crowdfunding campaigns.

Furthermore, as claimed by Spence (1973), a signal must be observable, costly to produce and able to differentiate among competing startups in order for it to be effective.

For entrepreneurs, the findings of Ahlers et al. (2015) highlight that retaining equity, providing more detailed information about risks and human capital (i.e. education of board members) and can be interpreted as effective signals among crowdfunders, and hence increase likelihood of funding success. This suggests some similarity between equity crowdfunders and more traditional investors (Downes and Henkel, 1982; Wickham, 2006).

A potential limitation of their research, however, is that they ignore the non-financial aspect of equity crowdfunding. Crowdfunders' non-financial motivation, e.g. if the investor is also a consumer of the product and has a strong bond with the brand, might also apply in equity crowdfunding, and could have affected the chance of campaign success in their research. Even so, the findings may prove useful to an entrepreneur who is considering to launch an equity crowdfunding campaign.

Reward crowdfunding

As mentioned, reward crowdfunding often involves pre-purchasing of goods that have yet to be produced. Funders in this type of campaign might differ from those of e.g. equity crowdfunding campaigns, as they are consumers of a product rather than investors in a venture.

Mollick (2014) examines, based on empirical research of data from the reward CFP Kickstarter, whether entrepreneurs can increase their likelihood for crowdfunding success if they focus on preparedness as a signal of quality. For measurement of preparedness, he investigates three potential determinants⁷: if the campaign pitch has a video (1), whether projects provided updates three days after launch (2) and if the campaign pitch had spelling errors (3). His results indicate that both providing a video and frequent updates increase the chance of success (by 26% and 13%, respectively), and that spelling errors reduce the chance of success (by 13%). These findings highlight the importance of preparedness during crowdfunding campaigns, as it may signal product quality to crowdfunders.

One potential limitation of Mollick's (2014) study is that Kickstarter only permits AON reward campaigns (Kickstarter, 2015a). Other reward crowdfunding sites, like Indiegogo, also permits KIA⁸ reward campaigns (Indiegogo, 2015a). If Mollick's (2014) findings also apply to KIA reward crowdfunding campaigns is therefore uncertain.

Cumming et al. (2015) found that on Indiegogo, AON campaigns have a higher chance of meeting its funding goal than KIA campaigns: 34% of all AON campaigns reached their goal, while only 17% of KIA campaigns did the same. They argue that this might be because of the signal an entrepreneur gives when deciding to go for the AON model. Spending time and effort in creating a crowdfunding campaign while in the same time risking not to receive any

⁷ All three factors are mentioned in the official Kickstarter blog as ways to stand out: https://www.kickstarter.com/blog/so-how-can-i-make-my-project-stand-out

⁸ Indiegogoo refers to these models as flexible or fixed funding

funding is risky and costly for the entrepreneur. The AON model might then signal that the entrepreneur is serious about production and that she will not go forth with an underfunded project. This reduces risk and costs for the crowd, and enables the entrepreneur to set a higher funding goal. The research also shows that AON campaigns on average sought to raise \$31 397, versus \$20 478 for KIA campaigns.

4.1.4. Social network: family and friends

Conti, Thursby and Rothaermel (2011) studied the importance of investment by F&F in early stage ventures when applying for external investment, such as venture capital and business angel financing. Their findings suggest that F&F money has a positive impact on external investment. However, a limitation of their research is that they only look at the technology sector (Conti et al., 2011). Is F&F money also important for crowdfunding? Mollick (2014) examines the effect of the size of the founder's social network. He argues that this is often the initial source of significant funding for many projects, and is therefore equivalent to F&F money. To research this, he examines founders on the CFP Kickstarter. By looking at the founders' Facebook friends, Mollick (2014) finds that founders with a large social network on Facebook are significantly more likely to be successfully funded than those with a small social network. E.g. for an average project in the Film category, he finds that a founder with 10 Facebook friends would have a 9% chance of succeeding, one with 100 friends would have a 20% chance of success, and one with 1000 friends would have a 40% chance of success (Mollick, 2014). However, one might suspect that the origination of this finding could also come from the credibility that a large Facebook network presents (as a signal), not only from the part that it is likely to bring more F&F money. Funders, at least of larger Kickstarter projects, might do a background check of the entrepreneur before pledging. Having a small Facebook network may then weaken the entrepreneur's credibility, maybe reducing willingness to pledge by the funder. Also, one potential limitation of the study might be that the researcher only looks at founders' Facebook network, not other social media sites like LinkedIn or Instagram.

Other researchers who examine the importance of social capital in crowdfunding campaigns are Zheng, Li, Wu and Xu (2014). They study Kickstarter from the US and DemoHour from China, two reward CFPs. Their empirical research measures the degree of social network ties

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as the number of fans the entrepreneur has on either Facebook (the U.S.) or Weibo (China), and they find that social network ties have a significant positive effect on the likelihood of crowdfunding success (Zheng et al., 2014), consistent with the findings of Mollick (2014).

4.1.5. Geography and peer effects

Existing theory predicts that geographical distance is important for investors evaluating early stage entrepreneurial ventures (Florida and Kenney, 1988). Investor activities such as monitoring of progress and providing input are cost-sensitive to distance. Is geographical distance an important factor for early stage crowdfunders as well? Agrawal, Catalini and Goldfarb (2015) examine the characteristics of investors from the CFP Sellaband⁹. Their empirical research suggests that the role of geographical distance seems to be greatly diminished for crowdfunding relative to other financing forms, as the average distance between entrepreneur (artist) and investor is approximately 5 000 km. However, they also find that local and distant investors are different: Distant investors' desire to invest increases as the entrepreneur accumulates capital, whereas local investors' desire does not. Further, they find that investors from the entrepreneur's social network (i.e. F&F) are disproportionately local, and that F&F invest early while others invest late (Agrawal et al., 2015).

In other words: geographical distance seems less important for crowdfunding, but F&F (who are most likely local) invest earlier than other investors. Distant investors are also responsive to the investment decision of others. Agrawal et al. (2015) therefore speculate in their conclusion that early investment may serve as a signal of entrepreneurial commitment, and that later investors may use this signal thereby increasing the likelihood of further funding and access to distant sources of capital.

This underlines the importance of social network for crowdfunding campaigns. In order to reach distant sources of capital, the entrepreneur has to utilize her social network and gain momentum for her crowdfunding campaign.

⁹ Sellaband is a music CFP that allows artists to raise the money from their fans and the SellaBand community in order to record a professional album, giving a percentage of future profits in return.

A potential limitation for the research of Agrawal et al. (2015), as with other academic crowdfunding reports, is that they only examine one CFP. If their findings apply to other CFPs is uncertain.

4.1.6. Reward campaign dynamics

Empirical research of Kuppuswamy and Bayus (2015) examines funding cycle dynamics of reward crowdfunding campaigns. By studying data from Kickstarter, they find that the funding cycle typically is U-shaped: More funding occurs during the first and last week compared to the middle of the campaign. This is found to occur for all type of reward campaigns, no matter the length or product category. They argue that the early funding most likely comes from F&F support, while the latter increase in funding activity might occur because of a relationship between two effects: a goal-gradient effect and a deadline effect.

The goal-gradient effect, as proposed by Hull (1932), suggests that the motivation to reach a goal increases with proximity to the desired end state. Kuppuswamy and Bayus (2015) argue that this effect could explain some of the sudden increase in funding activity. Further so when the deadline effect occurs, i.e. that a lot of activity happens at the end of an experience (Webb and Weick, 1979). The two effects could then enhance each other and create a spike in funding activity at the end of the funding cycle.

Moreover, Kuppuswamy and Bayus (2015) find that 70% of backers on Kickstarter only support a single project, and that 95% of these backers joined Kickstarter and pledged in the same day. Hence serial backers seem rare. This could indicate a higher dependency on social network for reward campaigns.

4.2. Literature review: Venture capital investments

Many startups are initially financed by bootstrapping, credit cards and personal loans in the entrepreneur's name. In addition, many turn to family and friends for financial support, whether it is sale of equity or loans. If these financing options are exhausted or unavailable, the startup may try to obtain a business loan at a bank or try to sell a large equity stake.

Venture capital (VC) firms have played a key part as a financial intermediary in the capital markets by supplying capital to startups in need of financing.

Jeng and Wells (2000) state that venture capital has been the driving force behind some of the most vibrant sectors in the US from 1980 to 2000. Further, Jeng and Wells (2000) specifically attribute large parts of the successful growth of companies like Microsoft, Compaq and Oracle, to venture capital financing. They also claim that there exists a widespread belief that venture capital firms are instrumental in bringing innovations to market and thereby enhancing economic growth, jobs and opportunities for further technological innovation. Venture capital is a young industry that has experienced rapid changes. It is possible to look at findings and data for the past and the present, but Gompers and Lerner (2001) emphasize that the value of these insights regarding the venture capital industry of the future may remain unclear. This constraint also applies to the case of the crowdfunding industry. The industry has experienced high growth for the past five years, but due to its young age it might be challenging to ascertain how the industry will look in the future, solely based on a few years of data.

4.2.1. Demand for capital

Entrepreneurs might follow several different strategies and actions in order to attract attention from VCs. This also applies to entrepreneurs who are using crowdfunding as a source of funding. Hustedde and Pulver (1992) analyzed data from 318 active startups seeking capital in Minnesota and Wisconsin (US). The results showed that entrepreneurs who did not seek advice in the funding process were prone to be less successful in acquiring equity finance and that those who did seek advice but used bankers were more likely to fail in acquiring equity finance. Attorneys appeared to contribute positively in the entrepreneur's process of securing equity finance, specifically by helping with marketing and referrals to other sources of capital than VCs. In addition, the study found that less experienced entrepreneurs who are aggressive in seeking funding and who are willing to surrender a substantial ownership share, are the most successful in securing equity finance. In contrast, older and more experienced entrepreneurs are prone to have difficulties in acquiring equity financing (Hustedde and Pulver, 1992). Further, VC-backed firms tend to have higher quality management teams than non-VCbacked firms, as suggested by Chemmanur, Simonyan and Tehranian (2011). In their research, management quality is measured by size of the team, percentage of team members with an MBA degree, prior managerial experience and relevant core functional expertise. This may imply that management quality (e.g. MBA degree) serves as a credible signal that reduces information asymmetry, thereby increasing the firm's attractiveness towards VC firms. However, the research of Chemmanur et al. (2011) does not provide an explanation as to why VC-backed firms tend to have higher quality management teams (i.e. if the VC prefer high management quality pre-investment or if they themselves create high management quality post-investment).

A different approach to attract attention from investors has been researched by Davila, Foster and Gupta (2003). They found that embarking on an early high-growth strategy in order to gain attention from potential capital investors might not be the most effective strategy. Their results suggested that companies with high growth, prior to any VC investment, did not appear to send a useful signal to decrease the information asymmetry between the entrepreneur and the VC. Thus, VCs at the time of the study did not tend to use high growth signals as a significant criterion in the selection process (Davila et al., 2003). For crowdfunding, signaling could be an important component in the time before, during and after the campaign. Therefore, studying the practice of signaling in a reward or equity crowdfunding setting, by looking at parallels between research on the topic and actual cases where it has been implemented, might provide valuable insights.

4.2.2. Uncertainty for the supplier of capital

Venture capital firms are generally interested in young companies that show growth potential. These companies also come with a corresponding high risk. In their paper, Gompers and Lerner (2001) suggest that one of the main reasons for entrepreneurs finding it difficult to obtain finance is information asymmetry.

Furthermore, this induces a principal-agent problem and corresponding agency costs between the entrepreneur and the venture capital firm. This problem is especially difficult for companies with intangible assets and whose performance is difficult to assess, such as early stage, high-tech companies with a heavy reliance on R&D (Gompers and Lerner, 2001). In terms of crowdfunding, this problem translates into the information asymmetry that is present when crowdfunders invests in an equity or reward campaign. It is difficult for crowdfunders to monitor their investments and in many cases their only guarantee is the word of the entrepreneur. This poses an interesting issue on how the concept of crowdfunding deals with monitoring and information asymmetry, and what factors motivates crowdfunders to invest in projects in spite of this.

Kaplan and Strömberg (2001) found that there are limits to the extent to which VCs are willing to monitor and support their portfolio companies, regarding monitoring costs and involvement costs. By employing the VCs own people in the startup, the VC will be able to monitor and manage the startup in the desired direction. The research of Kaplan and Strömberg (2001) suggested the VC plays a role in forming the management team of the portfolio company, pre-investment, in 14% of the investments. In addition, their research suggested that in 50% of the investments, the VC expected to play a role in the management after investing. The VCs in Kaplan and Strömberg's (2001) study were worried about 20% of their investments, their main concern being that the investments might require too much time. Even though this research was done over a decade ago and the fact that information is now generally more accessible, one can argue that the findings of Kaplan and Strömberg (2001) still holds value today, as the motivation of the different actors in this type of transaction, whether VC or crowdfunding, is neither fully accessible nor transparent.

In general, financial intermediaries take on a role of monitoring and gathering information about individual firms. As implied in the section above, a strategy used by VCs in order to monitor and control its investments is to make additions or substitutions to the management of the portfolio company.

A study by Hellmann and Puri (2002) examined the VCs role in the professionalization of startups, where the data originated from 170 young high-tech companies in Silicon Valley, California. Their findings suggested that VCs played a "top-down" role at the portfolio company. Firstly, by replacing key management positions, but also by influencing developments further down the organization, e.g. introduction of stock option plans for

employees and formulation of human resource policies. Furthermore, Hellmann and Puri (2002) concluded that firms with venture capital funding are more likely and faster to replace the entrepreneur with an external CEO, but that the entrepreneur still functions as an employee of the company. The study emphasizes that in the context of venture capital, the investor can play a much larger role than just a monitoring entity (Hellmann and Puri, 2002). Monitoring, advisory and professional management are traits that crowdfunders do not provide entrepreneurs with, seeing that the common crowdfunder would most likely lack the experience and credibility to have an impact. Therefore, it might be interesting to investigate if CFPs provide entrepreneurs with some of the same qualities that venture capital firms provide to their portfolio companies, and how this affects the outcome of crowdfunding campaigns.

4.2.3. What determines success?

Gompers, Kovner, Lerner and Scharfstein (2006) did a study on serial entrepreneurs (i.e. entrepreneurs of one or more successful or unsuccessful ventures). They investigated how the skill of the entrepreneur and the VC might increase the chance of success. The research showed that entrepreneurs who previously succeeded have a higher chance of success in their next venture, than first-time entrepreneurs and entrepreneurs who failed in their previous venture (Gompers et al., 2006). Chatterji (2005) found that an entrepreneur who uses her industry experience from her previous employer have a higher chance of success than her competitors who lack the experience. The findings above might seem intuitive, but they contradict the claim from Kihlstrom and Laffont (1979), who claimed that luck is the only factor that determines if the entrepreneur is successful or not.

One can argue that the success of a venture does not solely rely on the entrepreneur, but also on the characteristics of the source of funding. Companies that are funded by more experienced VC firms have a higher chance of success (Sørensen, 2004; Kaplan and Schoar, 2005; Gompers et al., 2006). In addition, Chemmanur et al. (2011) find that both management quality and VC-backing can contribute positively to the level of interest from analysts and institutional investors in the event of an IPO.

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The research from Gompers et al. (2006) suggests that VC firms are not just risk-bearers and suppliers of funds, but also consultants who put the funds in the right hands and ensures that it is used effectively. Furthermore, the study shows that the experience of the VC is of less importance if the entrepreneur has a history of successful ventures. This may indicate that prior success is a signal of quality or that VCs add little value to talented entrepreneurs (Gompers et al., 2006).

5. Crowdfunding Industry overview

5.1. Funding volume

On a global basis, the total crowdfunding volume amounted to \$2.7 billion in 2012, \$6.1 billion in 2013 and \$16.2 billion in 2014. For 2015, the total volume is predicted to reach \$34,4 billion (Massolution, 2015). In comparison, the global IPO, venture capital, private equity, and debt volume in 2014 were distributed as follows:

Activity	IPO	Venture Capital	Private Equity	Debt issuance
Volume	\$258 billion	\$87 billion	\$252 billion	\$5 700 billion

Table 1. Global funding volume for 2014. Data from Harjani (2014), NVCA.org, Bain & company (2015)and Thomson Reuters corporation (2015), respectively. VC includes seed, venture and buy-outs.

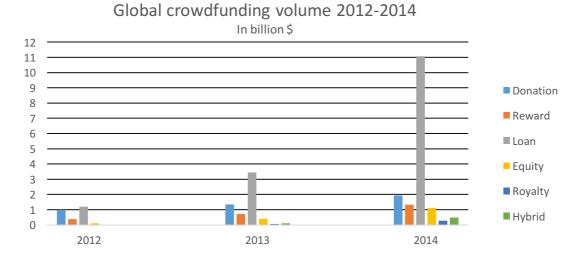


Figure 1 - Global crowdfunding volume, 2012-2014. Data from Massolution (2015).

The crowdfunding volume has grown exponentially, but one can see that crowdfunding is still relatively small compared to more traditional funding sources. Furthermore, the total crowdfunding volume is unevenly attributed between the different models.

Loan crowdfunding has had the largest volumes in the past three years, mainly due to high activity in the UK and Asia. Equity crowdfunding has historically been subject to cumbersome regulation and legislation in some countries, which made the model a difficult funding option to work with. Today, one can see changes in regulation and legislation in the US and European countries, which are likely to increase the growth of equity crowdfunding for both markets. Reward crowdfunding is the most used campaign type, and has experienced stable growth during 2012-2014, but it has not attracted the biggest volumes. This may partly be explained by the belief that most reward campaigns have lower capital needs and therefore seek less funding. In 2012, royalty and hybrid crowdfunding were not perfectly identified and it is thus difficult to find exact numbers from this year. In 2014 both models experienced growth, but their funding activity and volumes are still lower relative to the other models.

Model/Year	2012	2013	2014	Growth, 2013-2014
Donation	\$999 m	\$1340 m	\$1940 m	45%
Reward	\$391 m	\$726 m	\$1330 m	84%
Loan	\$1190 m	\$3440 m	\$11 080 m	223%
Equity	\$118 m	\$395 m	\$1100 m	182%
Royalty	N/A	\$59 m	\$273 m	336%
Hybrid	N/A	\$117 m	\$487 m	290%
Total volume	\$2700 m	\$6100 m	\$16 200 m	

Table 2. Global crowdfunding volume, 2012-2014. Data from Massolution (2015), Statista (2015a) andStatista (2015b)

5.2. The geography of crowdfunding

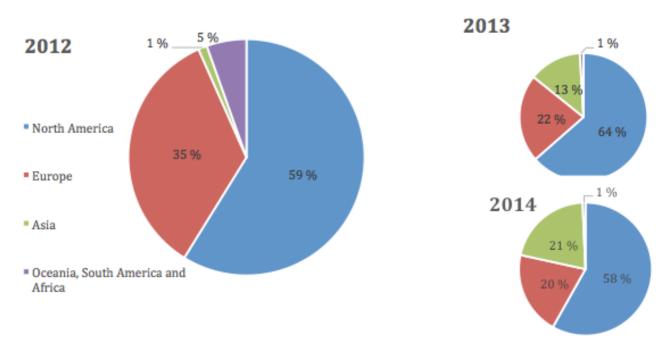


Figure 2. Geographical distribution of volume, 2012-2014. Data from Massolution (2015)

Crowdfunding is mainly Internet-based and therefore geographical borders affects mostly equity and loan crowdfunding, due to differences in legislation among countries. Donation and reward crowdfunding are models that, to a large extent, have no country borders. As mentioned earlier, Agrawal et al. (2015) found that the role of geographical distance seems to be reduced for crowdfunding relative to other financing forms. The world market can be divided into the following regions: North America, Europe, Asia, and a collective group is also established for Oceania, South America and Africa, due to their relatively small market size. The main emphasis of this thesis is on Europe, due to the higher relevance for Norwegian entrepreneurs. In addition, the North American market is discussed due to its size and maturity in regard to the concept of crowdfunding.

North America has traditionally been the region where the largest crowdfunding amount has been raised, and the region has continued to grow exponentially over the last years. Europe has also experienced high growth for the past three years, but has lost a big share of total market volume. Furthermore, the market for crowdfunding is growing at a high rate in Asia. In recent years, large parts of the Asian population have experienced an increase in purchasing power, which make Asian consumers more accessible and give them an increased financial power to affect most of the world's economic arenas, e.g. through stock exchange or Internet shopping. From only having 1% of total volume in 2012, Asia accounted for 21% of the total volume in 2014, primarily consisting of loan-based funds from Chinese CFPs (Massolution, 2015). Crowdfunding volume and growth rates for mentioned regions are shown in table 3 below:

Annual growth rates and funding volume						
Region/Year	2012		2013		2014	
North America	92%	\$1610 m	140%	\$3860 m	145%	\$9470 m
Europe	65%	\$945 m	43%	\$1350 m	141%	\$3300 m
Asia	N/A	\$33 m	245%	\$810 m	320%	\$3400 m
Oceania	N/A	\$76 m	-64%	\$27 m	59%	\$43 m
South America	N/A	\$0,8 m	268%	\$21 m	167%	\$57 m
Africa	N/A	\$0,1 m	6000%	\$6 m	101%	\$12 m
World growth/Volume	81%	\$2700 m	126%	\$6100 m	167%	\$16 200 m



The remaining regions, Oceania, South America and Africa, only account for a fraction of the total volume. Intuitively, an explanation for this might be that these regions are less developed with regard to technology and legislation (except for Australia) and can therefore not adapt as quickly to the growth potential that crowdfunding provides.

Special for North America are the previous barriers on equity crowdfunding. The US is currently changing legislation in regard to equity crowdfunding, which will probably facilitate growth in the US equity crowdfunding sector. This is further discussed in section 6.5.

5.3. The crowdfunding platforms - CFPs

The market has experienced growth in the number of crowdfunding platforms. The reasons for the increase in CFPs could be coherent with the reasons for the increased funding volume, i.e. the general public awareness of the concept, technological advances, and less cumbersome legislation. In addition, there are several "make-your-own-CFP" providers,

reducing the cost and complexity of creating a CFP. In the early 2000s, there were very few online crowdfunding platforms while today, there are over 1250 active platforms.

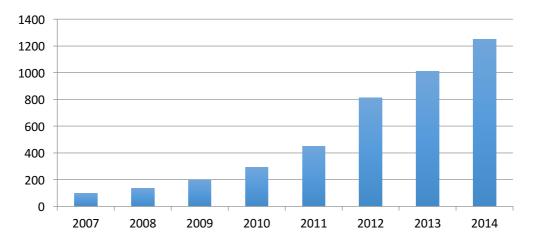


Figure 3. Number of CFPs, globally. 2007-2014. Data from Massolution (2015)

5.3.1. Distribution of volume

In North America, the top 5 and top 10 CFPs have traditionally accounted for most of the domestic market. In 2011, the top 5 CFPs in North America were responsible for 73% of the total volume and the top 10 CFPs were responsible for 89%. In 2014, these indicators have changed so that the top 5 CFPs now makes up 79% (increase) of the total volume, but the top 10 makes up 88% (decrease). This implies that the funding volume in North America is primarily funneled through the biggest CFPs in this region. Europe however, has experienced the opposite. In 2011 the top 5 European CFPs held 95% of the European market share and the top 10 CFPs held 97% of the market share. In 2014 both indicators have decreased significantly: the top 5 and top 10 CFPs are now responsible for 64% and 75%, respectively (Massolution, 2015). Furthermore, as illustrated in figure 4 below, the European crowdfunding volume is distributed over a larger number of CFPs than the North American crowdfunding volume.

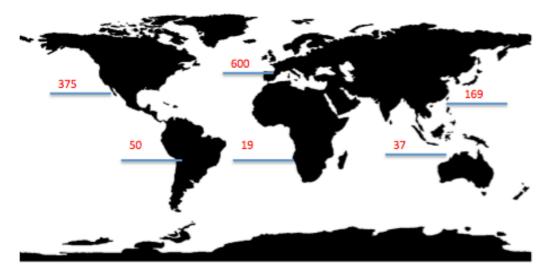


Figure 4. Global distribution of CFPs. Data from Massolution (2015)

Based on the authors' research on different CFPs, it is also found that European CFPs often specialize in a particular crowdfunding model or service, and target specific investors and entrepreneurs. The US CFPs on the other hand, might specialize in a crowdfunding model, but it seems that they typically target the general population rather than a segment of the population (with the exception of equity crowdfunding).

Lastly, the CFPs in North America are regulated under the same US legislation, whereas the CFPs in Europe are commonly regulated under the legislation of the country of residence. This may imply that the European market actually needs more CFPs in different countries in order to meet the demand from crowdfunders and entrepreneurs. However, this explanation is subject to change, since the continuous evolvement of crowdfunding in Europe promotes change in legislation on a domestic level but also on a EU/EEA level.

5.3.2. Crowdfunding platforms by model

Platforms offer different services to both crowdfunder and entrepreneur. Some platforms contain several of the different crowdfunding models but have main emphasis on one model, while other platforms specialize on one of the models only. Even though two CFPs in the same country might specialize in e.g. equity crowdfunding, their requirements, services and offerings could be different. For example, the UK equity CFPs Crowdcube, Seedrs and SyndicateRoom differ substantially: on SyndicateRoom, a business angel acts as the lead

investor and negotiates the terms of the deal. These terms will apply to both the angel and the crowdfunders who wishes to invest after the angel. On Crowdcube, crowdfunders hold shares directly, and on Seedrs, all the shares are pooled in a special purpose vehicle (SPV), where Seedrs acts as a nominee on behalf of all its crowdfunders.

Reports on 1250 CFPs indicate the following global distribution on CFPs based on crowdfunding model, where the model that the CFP has main emphasis on is registered:

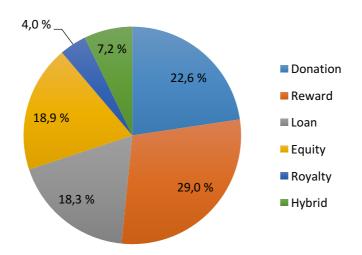


Figure 5. Distribution of CFPs based on crowdfunding model. Data from Massolution (2015)

Due to their relatively new entrance, hybrid and royalty crowdfunding CFPs only account for a small share. There is a majority of reward and donation CFPs, arguably because reward and donation crowdfunding tend to be less strictly regulated, thus making it easier to provide the service. Loan CFPs also have a substantial share of total CFPs. This is probably due to its high volume (\$11,08 billion in 2014, 68,4% of total crowdfunding volume) and growth, which could signal lucrative business opportunities. The large number of equity CFPs might seem counterintuitive, as equity crowdfunding has been premature in many markets. A possible explanation may be that operating equity CFP is profitable, since historically the actors involved have been high net worth individuals and business angels.

5.3.3. Characteristics of crowdfunding platforms

It is often free to become a member on CFPs, but crowdfunders typically pay a small percentage of the invested amount which the CFPs label as a transaction fee. Entrepreneurs will on the other hand be subject to a larger cost. Some CFPs operate with a fixed initial fee when the entrepreneur starts her campaign, and a success fee that incurs if the funding goal is reached. The success fee is a percentage that is typically between 5-10% of the total amount of funds raised. In comparison, underwriter spread for an IPO is approximately 7% of issue gross proceeds (Lee, Lochhead and Ritter, 1996; Chen and Ritter, 2000; PwC, 2015).

The fee that most CFPs charge if a campaign is successful helps align interests with entrepreneurs, while also reducing the entrepreneurs' risk of losing money if the campaign should fail. However, it could potentially also damage investor-entrepreneur relationships regarding the true quality of the project (which occurs due to information asymmetry). Previous entrepreneurship theory (e.g. Wickham, 2006) suggests that entrepreneurs have incentives to be overly optimistic (i.e. understate risk) about their business plan when presenting it to investors, in order to get a higher compensation for their equity (or product). Rational investors should anticipate this behavior and therefore take their money elsewhere, forcing the entrepreneur to choose less preferred investors¹⁰. If crowdfunders, assumed to be less sophisticated than traditional investors, recognize such overly optimistic action is less likely but requires more research. Conversely, one might think that, in the long run, CFPs are dependent on investors receiving a return on investment. Otherwise, the CFP could earn a bad reputation and be avoided by crowdfunders. This could reduce the likelihood of CFPs influencing entrepreneurs to present overly optimistic business plans. However, as crowdfunders are argued to be motivated by more than financial factors, some might care less about a low or negative return on investment, which in turn could reduce the CFPs' potential reputation problem.

As mentioned, CFPs that specialize in the same model often differ from one another by providing the crowdfunder and the entrepreneur with different tools and services, and by targeting different segments of the market. Some reward CFPs may only accept projects

¹⁰ Both the entrepreneur and the investor are then worse off than if they had agreed on a realistic business plan, thereby resulting in the well-known prisoner's' dilemma (Wickham, 2006)

related to culture (e.g. film, music and art), while some reward CFPs only may accept innovative technology projects. Some equity CFPs in Europe only allow high net worth individuals, business professionals and angel investors to invest through their platform. By limiting the investors to a group of resourceful individuals, equity campaigns have the potential to be fully funded within hours or days. Further, the services CFPs provide may be professional marketing assistance, legal documentation and post-campaign advisory.

When an entrepreneur initiates a reward or equity campaign, the CFP typically requires the entrepreneur to provide sufficient information about her project. This is part of the duediligence process that most CFPs perform when assessing whether or not a project should be featured on their CFP. This process varies a lot in complexity. Some equity CFPs require detailed legal documentation, business plans and financial forecasts, while some reward CFPs only require a business idea pitch in the form of text or short video. Because of the differences in what is required from the CFP, it is important the entrepreneur uses a CFP that meets her needs.

6. Crowdfunding market overview

This chapter examines the leading markets for crowdfunding in Europe. The chapter starts by explaining the current regulatory situation for cross-border transactions in Europe, followed by a brief overview of the crowdfunding activity in the UK, Germany and France. Lastly, recent changes in the North American regulation and legislation are presented.

6.1. Europe

Differences in regulation among EU and EEA countries can make it difficult for both crowdfunders and entrepreneurs to make cross border transactions. Furthermore, the legal frameworks of European countries were initially not engineered for the new concept that is equity crowdfunding. To simplify the equity crowdfunding process, many European countries are now introducing new domestic laws for regulating crowdfunding activity. These new rules might be appropriate for the domestic activity, but for the purpose of cross border crowdfunding transactions it may have a hampering effect (Gabison, 2015). Therefore, a harmonization of legislation and regulation for crowdfunding in the EU and EEA might benefit the European crowdfunding activity.

In September 2015, the European Commission published "The action plan on building a capital markets union". In the report, the commission recognizes crowdfunding as an alternative financing form for startups and small and medium enterprises (SMEs), and they further highlight the need for regulation and legislation that can make crowdfunding accessible between member countries. The European Commission is set to publish a new statement on these issues and possible solutions in the first quarter of 2016. Until then, they are only monitoring and gathering information in regard to the European crowdfunding activity (The European Commission, 2015b).

Currently, a possible solution to cross border crowdfunding transactions in the EU and EEA is The Market in Financial Instruments Directive (MiFID). MiFID is an EU law that provides regulations related to investment services for all the 31 member states of the EEA (ESMA, 2014). The main objective of the directive is to protect investors and increase competition in investment services. By obtaining a MiFID license, a CFP can have operations in its residing

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country and in member countries of the EEA. Investors and entrepreneurs who use MiFID licensed CFPs are also subject to the domestic legislation in their country of residence (ESMA, 2014).

In order to obtain a MiFID license, CFPs have to consult with the financial supervisory authority of their resident country. In April 2015, the Finnish CFP Invesdor obtained a MiFID license from the Finnish Financial Authority, becoming the first European CFP to have a license to offer services across the EEA.

6.2. The United Kingdom

The UK accounts for a substantial amount of the global crowdfunding volume. This is mainly due to the large amount of loan crowdfunding activity: UK CFPs lent out \$1,32 billion to individuals and \$997 million to businesses in 2014, as illustrated in table 4 below. Total UK crowdfunding amounted to \$2,5billion (Wardrop et al., 2015).

Model	Growth 2012-2014	Volume 2014
Loan - Business	253%	\$997 million
Loan – Individuals	113%	\$1 320 million
Equity	420%	\$147 million
Reward	176%	\$45 million
Donation	100%	\$4 million

Table 4. UK: Average three-year crowdfunding growth rates and volumes, 2012-2014. Data fromWardrop et al. (2015)

Loan crowdfunding in the UK follows the exponential growth the global market has experienced. In regard to the crowdfunding industry, reward crowdfunding has had a stable growth for the last three years, whereas equity crowdfunding in the UK has experienced high growth. This is illustrated in figure 6. Possible explanations for the high growth may be the establishment of more specialized equity CFPs, more suitable regulation and legislation, along with the general development of crowdfunding.

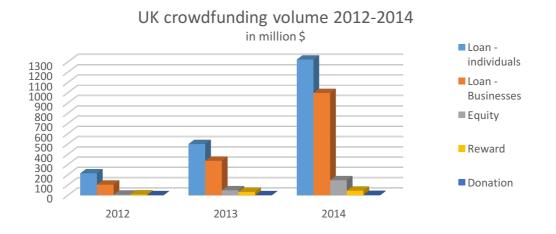
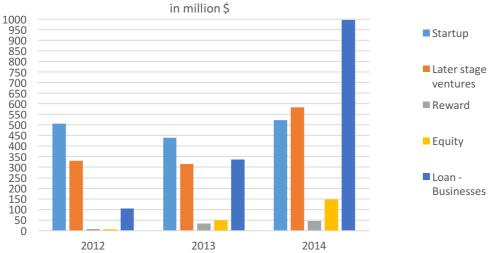


Figure 6. UK: Crowdfunding volume, 2012-2014. Data from Wardrop et al. (2015)

Compared to the other European markets, the relationship between UK equity crowdfunding investments and venture capital investments in UK companies is high, at 13,3%¹¹. This may suggest that equity crowdfunding is becoming more of a real substitute to traditional equity financing for startups (Groom, 2015). Special for the UK, there seems to be a trend where more and more institutional investors participate in the crowdfunding market. Bruce Davis, a representative the UK crowdfunding association (UKCFA), emphasizes that this could be a problem for the future UK crowdfunding market, seeing that smaller investors (the real crowd) might be crowded out by institutions (Wardrop et al., 2015). For entrepreneurs, however, this situation could increase supply of funds, thereby potentially making it easier to obtain funding.

 $^{^{11}}$ Equity CF / (VC startup + VC later stage) = 147 / (523+583) \thickapprox 0,133. Numbers from figure 7.



Capital allocated to UK businesses, 2012-2014

Figure 7. Startup and later stage venture investments in UK companies, relative to equity, business loan and reward crowdfunding, 2012-2014. Data from EVCA (2015) and Wardrop et al. (2015)

Legislation and regulation in the UK

The Financial Conduct Authority (FCA) regulates crowdfunding in the UK, and crowdfunding activity falls under the legal framework of the Financial Services and Markets Act 2000 (FSMA) (Solar plaza, 2015). According to the FSMA, a company can raise up to €5 million in a 12-month period and unsophisticated investors can invest up to €10 000 in a 12-month period (Gabison, 2015). In addition, unsophisticated investors must pass an "appropriateness test" in order to show the CFP that they understand the risks that are involved in equity crowdfunding. Foreign investors are allowed to invest through UK CFPs, but they would still be subject to domestic legislation from their resident country (Gabison, 2015; FCA, 2015).

In 2014 the FCA introduced new rules related to solicitation. UK CFPs and companies using the UK CFPs to raise funds can only make direct offers to investors who qualify as a high net worth individual, a sophisticated investor or individuals who confirm they intend to invest less than 10% of their net assets in crowdfunding securities (FCA, 2015).

Crowdfunding investments/pledges are available to foreign crowdfunders. In regard to entrepreneurs, most UK CFPs require that the company that seeks to raise funds is a UK

limited liability company (LLC) or limited liability partnership (LLP). Through email correspondence with Seedrs, a UK equity CFP, the authors found that Seedrs' business model allows foreign companies to raise money through their platform. Other UK CFPs that were studied (e.g. Crowdcube, SyndicateRoom) did not encourage foreign companies to raise funds through their platform.

To incentivize investment in early growth companies and startups in the UK, Her Majesty's Revenue and Customs (HMRC) offer the Seed Enterprise Investment Scheme (SEIS) and the Enterprise Investment Scheme (EIS) to UK taxpayers who invest in qualifying companies (Seedrs, 2015a).

SEIS is designed for investments in startups and gives the investor 50% of the amount invested in eligible SEIS companies, back to the investor in the form of income tax relief. Furthermore, if an investor is subject to capital gains tax from other investments and has reinvested his capital gains in shares in a SEIS eligible company, he can receive 50% of the invested amount in capital gains tax relief. At disposal of the SEIS eligible shares, should it result in capital gains or a loss, the investor will be exempt from capital gains tax or receive loss relief (Gov.UK, 2015a).

EIS is designed for investment in companies who are in a later stage than startups. By investing in EIS eligible companies, the investor will receive 30% of the invested amount in income tax relief. The capital gains tax obligation from an investment in an EIS eligible company can be deferred if the capital gains are reinvested in another EIS eligible company. In addition, capital gains from disposing of the EIS shares or a potential loss if the investment fails, can result in capital tax exemption or loss relief (Gov.UK, 2015b).

6.3. Germany

Total German crowdfunding amounted to \$184,2 million in 2014. (Wardrop et al., 2015) A distribution of crowdfunding growth rates and volume for Germany is shown in table 5 below:

Model	Growth 2012-2014	Volume 2014
Loan - Business	101 567%	\$8,1 million
Loan – Individuals	101%	\$106,6 million
Equity	174%	\$39,5 million
Reward	119%	\$22,3 million
Donation	57%	\$7,7 million

Table 5. Germany: Average three-year crowdfunding growth rates and volumes, 2012-2014. Data fromWardrop et al. (2015)

Relative to the rest of the European market, there has been equity crowdfunding activity in Germany for some time. Table 5 illustrates that the German crowdfunding environment has not experienced the same growth as other markets in the time-span 2012-2014, which might be due to the fact that Germany has had overall crowdfunding activity prior to 2012. There has been crowdfunding activity in Germany since 2006. Several reward CFPs emerged in 2010, and in 2011, more equity CFPs entered the market (ECN, 2015).

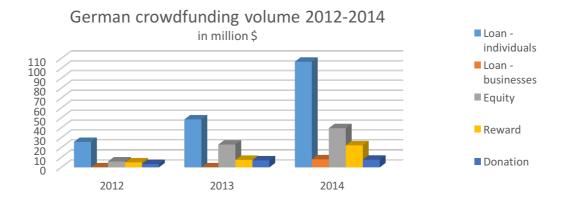
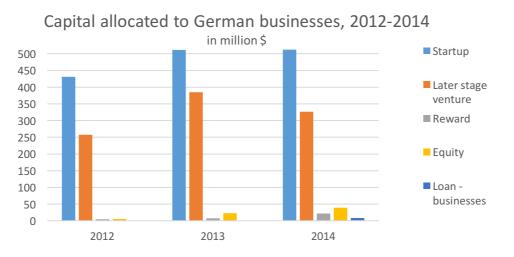


Figure 8. Germany: Crowdfunding volume, 2012-2014. Data from Wardrop et al. (2015)

German equity crowdfunding volume amounts to 4,8%¹² of venture investment in German companies, which is considerably lower than in the UK. Investments from VC and private equity firms in German startups have historically been high, and are almost at the same level as in the UK. Contrary to other European equity CFPs, many German equity CFPs specialize in seed and startup funding. This is an important trait, as the general requirements for launching a seed capital campaign are less strict. Intuitively, when a company seeks seed funding, one will not expect said company to have a long track record of revenues or verified financial statements for the last two years.





Legislation and regulation in Germany

German CFPs operate through the German Investment Act and the German Small Investor Protection Act. Most of the investment opportunities that German CFPs offer are governed by the obligation to publish a prospectus, but the German legislators have introduced a "crowdfunding exception". This exception excludes equity crowdfunding from several requirements, including the requirement of publishing a prospectus as long as the company raises less than €2,5 million (Solar plaza, 2015; Klöhn, Hornuf and Schilling, 2015).

German platforms that offer crowdfunders equity from public and private companies are performing financial services according to German law, and are thus subject to the German

¹² Equity CF / (VC startup + VC later stage) = 40 / (512+326) \approx 0,048. Numbers from figure 9

Banking Act and furthermore required to have a license from the German Federal Financial Supervisory Authority¹³ (BaFin) (ECN, 2015). Research by the authors of this thesis, however, find that most German equity CFPs operate under an exemption from this requirement. In fact, instead of offering equity, German equity CFPs operate as an investment broker or contract broker that offer crowdfunders subordinated loans and/or profit-participation loans. By performing these services, the German equity CFPs are only subject to acquire a license under the German Trade, Commerce and Industry Regulation Act, which is a far less comprehensive process to obtain than the BaFin license (ECN, 2015).

The type of security (i.e. subordinated loans and/or profit-participation loans) that investors receive when investing through German equity CFPs, can be characterized as something in between of equity and debt. The company seeking funding signs a loan contract with a non-fixed interest rate, where the future payments to investors depends on the future performance of the company (ECN, 2015). If the company is sold to a larger investor (exit), the investors receive financial compensation relative to their initial investment. If the company is not sold during, or at the end of the loan period, a valuation of the company is performed and investors are paid out a share in the company value according to their initial investment. The initial security that investors receive when investing, does not have voting rights and the security ranks below other types of debt in an insolvency proceeding (Companisto, 2015).

In order to protect crowdfunders, German law states that an individual may only invest up to €1000 in crowdfunding projects during a 12-month period. However, if the individual can provide the CFP with an income statement that proves that he or she has liquid assets of at least €100 000, he or she can invest up to €10 000 (Kelly, 2015). Solicitation by German CFPs is allowed, but has strict rules. Most importantly, advertisements for investment opportunities have to include warning notices that explains the risks a crowdfunder will face (Klöhn, et al. 2015).

¹³ During 2014, only one company sought financing through this platform model (ECN, 2015).

Most German CFPs are open to foreign crowdfunders. However, the authors found, through email correspondence with German CFPs (Companisto and Seedmatch), that foreign entrepreneurs would have to incorporate a German limited company (GmbH or UG) as a holding company for the shares of the actual company that seeks funding. This would incur transaction costs, legal work and additional taxation, which could reduce the attractiveness for Norwegian entrepreneurs to choose German CFPs.

6.4. France

During 2014, \$106 million was funded through individual loan crowdfunding and \$10,7 million through business loan crowdfunding. Reward crowdfunding accounted for the second highest volume, \$46,9 million while equity and donation crowdfunding accounted for \$35,4 million and \$5,9 million, respectively (Wardrop et al. 2015).

Model	Growth 2012-2014	Volume 2014
Loan - Business	3 443%	\$10,7 million
Loan – Individuals	172%	\$106 million
Equity	94%	\$35,4 million
Reward	170%	\$46,9 million
Donation	97%	\$5,9 million

Table 6. France: Average three-year crowdfunding growth rates and volumes, 2012-2014. Data from Wardrop et al. (2015)

In October 2014, the French government passed laws to facilitate business loan crowdfunding. This resulted in a high growth rate for this segment, and the establishment of over 70 domestic companies that offer crowdfunded business loans to French businesses (Yoshimura, 2015).

The French Government seems to try to foster the crowdfunding environment. The French Public Investment Bank (PBI) has established a website dedicated to French CFPs and French crowdfunding projects, creating a gathering point for the French crowdfunding market. The director of innovation at BPI France, Paul Francois Fourier, further emphasizes that crowdfunding is now a race in which the different European markets are positioning themselves to win (Wenzlaff, 2014).

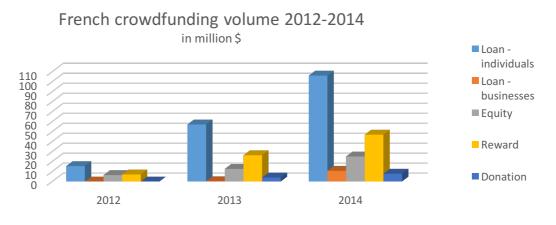


Figure 10. France: Crowdfunding volume, 2012-2014. Data from Wardrop et al. (2015)

France, as well as Germany, has a low equity crowdfunding volume relative to venture capital investments, at approximately 3%¹⁴. Total investments in French startups have historically been lower than investments in German and UK startups, but for later stage ventures, French companies have received substantially more funding than German later stage ventures (EVCA, 2015).

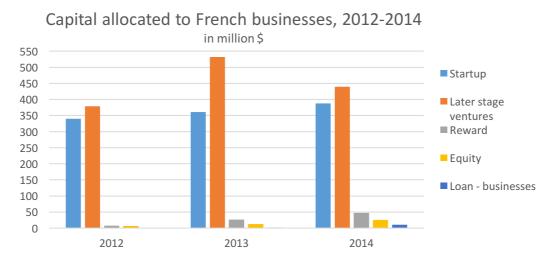


Figure 11. Startup and later stage venture investments in French companies, relative to equity, business loan and reward crowdfunding, 2012-2014. Data from EVCA (2015) and Wardrop et al. (2015)

¹⁴ Equity CF / (VC startup + VC later stage) = 25 / (388+439) \approx 0,03. Numbers from figure 11.

Legislation and regulation in France

As mentioned, new regulations for French crowdfunding went into effect in October 2014. French equity CFPs offering equity must now either obtain a license as a "crowd-sourced investment advisor" (CIP) or a license as a financial service provider (PSI). CFPs under the CIP license works as an intermediary between the crowdfunder and entrepreneur. The CIP CFP can issue securities from French public companies (SA) and French private companies (SAS). The latter has to provide audited financials for the previous two years. The maximum amount a SA or SAS can raise through a French CIP CFP is €1 million in a 12-month period. Investors face no limitations in regard to how much they can invest, but CFPs are responsible to check whether investors have enough funds so that a potential loss does not leave them in a personal financial crisis (ACPR Banque de France, 2014; Solar plaza, 2015). The CIP CFP is the most common CFP-type in France, but it can only offer its services in France, restricting the crowd to French residents.

If a platform has the PSI structure, a €125 000 capital requirement for the CFP is required by law. Companies using the PSI CFP can raise up to €5 million in a 12-month period. In addition, the crowd is not restricted to France but to the entire EEA. Under the PSI license, the CFP can sell securities directly to investors, i.e. not just working as an intermediary as CIP CFPs do (Torris, 2015).

The French CFP Alternativa was in 2012 split in two business units, AM France and Alternativa.fr. AM France is a PSI CFP and Alternativa.fr is a multilateral trading facility (MTF), which enables investors to trade securities in a secondary market. AM France and Alternative.fr only offer services to sophisticated investors and SA companies. When companies raise funds through AM France, they are simultaneously listed on Alternativa.fr (Torris, 2015). The opportunity to trade in a secondary market makes equity crowdfunding securities more liquid for crowdfunders, which is an area the equity crowdfunding industry in most countries have found challenging to address.

6.5. Recent regulatory changes in the United States

The SEC regulates equity crowdfunding in the US through the Securities Act from 1933 and through various state and federal regulations (Solar plaza, 2015). Historically, it has been

problematic for US startups to raise funds through equity crowdfunding, as the rules have been cumbersome and not customized to fit the concept of crowdfunding for startups. In addition, only accredited investors¹⁵ have been allowed to invest in private companies in the US. Currently, there are approximately 8 million accredited investors in the US, equal to 2,5% of the total US population (Barnett, 2015). Traditionally, if a US private company wants to sell its equity, it has to register with the SEC or meet the exemption criterions that are set forth by Regulation D. Both alternatives bear significant costs in the form of complex legislative and regulatory burdens (SEC, 2014). Consequently, this has made the offering of equity difficult for early stage companies and startups in need of seed funding.

On April 5, 2012, president Barrack Obama signed the "Jumpstart our business startups act" (JOBS act) into law. The JOBS act comprises of seven titles, with the aim to encourage funding of US small businesses by relaxing various securities regulations (SEC, 2015b). For entrepreneurs and crowdfunding, two important changes are the SEC's adoption of Regulation A+ (title IV) and Regulation Crowdfunding (title III).

6.5.1. JOBS act title IV, Regulation A+ (currently in effect)

Regulation A+, which was adopted on March 25, 2015, gives private companies the opportunity to raise capital from both accredited and non-accredited investors. Under Regulation A+, US and Canadian companies can choose to offer securities up to \$20 million (tier 1) or \$50 million (tier 2), in a 12-month period. If the company decides to offer securities for a maximum of \$20 million, it can decide whether to adhere to tier 1 or tier 2. If the company offers securities under tier 1, it will have no limitations regarding the number of non-accredited investors or the amount that non-accredited investors can invest. Furthermore, under tier 1, companies are subject to individual state laws if they choose to sell their securities in other states than the state where the company resides. Under tier 2, non-accredited investors may only purchase shares in private companies for up to 10% of their annual income or net worth, whichever is greater. The tradeoff by choosing tier 2,

¹⁵ Based on the SEC's definition, an accredited investor is an individual who has an income exceeding \$200 000 in each of the two previous years, or has joint income with a spouse exceeding \$300 000 in each of the two previous years. Alternatively, an accredited investor can be an individual whose net worth, or joint net worth with a spouse exceeds \$1 million, excluding the value of his/her/their primary residence (SEC, 2015a).

relative to tier 1, is that tier 2 offerings are exempt from the different state laws in which the security is sold. This can save the company both time and money (SEC, 2015c).

While Regulation A+ offerings are subject to less extensive reporting and less disclosure requirements than offerings that are made under Regulation D, it is still a lengthy and time-consuming process that is not very suitable for startups. Regulation A+ is often referred to as the "Mini IPO". Offerings under tier 1 and tier 2 would therefore suit companies that are not looking for seed funds, but rather companies that are passed that stage. The main factor that is important for equity crowdfunding in regard to Regulation A+, is that non-accredited investors are allowed to invest.

6.5.2. JOBS act title III, Regulation Crowdfunding¹⁶

The SEC adopted the Regulation Crowdfunding rules on October 30, 2015. Under regulation Crowdfunding, the required legal paperwork and disclosure process is reduced relative to previous regulations. In addition, the security offering can be done through a registered crowdfunding portal (i.e. CFP) rather than traditional brokers, which might be cheaper for entrepreneurs. Under this type of offering, a US limited company can raise a maximum of \$1 million through crowdfunding offerings in a 12-month period. Further, for a 12-month period, any individual with an annual income or net worth less than \$100 000 can invest an aggregate of \$2000, or 5% of the lesser of his annual income or net worth is equal to \$100 000 or more, he can invest 10% of the lesser of his annual income or net worth (SEC, 2015d).

Regulation prior to the JOBS act did not allow any public solicitation for private companies. Under regulation Crowdfunding, companies can use email and social media (e.g. LinkedIn, Facebook, Instagram) to offer investment opportunities. In contrast to Regulation A+, Regulation Crowdfunding gives startups in need of seed funds an opportunity to address a large crowd without having to go through a long and costly process. Regulation Crowdfunding may therefore be characterized as the beginning of real equity crowdfunding in the US (Guzik, 2015).

¹⁶ In effect from early 2016

However, as a foreign entrepreneur it might prove difficult to raise funds through equity crowdfunding in the US. Through email correspondence with US equity CFPs, albeit prior to the adoption of regulation crowdfunding, the authors found that US equity CFPs are willing to work with foreign entrepreneurs only if the entrepreneur incorporates a US limited company.

7. The Norwegian crowdfunding market

This section examines the current situation for crowdfunding in Norway, in addition to crowdfunding volumes in the Nordic region (Norway, Denmark, Sweden, Finland and Iceland). The section also briefly reviews the activity of traditional sources of capital for Norwegian entrepreneurs and startups. Lastly, the regulatory challenges that crowdfunding platforms face in Norway is discussed.

7.1. Market situation for Norwegian crowdfunders and entrepreneurs

There are a limited number of CFPs in Norway which together cover reward, donation and equity crowdfunding, e.g. momsmeanbusiness.com (reward), NewJelly.com (reward & equity) and bidra.no (reward and donation). The CFPs mentioned have several successful projects that have been financed 100% or more. Still, the Norwegian CFPs seem to develop and operate at a slower pace than its competitors in Europe and in the US. One might also argue that the majority of the Norwegian crowd is less informed of the concept of crowdfunding. These are two important obstacles that the Norwegian crowdfunding market needs to overcome.

Through email correspondence with the Finnish CFP "Invesdor", the authors found that a new Invesdor affiliate will become operational in Norway within the first three months of 2016. Furthermore, the new affiliate will operate through its newly obtained MiFID license. They will first offer equity crowdfunding, and at a later stage introduce loan crowdfunding to the Norwegian market. Invesdor already has experience in equity and loan crowdfunding from their operations in Finland, whereas the Norwegian financial crowdfunding market is practically non-existent. If one assumes the crowdfunding market in Norway follows the same trends as for other European countries, the potential for a financial CFP in Norway is high. Currently, there are no CFPs in Norway where an investor can make a financial profit¹⁷.

After a discussion with Dr. Rotem Shneor (2015), head of the Nordic Crowdfunding Alliance (NCA), the authors learned that as a measure to promote growth in the Nordic crowdfunding

¹⁷ NewJelly has had two crowdfunding campaigns marked as equity crowdfunding, but the entrepreneurs explicitly emphasize that a financial return for their investors is not a priority.

market, a campaign listed on a NCA partnered CFP would also be featured on every other CFP that is a partner of the NCA. This could help solving the problem of a limited Norwegian crowd, as Norwegian campaigns will then also be listed on CFPs in Denmark (Booomerang.dk), Finland (Invesdor.com and Mesenaati.me) and on Iceland (Karolinafund.com). NCA and the partner CFPs represent over 30 000 individual crowdfunders, distributed among the Nordic countries (Nordic Crowdfunding Alliance, 2015).

As mentioned, Norwegian crowdfunders currently have limited options in regard to financial crowdfunding. A Norwegian crowdfunder looking for non-financial return should seek out the specific project that he wants to fund, regardless of the location of the campaign. If he on the other hand is looking for financial return, additional factors are important, e.g. the legislation and regulation of the country in which the CFP resides, domestic legislation and regulation for the crowdfunder, currency, accessibility and reliability. From the authors' research and correspondence with foreign CFPs, it seems loan crowdfunding for Norwegian nationals cannot be characterized as a viable investment option. However, the research suggests that equity crowdfunding in Europe may be a realistic investment opportunity. Excluding Nordic CFPs, several European equity CFPs (e.g. Seedrs, Crowdcube) are open to foreign investors. Still, investing through a foreign CFP would make the investor subject to both domestic and foreign legislation, which in some cases might be problematic. A more harmonized regulatory framework for the EU/EEA could help mitigate this issue, thereby benefitting the whole European crowdfunding industry.

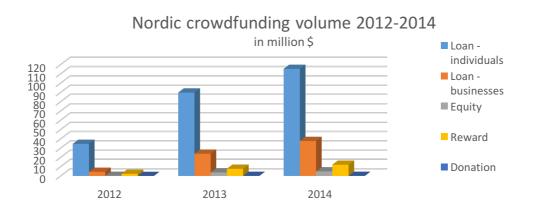
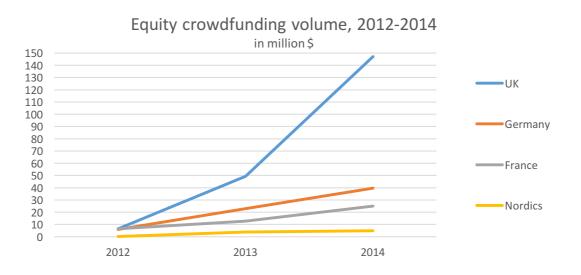


Figure 12. The Nordic: Crowdfunding volume, 2012-2014. Data from Wardrop et al. (2015)

Despite the slow development of crowdfunding in Norway, crowdfunded loans to individuals and businesses during 2014 in the Nordics equaled \$115 million and \$38 million respectively. \$12 million was raised through reward campaigns, while donation based campaigns raised approximately \$133 000. During 2014, equity crowdfunding activity totaled \$5 million.





As figure 13 illustrates, the Nordic equity crowdfunding volume has not yet experienced the same growth that the leading markets have. A collective reason for low Nordic crowdfunding volumes in general may be the limited crowd of the Nordic countries relative to the crowd in the UK, Germany and France. However, for equity crowdfunding in the Nordics, the low

volume may also be a result of cumbersome domestic regulation and legislation. Wardrop et al. (2015) found that a significant amount of the providers of alternative finance (i.e. CFPs) in the Nordics believed that current legislation and regulation in their country was excessive and too strict. Contrary to France, where the government has acknowledged crowdfunding as a focus area, indications are that Nordic countries lag behind in the process of facilitating equity crowdfunding on a domestic level.

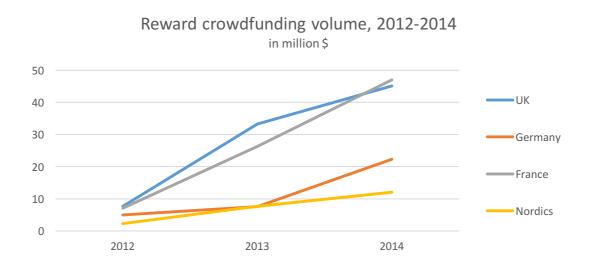
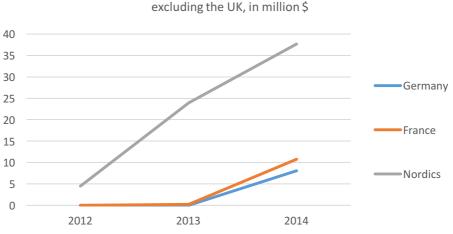


Figure 14. Reward crowdfunding volume in leading European markets and the Nordics, 2012-2014. Data from Wardrop et al. (2015)

Reward crowdfunding has fewer legal constraints in regard to cross-border transactions. This might explain why the Nordic region has experienced the high three-year average growth of 143% in this segment. Albeit, the Nordic volume is still low compared to the rest of the European market.



Business loan crowdfunding volume, 2012-2014 excluding the UK, in million \$

Figure 15. Business loan crowdfunding volume in France, Germany and the Nordics, 2012-2014. Data from Wardrop et al. (2015)

In the above table, volumes for the UK is excluded in order to increase the illustrative effect of the other markets. Contrary to volumes of the other segments of crowdfunding, business loan crowdfunding in the Nordics is higher than in France and Germany. As previously explained, French business loan crowdfunding activity was first initiated in October 2014, when proper legislation was introduced. Furthermore, German CFPs providing crowdfunded business loans are required to have a partner bank, to whom they pay a commission on issued loans, making margins lower and operations less profitable (Vasagar, 2015).

One major obstacle that Norwegian entrepreneurs face is the lack of Norwegian funding sources and available capital. Dr. Rotem Shneor (2015) with the NCA emphasizes this problem and claims the solution could be crowdfunding. In order to assess this claim, it is relevant to look at the availability of capital by examining startup/SME lending and venture investments in the Norwegian market. Both loan and equity crowdfunding could be characterized as substitutes to the funding sources mentioned above. Theoretically, the accessibility of crowdfunded capital is higher than traditional business loans and venture capital, if one assumes that banks have requirements that often are unrealistic (e.g. credit history and years of revenues) for most startups. Furthermore, the number of startups funded via VC firms is only a fraction of the number of startups in need of funding (as illustrated in figure 17 below).

7.2. Venture capital activity in Norway

In 2014, venture capital and private equity firms (domestic and foreign) invested \$74,4 million in startup ventures and \$82,7 million in later stage ventures in Norway, totaling \$157,1 million. In addition, the Norwegian private equity market experienced an all time high investment level from foreign investors in 2014 (NVCA.no, 2015).

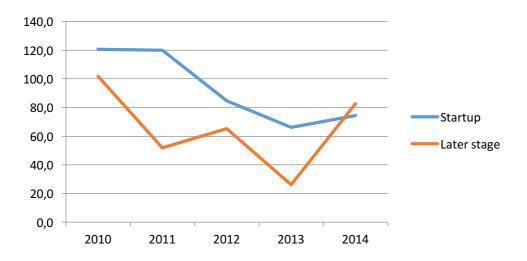


Figure 16. Startup and later stage venture investment volumes in Norwegian firms, by Norwegian and foreign VC and PE-firms, 2010-2014. Data from EVCA (2015)

The invested amount has declined for the past four years, but experienced an upturn in 2014. Figure 16 illustrates that the total level of available capital has decreased in the past five years. In addition to a decrease in value of investments, there has also been a decrease in number of investment deals, as shown in figure 17.

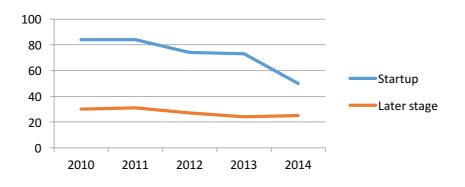


Figure 17. Number of Norwegian startup and later stage firms invested in by Norwegian and foreign VC and private equity firms, 2010-2014. Data from EVCA (2015)

By examining figure 16 and figure 17 together, one can see there is a gap that is not being filled. If one assumes that entrepreneur demand for capital has not decreased accordingly, this leaves Norwegian entrepreneurs with a more limited supply of investor capital. When the supply decreases, the competition for the available capital intensifies (given above assumption). Ultimately, this might result in a disruptive innovative environment, where potentially prosperous businesses and entrepreneurs either fail to obtain capital or lose motivation due to the unavailability of capital. To ensure the future of Norwegian innovation, it is important that demand is met with supply, but it seems that this is currently not true for the Norwegian market.

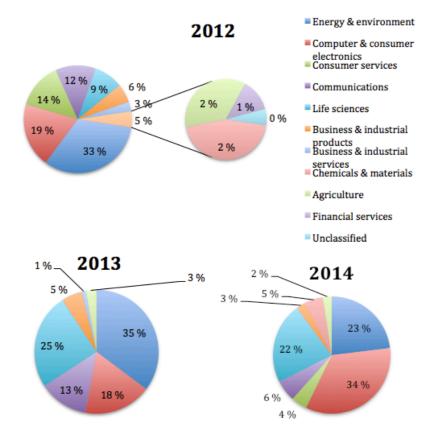


Figure 18. Share of amount invested in Norwegian startups, by domestic and foreign VC and PE firms, 2012-2014. Data from EVCA (2015)

Venture capital and private equity firms that invest in Norwegian companies tend to have a preference for certain sectors, as illustrated in figure 18. Over the last years, more than 50% of total funds invested have been invested in energy & environment and computer & consumer electronics.

7.3. SME lending in Norway

Figure 19 illustrates the outstanding business loans in Norway, 2007-2012. As one can see, the amount of total outstanding business loans comprises of a large portion of SME loans.

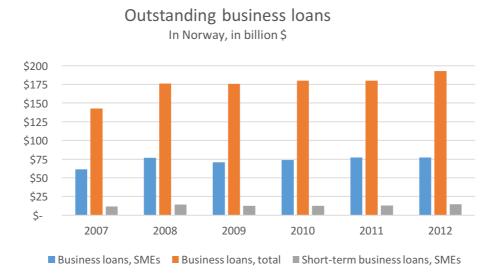


Figure 19. Outstanding business loans issued in Norway, 2007-2012. Data from OECD (2015)

The explanation for the big portion of SME lending relative to total business loans might be twofold: It could be that the conditions for SMEs to obtain loans are getting more relaxed, or it could be that the category total business loans is not representative since bigger companies finance themselves through other sources than bank loans.

Large firms are generally able to finance themselves through the market by issuing debt and equity securities, making them less dependent on bank financing (OECD, 2015). Most SMEs and startups do not share this benefit, and it is challenging for them to obtain debt financing. This makes them more vulnerable to changing conditions and requirements in the credit market, which could potentially make it more difficult to obtain debt financing.

Innovation Norway is a government organization that helps entrepreneurs, startups and SMEs by offering them advisory services and financial support. The financial support Innovation Norway offers is high-risk loans, low-risk loans or grants (Innovation Norway, 2015a). The loans are priced above market interest rates, and premiums vary in regard to the lender's risk. Furthermore, the maturity is up to ten years, which is often the duration of the project, and required collateral is usually below the collateral that banks require. The grants provided by Innovation Norway are normally one third of the project costs, but they also vary depending on the company size (OECD, 2015). In order to obtain such grants, Innovation Norway must find the company's application, business plan and growth potential viable and within scope.

In Innovation Norway's annual report (2015b), it is emphasized that Norwegian startups and growth companies need to grow internationally. Norwegian businesses with good specialized business-ideas and high growth potential have difficulties realizing their growth potential in Norway, due to the small Norwegian market. A Norwegian crowdfunding market open to crowdfunders abroad could help bring in much needed capital to fund future innovation and ventures in Norway.

7.4. Legal aspects concerning financial crowdfunding in Norway

Two obstacles for financial crowdfunding in Norway are the Norwegian concession and prospect rules. The concession rules state that some entities need permission from legal authorities to initiate business activity, while the prospect rules require some entities to draft a prospect when offering tradable securities.

7.4.1. Legal challenges for equity crowdfunding in Norway

Stock emission

Equity crowdfunding requires that the entrepreneur is a juridical person in the form of a company, since the exchange consists of funds for ownership (company equity). This means that the entrepreneur has to choose between different company structures. The most common structure in Norway is "aksjeselskap/AS", the Norwegian equivalent for a limited liability company. With this company structure, the entrepreneur and other share owners bear no personal responsibility for the company's liabilities. To establish an AS, one needs at least NOK 30 000 initial share capital, which was recently reduced from NOK 100 000 (Altinn, 2014). The low personal risk and low capital requirement for establishment makes the company structure well suited for equity crowdfunding. Still, there are a few legal challenges regarding equity crowdfunding for this company structure. The Limited Liability Companies

Act (1997) states that only (current) share owners or specifically named persons may be invited to buy new shares during an emission, cf. asl. § 10-1. This means that issuing equity shares in a company through a crowdfunding platform to the public may in fact be illegal for an AS. However, there might be a way around this constraint. As mentioned by Hermansen (2014), asl. § 10-1 does not state that approaching the public with an offer to later buy equity shares is illegal. As long as there is no formal commitment either by the entrepreneur or the investor during the crowdfunding process, asl. § 10-1 seems not to be violated. The crowdfunding campaign can then instead be used as a means to locate potential investors, with no formal commitment, and then in the next round the company can specifically name those interested in a formal offer towards investors. A CFP that practices equity crowdfunding in this way is the Swedish FundedByMe. Their terms of service, under equity crowdfunding section 3, states the following:

During the campaign, a Member may offer to participate in the fundraising by specifying the amount such Member would like to invest. Any offer by a Member to invest (including submission of a specified amount) constitutes a non-binding offer to invest by such Member. Such offer may thereafter be accepted or rejected by the Company being subject to the Equity Crowdfunding Campaign (FundedByMe, 2015a).

Concession rules

According to the Securities Trading Act (2007), Financial securities companies in Norway need concession from legal authorities to do business, cf. vphl. § 9-1. The first sentence states (translated from Norwegian): *"Investment services provided on a commercial basis can only be provided by businesses which have approval for this from the department"*. Furthermore, investment service is defined as *"reception and dissemination of orders on behalf of customer regarding one or more financial instruments as defined in § 2-2", cf. vphl.* § 2-1. As tradable securities fall under the definition of financial instrument, cf. vphl. § 2-2, it is not impossible that equity CFPs will be classified as a securities company and hence need concession from legal authorities. This might increase transaction costs and complicate the crowdfunding environment.

Prospect rules

A prospect document should include information that is necessary for the investor to be able to make a well-founded assessment of the issuer's financial position and prospects, and of rights concerning issued securities, cf. vphl. § 7-13 first section. These documents can be comprehensive and time-consuming to make, and is therefore a potential barrier for equity crowdfunding in Norway.

Norwegian companies have two kinds of prospect rules that might apply when issuing shares: Norwegian prospect rules and European prospect rules (EEA prospects). The former rules have less demanding information requirement than the latter (PwC, 2012). Norwegian prospect rules apply when issuing shares towards 150 people or more and at a total value of at least ≤ 1 million during a 12-month period, cf. vphl. § 7-2. If the entrepreneur issue shares at a total value of ≤ 5 million or more, during a 12-month period, she must instead follow the mentioned EEA prospect rules, cf. vphl. § 7-7. This means that as long as the crowdfunding campaign is either focused towards less than 150 people or collects less than \$ 1 million, the prospect rules do not apply.

7.4.2. Legal challenges for loan crowdfunding in Norway

Concession rules

Funding activity is defined in the The Financial Institutions Act (1988) as to provide, broker or act as guarantee for credit or in any other way contribute to financing of businesses other than self-owned, cf. finansvl. § 1-2. Furthermore, only some financial institutions have the right to conduct funding activity, e.g. funding firms, cf. finansvl. § 1-4. Funding firms, however, need concession to operate, cf. finansvl. § 3-3. Finansvl. § 1-4 also states that brokering of loans is not limited by mentioned paragraph. A loan brokerage firm is defined as a firm that does no other funding business than brokering, cf. finansvl. § 1-5 second section. This means that if a CFP were to structure its business so that it is a loan brokerage firm, meaning it never actually receives/sends capital from/to the crowdfunder/entrepreneur, it seems it will not need concession to operate. It will then act as an intermediary, a third party, and only organize deals between investor and entrepreneur without controlling the actual transaction. If the CFP receives money from the investor and then itself sends it to the entrepreneur, it will be defined as a funding firm and

therefore need permission from legal authorities. Still, loan brokerage firms are required by law to deliver a report about their business on a form of which the authorities determine, cf. finansvl. § 4-1.

The Swedish CFP previously mentioned, FundedByMe, seems to have structured itself as to avoid concession challenges similar to the Norwegian rules. The following is stated in its terms of service, under "fees and payment terms" section 1:

Payment for funding in an Equity Crowdfunding Campaign shall always be made from the Investor to the Entrepreneur, and payment of a Loan within Loan Crowdfunding shall always be made from the Lender to the Borrower, and shall not at any time be made to FundedByMe. All payment shall be made in accordance with the instructions set forth on the Website, e.g. by the use of the Payment Service Provider as specified by FundedByMe. Hence, FundedByMe shall not take possession of Campaign funds at any time (FundedByMe, 2015a).

8. Guide: Why and how to use crowdfunding for raising capital

8.1. Traditional funding versus crowdfunding: Cost of raising funds

There are several factors an entrepreneur should evaluate when considering whether to raise capital by traditional funding or crowdfunding. This section briefly examines a few factors that could affect the cost of raising funds when comparing the two. Traditional funding is used as an umbrella term for all funding that is not crowdfunding, while crowdfunding is used as an umbrella term for reward, equity and loan crowdfunding.

Network and expertise

In the literature review, it is stressed that traditional funding (e.g. venture capital or angel investment) often brings additional value to the company in the form of startup expertise and high value networks. As most crowdfunders are assumed to be small, and often unsophisticated, it is unlikely that the entrepreneur will receive the same benefits from crowdfunding. And if some of the potential crowdfunders possess expertise or network beneficial to the entrepreneur, their individual gain of sharing such information is low due to their low stake in the company. The alternative cost of forgoing such value should be included when calculating the cost of raising funds via crowdfunding.

Furthermore, as venture capitalists or angel investors sometimes also have expertise regarding the product or industry, and valuation of startups in general, the asymmetric information problem might be lower than for crowdfunding. If the entrepreneur is of high quality, and the traditional investors recognize this, it could increase their willingness to pay a fairer price for the equity that is offered. As argued in the literature review, this information asymmetry could make crowdfunding more attractive to low quality entrepreneurs and lead to adverse selection. An extreme potential consequence of this is the "market for lemons", as described by Akerlof (1970), where investors are unable to identify and separate low quality from high quality. If such, investors are likely to require discounts even from high quality investors, as they cannot identify them to be of high quality. This should theoretically increase the cost of raising funds via crowdfunding, but as research on the behavior of crowdfunders so far is limited it is too early to argue if such a statement is true or false.

A counter-argument to the asymmetric information problem for crowdfunding is the "wisdom of the crowds", as studied by Galton (1907). He found that, during a contest of guessing the weight of an ox, the average guess from a sample of 787 participants was within 1% of the correct answer, better than guesses from professionals like farmers and butchers. One might argue that the wisdom of the crowd logic might apply to crowdfunding as well. That is, that the crowd can at times be equally or more effective than professional individuals or institutions (e.g. VC or angel investors) in evaluating projects, thus potentially reducing the possible consequences of asymmetric information.

Marketing feedback

If an entrepreneur successfully raises capital through reward or equity crowdfunding, she also gets valuable marketing information. From the reward model, she obtains information about the demand for her unfinished product. This could reduce uncertainty (i.e. variance) about future demand. From the equity model, she receives validation from a high amount of people that they see value in her project. Importantly, in both cases she also gets the opportunity of receiving feedback from her crowd. This potential added value would not be gained if she instead raised capital through traditional funding sources, which thereby might indicate a lower cost of raising funds via crowdfunding than via traditional funding.

Investor management

Capital raised via traditional funding mechanisms typically involves few investors. Conversely, crowdfunding typically involves several hundred or sometimes even thousands. While a large crowd potentially comes with benefits such as valuable feedback, the time spent and costs of communicating with them is likely to be higher than for traditional funding. This could increase cost of raising funds via crowdfunding relative to traditional funding.

Revealing information: Risk of imitation and increased supplier power.

There are a few risks linked to crowdfunding that are less severe when traditional funding is used. One is the risk of someone imitating the business idea. It lies in the nature of crowdfunding to disclose important product details to the public. Depending on the product, some risk can be mitigated by patents but not all. Another risk is that potential suppliers may take advantage of the public campaign information when calculating their prices. This can be solved by securing supplier contracts prior to the campaign, but still has the potential to increase input costs for the entrepreneur. While it could be difficult to calculate the costs of mentioned risks, it could make crowdfunding more expensive relative to traditional funding.

Global versus local

Traditional funding is typically only available from investors of geographical proximity to the entrepreneur, due to reasons argued earlier. The selection of potential investors may therefore sometimes be limited, e.g. if she lives in a smaller city (although demand for capital may also be lower). If supply of capital is low or demand is high, due to local factors, the entrepreneur might have to pay a higher price for the money raised. As crowdfunding is an Internet phenomenon, it is potentially borderless¹⁸. If she has a high quality product idea with high potential demand, she could exploit investors/backers with the most willingness to pay. The relative value added of this effect depends on local factors that limit traditional funding, but is still likely to reduce the cost of raising funds via crowdfunding compared to traditional funding.

In summary, entrepreneurs who experience less problems regarding revealing of information about their product, or do not receive much additional benefits from expertise and network of institutional investors, should consider crowdfunding as a viable source of capital.

8.2. Choice of crowdfunding model: what to consider

It has been argued that startups often face challenges when trying to obtain funding. Startups typically own little assets, making bank loans more difficult to get. Furthermore, the problem of asymmetric information for investors is enhanced due to lack of available historical data. VC and angel investing are available to some, but they prefer to invest relatively large amounts and usually only do so if the potential upside is significant. As a

¹⁸ Although for reward crowdfunding, it is previously mentioned that the entrepreneur's social network is found to be of great importance and account for a high amount of the pre-sales. As most of the entrepreneur's social network is likely to be local, this relative effect is diminished for reward crowdfunding.

result, crowdfunding has become a viable fundraising method. There are however, as mentioned earlier, several crowdfunding models to choose from. The next sections will try to shed light on how the models differ from each other and what implications an entrepreneur should be aware of when considering crowdfunding¹⁹. A summarizing table (table 7) is presented at the end of the subchapter, consisting of reward, equity and loan crowdfunding.

8.2.1. Reward crowdfunding

Reward crowdfunding is one of the non-financial crowdfunding models. Funders of these campaigns do not expect a financial return on their pledge, they rather expect non-financial rewards based on the size of their pledge. The model is often compared to pre-purchasing, and a majority of the crowdfunders are assumed to be future consumers of the product.

Funder motivation – extrinsic and intrinsic

As described in the literature review, the motivation behind crowdfunders' decision to pledge typically varies. However, research so far only supports or rejects predetermined hypothesis. It does not provide objective evidence, as crowdfunding is still a relatively new phenomenon. Still, scholars seem to agree that crowdfunders of reward campaigns, by varying degree, are motivated by more than extrinsic desires (Belleflamme et al., 2013; Gerber and Hui, 2013; Pierrakis and Collins, 2013; Cholakova and Clarysse, 2015). That is, the crowdfunders as a group are heterogeneous. Four motivators are described by literature: Desire for reward (extrinsic), the act of helping others, being a part of a community and supporting a cause (intrinsic).

Crowdfunders who, in addition to desiring reward, are motivated by intrinsic desires could be willing to pay more than their subjective valuation of the product itself. If one assumes that these motivations exist, it gives the entrepreneur an opportunity to price differentiate her crowdfunders by carefully designing rewards that build on both extrinsic and intrinsic desires, and to exploit their different willingness to pay. Crowdfunders can then self-select

¹⁹ A general weakness of the guide is that it offers little insight into importance of product theme when considering crowdfunding (most relevant for reward crowdfunding). The literature that is studied typically examine model dynamics, while giving less attention to the potential implication that product theme has on the findings (e.g. if technology campaigns share characteristics with media or fashion campaigns).

the reward that fits their individual preferences, increasing both consumer and producer surplus. This consumer discrimination effect is one of the main strengths of reward crowdfunding. Price differentiating is not possible to the same degree with other crowdfunding models or traditional financing forms, as when the product is released to market, those who would be willing to pay extra in order to help realize production will have to pay the same as other consumers. Hence, one might argue that reward crowdfunding, to some extent, expands the market of the entrepreneur's product. However, this price discrimination effect is diminished if the entrepreneur's capital requirement is large (as discussed in the literature review).

Although desire for reward is argued to be the greatest motivator for most crowdfunders of this type of campaign, others (e.g. family and friends) could value the intrinsic part more or even pledge without planning to consume the future product. Entrepreneurs with this in mind could create reward levels that focus on the intrinsic motivations, e.g. a handwritten postcard with appreciations from the entrepreneur and her team (emphasizing the "help others" motivator), or exclusive insight and updates on the progress of the project or voting rights regarding design of the product (emphasizing the "being part of a community" motivator). Further, depending on her product, the entrepreneur may construct her campaign design so that people associate with these desires. If the product focuses on social or environmental causes, e.g. an innovative water cleanser aimed at the third world or a more energy-efficient light bulb, one might think that some of the potential crowdfunders back the project based on the desire to support a cause rather than the desire for reward. The communication of this message might then be more important than the actual rewards.

Entrepreneur motivation – reward crowdfunding is more than just financing

The main motivation of most fundraising methods is to raise funds. While the same is likely to be true for crowdfunding, reward crowdfunding brings more than just financing. It could also work as a marketing tool, i.e. a way to expand awareness of work and to form lasting connections with customers. With the help of Web 2.0, the entrepreneur and more importantly the crowdfunders may use their social media platforms to influence others into supporting the crowdfunding campaign. If the campaign reaches the right crowd, this form of marketing could prove very valuable as it comes from other consumers and not just the

entrepreneur (i.e. word-of-mouth marketing versus marketing investments). Word-of-mouth customers are found to bring more long-term value to firms than marketing-induced customers (Villanueva, Yoo and Hanssens, 2008) and also come at a much lower cost. Also, if the campaign is successful it gives the entrepreneur an opportunity to build a fan base that otherwise could take years to build, by e.g. including crowdfunders in the production and design process. Furthermore, although more difficult to influence, news media outlets sometimes cover crowdfunding campaigns which further increase public awareness of the project.

In addition to raising funds, expanding awareness of work and establishing connections, gaining approval is found to be a motivation for some entrepreneurs (Gerber and Hui, 2013). If an entrepreneur is uncertain that there exists a market for their product, reward crowdfunding could be a way to test demand. An unsuccessful campaign might indicate that the venture is risky and that improvements need to be made before product launch. A successful campaign reduces startup risk by exposing potential demand while in the same team securing pre-orders for the product. Either campaign outcome, the entrepreneur will have increased her risk knowledge of the venture.

Another potential benefit from gaining approval is that it reduces the asymmetric information problem. Startups typically have very little historical data to present when applying for external finance. Should the entrepreneur need more capital, e.g. a bank loan to improve production or a venture investment to expand, a successful crowdfunding campaign could serve as a credible, costly signal that the startup is of quality²⁰. The amount of money raised and number of supporters could then be seen as a quantification of the value of the startup.

A final relevant motivator for entrepreneurs to use reward crowdfunding over other fundraising models is maintaining control of the startup. Equity crowdfunding (and traditional investment) comes at the expense of reduced ownership of the startup,

²⁰ However, early (reward) crowdfunders might feel cheated if the company sells ownership to external sources at a later stage, as happened when Oculus Rift, a virtual reality headset funded on Kickstarter, was acquired by Facebook in 2014: <u>http://www.huffingtonpost.com/2014/03/26/oculus-rift-kickstarter_n_5034511.html</u>

sometimes reducing the entrepreneur's creative control over the project. However, the crowd's ability to actually implement control over startups is not well documented.

Idiosyncratic risk, return and signaling

Crowdfunders face a few risks when backing a reward crowdfunding campaign, which entrepreneurs should be aware of. The two main risks are fraud and ability to deliver reward. While the fraud rate on e.g. Kickstarter is less than 5% (Mollick, 2014), the risk of fraud is still prominent. The capital is raised up front and there is no clear legal obligation from the entrepreneur to deliver the promised rewards. Honest entrepreneurs with this in mind should focus on campaign transparency, so that crowdfunders are not deterred from backing a project because of fear of fraud. The need to trust the entrepreneur is found to positively affect likelihood for crowdfunding success (Cholakova and Clarysse, 2015). Ability to deliver is another potential risk. Not all successful crowdfunding campaigns eventually end up with crowdfunders receiving their rewards. Given high information asymmetry between the entrepreneur and the crowdfunders, crowdfunders may search for credible (costly and observable) signals (Spence, 1973) that reduce risk of fraud and failure to deliver. Furthermore, crowdfunders of reward campaigns are assumed to be less sophisticated than traditional investors, and they differ from traditional investors in that they do not receive any part of future profits from the company they pledge to. Instead, they are likely to be future consumers of the product. Traditional effective signals may therefore be less effective for this type of funding, e.g. retaining equity, education of board members and providing risk details. One might even think that providing too much details of risk could deter those crowdfunders whose only motivation is desire for reward, as the risk of many projects is high relative to the objective value of rewards.

Research suggests that preparedness²¹ positively affects likelihood for reward crowdfunding campaign success (Mollick, 2014). Including a well-made video and regularly providing campaign updates is costly and time-consuming for the entrepreneur, and could therefore signal determinacy and willingness to work hard for the project to succeed. Grammatical errors in the campaign pitch are found (by Mollick, 2014) to negatively affect likelihood for

²¹ Measured by inclusion of video or not, whether the entrepreneur provided updates three days after launch and if the campaign pitch had any spelling errors in it.

campaign success, possibly for the same reasons as it may show lack of determinacy. All three factors are also easily observed by the crowdfunder. This suggests that backing a campaign might be related to the rational evaluation of the likelihood of the entrepreneur's success in creating the product, i.e. ability to deliver reward (given that mentioned factors are good indicators of entrepreneur quality). This is similar to other types of venture financing, but the complexity of the signals differs.

Signaling preparedness is therefore important for entrepreneurs considering reward crowdfunding, as it is found to increase chance for campaign success and could be a part of the crowdfunders' risk evaluation of the project.

All-or-nothing versus keep-it-all

As mentioned earlier, there are two different reward crowdfunding models: The AON model and the KIA model. The choice of model affects the crowdfunder's risk of receiving reward in addition to the entrepreneur's risk-return tradeoff. From a crowdfunder's perspective, the risk of the entrepreneur initiating an under-funded project is present if the KIA model is used. An under-funded project is associated with higher risk of project failure, thus the KIA model increases risk borne by the crowd. The AON model, however, shifts the risk upon the entrepreneur. If the campaign fails to reach the goal, no money is transferred to the entrepreneur. From an entrepreneur's perspective, the KIA model allows her to keep pledged money even if she fails to reach her goal, which could be preferred by risk-averse entrepreneurs. Choosing the AON model could therefore serve as an effective signal, being both costly and observable, from the entrepreneur to the crowdfunders: It could signal that the entrepreneur is willing to risk receiving no funding at all and that she will only initiate the project if enough capital is raised. The risk of receiving no funding could be too high for low quality entrepreneurs to benefit from the model, hence choosing the AON model could also signal entrepreneur quality. This in turn could let the entrepreneur set higher funding goals than with the KIA model, as the risk of the crowd is reduced.

A study by Cumming et al. (2015)²² found that 34% of all AON campaigns reached their goal, while only 17% of KIA campaigns did the same. Also, AON campaigns on average sought to raise \$31 397, versus \$20 478 for KIA campaigns.

The model decision is therefore a risk-return tradeoff: The AON model seems to increase likelihood of funding success and also lets the entrepreneur set a higher goal, but in the same time it brings significantly more risk. The KIA model seems to have lower chance of meeting the goal, but the entrepreneur is still secured the pledged amount if the campaign fails to do so.

However, there likely are situations where this risk-return relationship regarding AON versus KIA is of less importance. If the project's fixed costs are very low, e.g. as for mobile app developers, there is less need for a high amount of crowdfunders to share the costs among. She can then initiate the project even if she gets e.g. 40% funding, as long as pledges cover marginal production costs, without reducing the quality of the project. If the entrepreneur manages to clearly signal this to crowdfunders, the KIA model might be optimal. Furthermore, not all reward CFPs offer both campaign models, e.g. Kickstarter which only allows the AON model. The crowdfunder is then not able to differentiate the AON quality signal from those of other entrepreneurs, which reduces the effectiveness of the signal (Spence, 1973).

Importance of social network and geography effects

As previously argued, startups and investors face additional information asymmetries regarding the quality of the entrepreneur's project. This problem may be even greater for early-stage crowdfunding, as gathering information and monitoring progress is less beneficial when pledges or investments are small. An entrepreneur's social network is then likely to be of importance for crowdfunding campaigns. Family and friends (F&F) have "inside" information about project quality that other investors cannot obtain themselves. Crowdfunders may therefore interpret the investment decision of others as a signal of project quality (i.e. "herding" behavior (Banerjee, 1992)).

²² They studied Indiegogo, a reward CFP that accepts both KIA and AON models

Research that supports this suggestion is that of Mollick (2014), Zheng et al. (2014) and Agrawal et al. (2015). The first two found that entrepreneurs on Kickstarter who had many Facebook friends were much more likely to achieve campaign success than those who had few. Furthermore, Agrawal et al. (2015), who in addition examined the geography of crowdfunding, found that F&F are most likely local and that they invest earlier than other investors. They also found that distant investors' desire to invest increases as the entrepreneur accumulates capital. Even though there are considerable limitations to mentioned research, as stated in the literature review, one can try to draw a few observations:

First, a large network of F&F seems to increase chance of funding success. This does not necessarily mean that adding more Facebook friends prior to launching a campaign increases chance for funding success. The source of the effect could rather be the increased possibility of F&F money that a large social network brings. The Facebook network is then more of a proxy for the entrepreneur's "offline" network. However, one might also argue that a large Facebook network increases the entrepreneur's credibility. A dishonest entrepreneur probably would not link her Facebook profile to the campaign, and a fake profile could be less likely to have many Facebook friends.

Second, F&F invest earlier than other investors, which is important because other investors are suggested to be affected by prior investment decisions. A reason for this might be that F&F (and possibly lead investors for equity crowdfunding) are likely to have information about entrepreneur commitment and quality. This information could be difficult and even unprofitable to obtain for other crowdfunders, as the cost of doing so would be high relative to average pledged or invested amount. Other crowdfunders may then wait and see whether the entrepreneur manages to obtain funding from F&F. If this interpretation of the signal (early investment by F&F) is correct, however, is uncertain. It could be that F&F feel obliged to back the entrepreneur due to social contracts, thereby reducing the quality of the signal. Even so, empirical studies argue that early investment is important.

Third, the findings of Mollick (2014) and Zheng et al. (2014) originated from data from Kickstarter (and DemoHour), a reward CFP, while the findings of Agrawal et al. (2015)

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originated from data from Sellaband, a profit-sharing CFP. Comparing data from different CFPs with different crowdfunding models is a potential limitation when trying to make conclusions, but still, it could also indicate that mentioned network effects apply to both reward and equity crowdfunding. This is not too unlikely, as even though the crowd of the two models differ, they both suffer from the same asymmetric information regarding entrepreneurial quality and commitment.

Moreover, a study of the Kickstarter community found that 70% of backers on Kickstarter only support a single project, and that 95% of these backers joined Kickstarter and pledged in the same day (Kuppuswamy and Bayus, 2015). In other words, serial backers seem rare. This could indicate that entrepreneurs who use Kickstarter attract most of their funding by utilizing their social network of friends and others (i.e. followers who indirectly know the entrepreneur through social media connection), making social network for entrepreneurs even more important for reward crowdfunding than for other crowdfunding models (where serial investors are more common).

The entrepreneur's social network is therefore likely to affect the campaign outcome, as early support seems to increase the likelihood that later crowdfunders also support the campaign. One can not yet make any credible conclusions as to why this herding phenomenon occurs, but since most early support typically comes from F&F, it is tempting to suggest that it occurs due to the signaling effects, e.g. of quality and commitment, that comes with F&F support. However, the herding behavior might also come from the fact that the closer the campaign is to reach its goal, the higher is the marginal impact of each pledge (for AON campaigns). This could enhance the intrinsic motivations of each crowdfunder, as they may feel their pledge is then of more significance for the entrepreneur or the cause. Early investment from F&F might then initiate a "snowball effect", as the marginal impact of each pledge only increases the closer one is to the goal.

Either way, early support is likely to positively affect the chance of funding success. It is then important for entrepreneurs who consider reward crowdfunding to properly utilize their social network. However, keeping momentum from the beginning of the campaign until the end is very difficult and rare, as will be discussed in the following section.

Reward campaign dynamics: The "Kickstarter effect"

The funding cycle of reward crowdfunding campaigns often follow a U-shape, as mentioned in the literature review. More funding occurs during the first (mostly from F&F) and last week of the campaign compared to the middle period. This illustrates the difficulty of sustaining and increasing funding activity throughout the campaign. After the first week there is typically low funding activity, no matter the product category or campaign length. But, if enough money is pledged and the campaign approaches its end, the U-shape can be explained by two potential effects: the goal-gradient effect and the deadline effect. The goal-gradient effect predicts that individuals' motivation to reach a goal increases when it is near its desired end state. As discussed in the previous section, this effect could occur since the marginal impact of each pledge increases the closer the goal is, creating the snowball effect. However, even though mentioned effect could occur anywhere in the campaign cycle, it typically occurs in the end. This again could be explained by the deadline effect, which predicts that more activity typically happens close to the deadline. Together, these effects could be the source of the sudden spike in funding activity towards the end of the campaigns (commonly referred to as the "Kickstarter effect"²³).

Campaign length and goal size

One might think that setting a longer campaign duration (e.g. 90 or 60 days rather than 30) increases chances of being successfully funded, as it gives crowdfunders more time to discover the campaign. However, mentioned U-shape and campaign dynamics (Kuppuswamy and Bayus, 2015) illustrate that most campaigns experience low funding activity in the middle of the funding cycle, no matter the length. Researchers even find a significant negative relationship between campaign duration and funding success (Mollick, 2014; Cumming et al., 2015). While one may only speculate as to why this is the case, as explanatory research on the area is limited, statistics contradicts setting longer durations. One reason could be that crowdfunding campaigns are fatiguing and time-consuming for entrepreneurs, so that longer durations make the days spent trying to convince the crowd less effective. Another could simply be that lower quality entrepreneurs tend to choose longer durations (for whatever reasons), or that longer durations signal lack of confidence.

²³ <u>https://www.kickstarter.com/blog/the-kickstarter-effect</u>

Further, as will be briefly discussed in the next section, empirical research suggests that higher goal sizes decreases chances for funding success. If entrepreneurs with high funding goals tend to set longer campaign durations, as more crowdfunders are needed to be successfully funded, this could also be a reason why longer campaign durations seem to decrease funding success. More explanatory research on this area is therefore needed in order to know the real effects of campaign duration on funding success, but either way, entrepreneurs considering reward crowdfunding should be aware that campaigns with longer durations are statistically less likely to achieve funding success. The entrepreneur should therefore do a careful consideration of what duration that best fits her campaign.

Setting a low goal size could also be tempting for entrepreneurs, such that the goal-gradient effect more easily occurs. This could however be unwise, as pledging activity is found to fall off once a project reaches its goal²⁴ (Kuppuswamy and Bayus, 2015). A reason for this might be that the intrinsic motivation could disappear if the entrepreneur has already reached her necessary funding amount. If the goal is too low, the entrepreneur risks having to go forward with a project that is actually underfunded, increasing likelihood of project non-delivery or need to raise more capital. Moreover, campaigns with high project goals are found less likely to be funded (Mollick, 2014), further emphasizing the importance of setting appropriate funding goals.

8.2.2. Equity crowdfunding

Equity crowdfunding has been restricted by legal complications in many countries²⁵, but is starting to become a viable alternative for early-stage funding. As discussed in section 7.4.1, the crowdfunding model has yet to be explicitly mentioned in the Norwegian legislation, but should be legal as long as there are no binding commitments between the investor and the entrepreneur during the funding campaign.

²⁴ Interestingly, Kuppuswamy and Bayus (2015) find that the opposite occurs for Design, Games and Technology projects, i.e. projects that offer tangible rewards – successfully funded projects seem to receive even more funding before their funding cycle ends.

²⁵ Legal challenges for equity crowdfunding and how it complicates the process for the entrepreneur is covered in previous chapters

One of the main differences between crowdfunders of equity (and loan) campaigns and crowdfunders of reward campaigns is that for the equity model, the crowdfunders are not necessarily consumers of the future project. They expect a financial return on their investment, rather than non-financial rewards. This financial return may originate from dividends and capital gains from ownership of equity in the entrepreneur's startup. The main focus of this thesis, however, is on the entrepreneur and how she can use the model to raise capital for her startup. Thus, financial aspects, e.g. valuation of equity or crowdfunders' return on investment compared to risk²⁶ are not covered.

Funder and entrepreneur motivation

To the authors' knowledge, there is not much empirical research on the motivation for funders to participate in equity crowdfunding campaigns. Still, some scholars believe that also these crowdfunders experience intrinsic motivation (or increase in utility), in addition to desire financial return when participating (Pierrakis and Collins, 2013), i.e. community benefits (Belleflamme et al., 2013). However, in contrast to reward crowdfunding, these community benefits are assumed to be equal for all crowdfunders, i.e. the crowdfunders' increase in utility is homogeneous and does not depend on the identity of the crowdfunder. This makes it easier (theoretically) for the entrepreneur to exploit community benefits, than if the reward model is used. This is especially beneficial if the entrepreneur requires a high amount of capital (e.g. >\$100 000). The rationale is that if a lot of capital is required, it could be difficult to attract enough consumers (as for reward crowdfunding) to pre-purchase the product, compared to investors (as for equity crowdfunding) looking for a financial return. There are only so many consumers who potentially are willing to buy a product in advance, as it will depend on the their taste for the product. Investors looking for a financial return, however, are not necessarily future consumers. Their taste for the product is therefore assumed to be of less importance. If the amount of required capital is high, then, it could be easier to please equity crowdfunders as they share the same community benefits, than with reward crowdfunding, where the crowd is assumed to be heterogeneous with regards to community benefits and motivation.

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²⁶ To the authors' knowledge, there is very little (if any) empirical research on risk-return for participants in equity crowdfunding, specifically.

For the entrepreneur, this means that if she requires a high amount of capital to start her project, equity crowdfunding could give higher returns than reward crowdfunding. This is because it will then (theoretically, as assumed by Belleflamme et a., 2013) be easier to convince investors who gain equally from community benefits. Alternatively, if the amount required is smaller, reward crowdfunding could be more beneficial for the entrepreneur. She can then exploit consumers with high willingness to pay.

However, as mentioned in the literature review, Cholakova and Clarysse (2015) found no significant positive relationship between the intrinsic motivators (help others, belonging to a community, support a cause) and the decision to invest in a project²⁷. Therefore, more research is needed before one can make any credible suggestions about whether the theoretical community benefits by Belleflamme et al. (2013) exist for equity crowdfunding, but it could still be valuable knowledge for entrepreneurs experimenting with the phenomenon.

An illustration on how the motivation for equity crowdfunders might differ, compared to traditional investors, is given in figure 20 below:

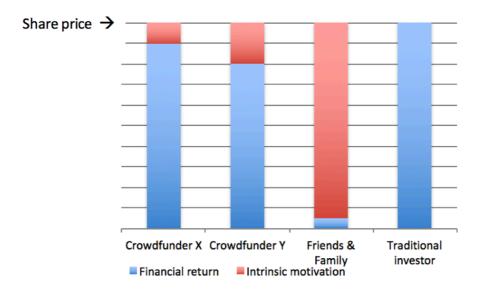


Figure 20. Illustration of different motivation levels for equity crowdfunding

²⁷ Important to note that they only surveyed participants from one CFP, Symbid. It is impossible to know if the findings apply to other CFPs as well, which requires more research.

The aim of figure 20 is to illustrate that the motivation of equity crowdfunders might differ, and that even if a crowdfunder is not motivated enough by financial returns or intrinsic benefits alone, they can choose to invest if the motivations combined are high enough. The traditional investor, however, is assumed to only desire financial returns.

One might also argue that sometimes, if the combination of a crowdfunder's desire for financial returns and intrinsic benefits is high for enough crowdfunders, they could even value the equity more than traditional investors.

Crowdfunder and entrepreneur liquidity

Crowdfunders' investment liquidity for this type of fundraising is low, at least compared to loan crowdfunding and in a sense also reward crowdfunding. Loan crowdfunders set dates on when they want their loan back, whether through periodical installments or everything at once. Reward crowdfunders, even though they do not expect a financial return, are likely to get their desired compensation earlier than those of equity crowdfunding campaigns (of course depending on the type of product they pledge to). As secondary markets for crowdfunded stocks are rare, equity crowdfunders typically have to wait until the startups they invest in are acquired by other companies or through IPOs. Furthermore, startups rarely pay dividends, at least not before they are profitable (ESMA, 2014). For the same reasons, equity (or reward) crowdfunding affects startups' liquidity in a more positive way than what loan crowdfunding does.

Signaling

In order to successfully raise capital via an equity CFP, startups need to find ways to clearly signal their value to small investors²⁸. How these signals are interpreted, as previously discussed, might differ from what prior theory suggests. But still, if one assumes that crowdfunders are rational in their investing, the predictions of Spence (1973) should hold: the signal must be observable and costly in order for it to be effective. Otherwise, the signals could be interpreted as "cheap talk". Retaining equity and providing detailed information about risks (reducing uncertainty) and human capital, i.e. education of board members

²⁸ Corporate finance literature defines small investors as those who (1) invest relatively small amounts of money, and (2) receive a relatively small stake of a company in return (Ahlers et al., 2015).

(indicating project quality) are signals that are found to be effective for equity crowdfunding campaigns (Ahlers et al., 2015), and can consequently positively impact the likelihood of funding success. Further, even though capital gains depend on it, entrepreneur exit-plans through acquisition or IPO did not increase likelihood for funding success (Ahlers et al., 2015). One reason could be that since such plans are not binding and consist of other factors that cannot be controlled by the entrepreneur (e.g. the macro environment), crowdfunders interpret such signals as cheap talk.

By retaining a substantial equity share in the company that is not offered during the equity crowdfunding campaign, the entrepreneur can effectively signal unobservable characteristics of her project: It is costly to retain ownership interests and the potential benefit is future cash flows. If the entrepreneur does not believe in future cash flows (i.e. if the entrepreneur is of low quality), the cost of producing the signal would outweigh its benefits. It is also easily observed by the investor, while in the same time helping to align the interests of the entrepreneur and her investors.

In order to further reduce uncertainty, the entrepreneur could include financial forecasts of her project, e.g. vision, sales, EBIT(DA) and net earnings. However, the authors of this thesis are skeptical about the value of such forecasts for crowdfunders. Information asymmetry creates incentives for entrepreneurs to present overly optimistic predictions of their project, which (rational) investors should anticipate, thereby reducing the quality of the signaling effect²⁹.

Percentage of MBA graduates among executive board members is positively related with the number of equity crowdfunders (Ahlers et al., 2015). If the entrepreneur's team possesses education, she should signal this clearly during her funding campaign.

Lastly, equity crowdfunding might be more suitable than reward crowdfunding for some types of ventures where pre-purchasing is difficult, e.g. restaurants or business-to-business ventures.

²⁹ See e.g. Wickham (2006) for a description of the entrepreneur-investor Prisoners' Dilemma

8.2.3. Loan crowdfunding

Loan crowdfunding is another financial crowdfunding model. As with equity crowdfunding, crowdfunders of this model are not necessarily consumers of the entrepreneur's future product. The expected financial return originates from interests on the supplied loan, which is repaid either with periodical installments or at the end of its duration.

The authors of this thesis found considerably less research on this crowdfunding model than on reward and equity crowdfunding³⁰. Furthermore, loan capital is more difficult to get for startups, thereby reducing its relevance for this thesis and for entrepreneurs of startups. The model may be most relevant for businesses with established revenues and credit history. Loan crowdfunding is therefore not covered to the same extent as reward or equity crowdfunding.

Moreover, one might argue (*not* based on any empirical research) that loan crowdfunding share many of the psychological characteristics of equity crowdfunding, as both models offer financial returns. However, many loan CFPs require the companies to have been active for at least two years and to generate a certain amount of revenues (e.g. LendingClub, Zopa). This could potentially reduce the effect of mentioned intrinsic motivations (e.g. help others or support a cause), as the companies might not depend on the funding to stay in business. It could also serve as an important signal: a few years of business should provide at least some sort of credit history, which crowdfunders could evaluate. The typical entrepreneur of other crowdfunding models is not assumed to have such credit history. Effective signals might therefore be different, but research on the topic is needed.

A table that summarizes a few of the main characteristics of the three crowdfunding models is presented below.

³⁰ Moreover, the research that was found often focused on peer-to-peer lending to individuals (e.g. the CFP Prosper.com), not peer-to-peer lending to businesses.

Crowdfunding model	Reward	Equity	Loan
Form of support	Donation/pre- purchase	Investment	Loan
Form of return	Rewards and intangible benefits	Dividends and capital gains, if the business does well.	Interests and repayment of loan.
Funder motivation	Intrinsic and/or desire for reward	Intrinsic and/or desire for financial return on investments	Intrinsic and/or desire for financial return on loan
Importance of network prior to campaign	Very high	High	Low ³¹
Marketing value	High	Moderate	Low
Entrepreneur Liquidity	Good	Good	Bad
Creative control over project	Good	Bad, depends on share of ownership sold	Good
Suitable for B2C or B2B ventures?	B2C	Both	Both

Table 7. Characteristics of different crowdfunding models

8.3. Choice of CFP: What to consider

This chapter examines five CFP alternatives for Norwegian entrepreneurs. Individual traits and what the CFPs offer entrepreneurs (e.g. marketing, legal help) are presented. Loan CFPs are not considered due to less relevance for Norwegian startups.

8.3.1. Choice of equity CFP

The following section is based on the premise that the entrepreneur owns a startup that is classified as a Norwegian limited company (AS), and that she intends to obtain additional funding through equity crowdfunding. Additionally, the first discussion is based on the premise that the Norwegian Invesdor affiliate is operational and ready to use for the Norwegian entrepreneur.

³¹ Based on anecdotal summary of information obtained by the authors.

If the entrepreneur plans to do an equity crowdfunding campaign, she must find the CFP that offers the best services for her needs and that best fits her legal environment. As previously mentioned, there are a limited number of CFPs that offer equity campaign services to Norwegian entrepreneurs. Many of the CFPs that the authors have been in contact with stated that in theory, they could work with a Norwegian startup, but that it might prove difficult in practice (due to the legal environment). Based on our research, we suggest three equity CFPs that a Norwegian entrepreneur might find suitable: Seedrs (UK), FundedByMe (Swe) and Invesdor (Fin/Nor). The first section provides a brief summary on how the three CFPs assist the entrepreneur in the campaign process. Furthermore, table 7 presents key information from each of the three CFPs.

Pre-campaign

Seedrs: The Seedrs team must first review and approve the entrepreneur's campaign, evidence, business plan and valuation in order for it to be featured on the platform. This may take up to two weeks and will be a two-way communication process between the Seedrs team and the entrepreneur (Seedrs, 2015b).

Invesdor: First, the Invesdor team will do a background check and evaluate if the entrepreneur's company is eligible. Afterwards the entrepreneur must pitch her campaign to Invesdor and its partners (Invesdor, 2015).

FundedByMe: Before the campaign goes live, it must be reviewed and approved by the FundedByMe team. The entrepreneur needs to present executive summary, business plan, financial forecasts and valuation (FundedByMe, 2015b).

During campaign

Seedrs: On this platform the entrepreneur has the option of having a "hidden" or "public" campaign. Hidden campaigns are only visible to the entrepreneurs' network and the CFPs lead investors. Campaigns often start out as hidden and become public when a minor funding goal is reached (Seedrs, 2015b).

Invesdor: Campaigns on Invesdor also start as hidden. When the campaign gains enough support, typically between 20%-30% of the funding goal, it will be available to the public.

The entrepreneur's campaign will be featured on social media updates and bi-weekly email newsletters from Invesdor. In addition, the campaign will also be featured on all the partner CFPs of the Nordic Crowdfunding Alliance (Invesdor, 2015).

FundedByMe: The campaign will be public by default, and featured on social media updates from FundedByMe (FundedByMe, 2015b).

Post-campaign

Seedrs: If the campaign is successful, the Seedrs team will perform a legal due diligence on the company and the entrepreneur. If the company is a Norwegian AS, Seedrs will help the entrepreneur to incorporate a UK limited company as a holding company. In addition, the Seedrs team will also assist in trying to obtain SEIS or EIS eligibility³² for the company shares. Once all legal documents have been signed, funds from the campaign will be transferred to the company. Seedrs holds the shares that are purchased in an SPV³³ and acts as a nominee on behalf of the shareholders. This is in order to protect investor rights and also to mitigate the investor management problem that the entrepreneur has to face (Seedrs, 2015b).

Invesdor: Invesdor checks that every investor has paid for the amount of shares they subscribed to. The entrepreneur must carry out the registration of the new shareholders. Once this is done, the funds will be paid out to the entrepreneur's company (Invesdor, 2015).

FundedByMe: When the funding round is successful and closed, the entrepreneur contacts and invoices the subscribed investors in exchange for certificate of shares purchased. FundedByMe only works as an intermediary, connecting investors with the entrepreneur (FundedByMe, 2015b).

³² See chapter 6.2 for an explanation of the terms

³³ Special purpose vehicle

Equity	Seedrs	Invesdor	FundedByMe
Initial cost	None	€500	€500
Success fee	7,5%	6% + legal fee €500 + €5 per investor	8%
Transaction fee, paid by investor	7,5% on potential capital gains if stock is sold	Depending on investor's bank provider	None
Campaign duration	60 days	30-90 days, determined by the entrepreneur	90 days
Who can invest?	European residents	European residents	European residents
Overfunding possible?	Yes	Yes	No
KIA or AON?	AON	AON	AON
Advantages	SEIS and EIS, well established investor base	Partner of NCA, MiFID license, Norwegian CFP	Quick registration process, "Investeraravdrag ³⁴ " (tax benefits for Swedish residents)
Disadvantages	Additional taxation, transaction costs (i.e. UK holding company) Long registration process	High costs	Not properly regulated through Swedish law ³⁵ , can give rise to future conflicts. High costs

 Table 8. Equity CFPs: key information from Seedrs (2015b), Invesdor (2015) and FundedByMe (2015b)

http://www.skatteverket.se/privat/skatter/vardepapper/investeraravdrag.4.10cbb69314111c2d94ba38b.html

³⁴ See link for more info regarding "investeraravdraget":

³⁵ Swedish laws do not explicitly regulate crowdfunding platforms, and FundedByMe does not have license to operate by Swedish financial authorities (they believe they do not need one as they only act as an intermediary). This could be problematic in the future, e.g. if fraud occurs.

8.3.2. Choice of reward CFP

The following section is based on the premise that the entrepreneur owns a startup that is classified as a Norwegian limited company (AS), and that she intends to obtain additional funding by pre-selling her products through a reward crowdfunding campaign.

If the entrepreneur intends to initiate a reward campaign, the legal environment is of less importance (less regulation is required when there is no possibility for investor financial return). The choice of CFP should be based on costs, what services the CFP offers (e.g. KIA or AON campaign model), the demography of its members and the CFPs reputation. Kickstarter (US) and Indiegogo (US) both have a strong reputation and are well established in the global crowdfunding industry. FundedByMe (Swe) has a large European crowd and years of experience in reward crowdfunding. The three CFPs require the entrepreneur to provide a certain amount of information about the project prior to launching the campaign, but the requirements are less strict than for equity crowdfunding campaigns. The authors also examined Norwegian CFPs (e.g. Bidra, NewJelly), but found most characteristics to be inferior relative to the CFPs mentioned above.

Pre-campaign:

All three CFPs provide the entrepreneur with a simplified step-by-step tool to create a campaign. Prior to launch, CFP staff will review the campaign and project. The entrepreneur then receives either refusal or constructive feedback and/or approval. The campaign usually goes live within 1-4 days, which is a lot faster than for equity crowdfunding campaigns (FundedByMe, 2015b; Kickstarter, 2015b; Indiegogo, 2015c).

During campaign:

Campaigns on FundedByMe will be featured on social media updates (FundedByMe, 2015b). On Kickstarter, if the staff finds the entrepreneur's project compelling and interesting, the project may have the opportunity to be featured under the category "Staff pick", which gives the project increased credibility and exposure (Kickstarter, 2015b). Indiegogo provides entrepreneurs with access to Amazon Launchpad, which can be characterized as a marketing tool. This may increase the campaigns visibility throughout the campaign period (Indiegogo, 2015c).

Post-campaign:

If the campaign is successful on FundedByMe and the entrepreneur's bank details have been verified in advance, the funds will be transferred to the entrepreneur within 1-2 days (FundedByMe, 2015b). A successful campaign on Kickstarter gives the entrepreneur access to a feature that works as a blog for the project. There, the entrepreneur can post updates about her production and communicate with crowdfunders. This can be characterized as an information hub and a communication tool. The entrepreneur will receive the funds within 14 days after the campaign ends (Kickstarter, 2015b). If the campaign is successful on Indiegogo, the entrepreneur will receive the funds within 15 business days (Indiegogo, 2015c).

Reward	FundedByMe	Kickstarter	Indiegogo
Initial cost	None	None	None
Success fee	6%	5%	5%
Transaction fee	None	3-5% for backers	3-5% for backers
Duration	45 days	1-60 days	No limit, but they recommend 40 days or less
Who can pledge?	No restrictions	No restrictions	No restrictions
Overfunding possible?	Yes	Yes	Yes
KIA or AON?	AON	AON	AON & KIA
Advantages	Overall quick process, Scandinavian	Reputation, large crowd, mid- and post-campaign tools	Reputation, large crowd, has both AON and KIA models, mid- campaign marketing
Disadvantages	More limited crowd than Kickstarter and Indiegogo	Up to 14 days between campaign end and reception of funds	Up to 15 days between campaign end and reception of funds

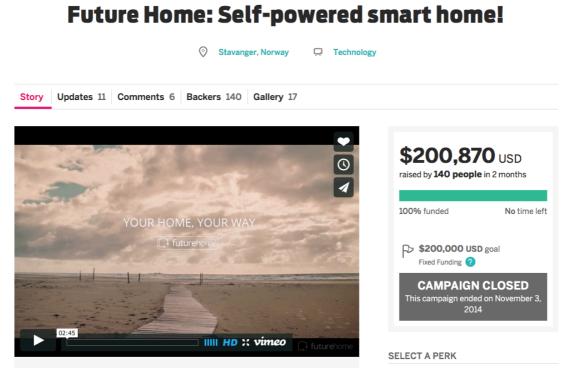
Table 9. Reward CFPs: Key information from FundedByMe (2015b), Kickstarter (2015b) and Indiegogo (2015c)

This subchapter presented three CFPs for both reward and equity crowdfunding. Which CFP that is optimal depends on the needs of the entrepreneur. The selection of CFPs in the discussion above is based on the subjective evaluation of characteristics by the authors.

8.4. Case studies

In this chapter, two case studies are presented: Future Home and Someone.io. The case studies are not representative to generalize or conclude on how to successfully raise capital through crowdfunding. The purpose is rather to illustrate how a crowdfunding campaign may proceed, while shedding light on practical aspects and implications.

8.4.1. Future Home: Reward campaign



Front page of Future Home's Indiegogo campaign. From Indiegogo, 2015.

This case study is based on information gathered from Indiegogo, Future Home's blog and email correspondence with Sigbjørn Groven, CFO at Future Home.

The company

Future Home is a Norwegian startup company that sells an app and a control unit that make it possible to control a wide range of household electronic devices. The four founders have years of relevant work experience and education in the fields of electrical engineering, management, finance, entrepreneurship and automation. As of today the company has 11 employees, including the founders (PROFF, 2015). In early November 2014, the company ended a successful 60-day AON reward crowdfunding campaign on Indiegogo, raising \$200 870 from pre-sales and donations from 140 individuals, with an initial goal of \$200 000.

The campaign

At first, the team was under the impression that presenting a video and product information on the campaign would be enough to get sufficient orders, but throughout the campaign they changed their approach. Instead of telling "the story" that many reward campaigns do, the team shifted its focus towards direct sales and demonstrations. Future Home's campaign sought to present information in an easy and understandable manner, by using video and illustrations. The campaign also provided a brief introduction of the team and a short summary of why they needed funds. The main focus of the campaign seemed to be showing the applicability of the products. The campaign offered 12 reward levels, ranging from \$5 to \$15 000. This provided backers with multiple options, from merely donating \$5 to the development of Future Home, to buying a \$15 000 Villa-kit.

The initial funding goal was \$200 000, which is high for a reward campaign. Sigbjørn Groven, CFO at Future Home explained that the high goal was a necessity, as Future Home needed a pre-specified number of units sold in order to obtain the production prices that they had negotiated prior to the campaign. This also excluded the KIA model.



One of the stunts the Future Home founders performed: Personally thanking backers via a webcam. From Future Home's blog.

As mentioned, sustained funding activity throughout crowdfunding campaigns is very difficult to achieve (cf. U-shape). Future Home managed to be featured in news media prior to and during the campaign, which probably helped them spread awareness of their product to the public. Furthermore, Future Home also created several stunts, intended to "go viral". One of the stunts was "Control our office – Chaos mode". This provided the public with the opportunity to use the products online in real-time, in Future Home's offices. For a limited period, over a thousand unique users controlled the office lights, coffee maker and blinds.

Even though attention from the crowd was present, Future Home struggled to obtain enough sales. A week before the campaign deadline, Future Home was represented at a homeowner's exhibition in Stavanger, Norway. Here, the team was able to demonstrate Future Home's product to target customers and establish contacts. A few days later, one hour prior to the deadline, Future Home successfully secured the funding goal.

Post-campaign

Initially, Future Home wanted to run their campaign on Kickstarter, based on the CFP's good reputation. At the time, Norwegian entrepreneurs could not create campaigns on Kickstarter, so Indiegogo served as the second best choice. In retrospect, the team

recognizes that making their own CFP solely for the purpose of the Future Home campaign could also have served as a viable alternative, so they would not have been subject to Indiegogo's success fee. Several CFPs defend their fees based on the marketing tools they provide. The Future Home team ended up bringing in approximately 95% of total sales themselves, without assistance from Indiegogo.

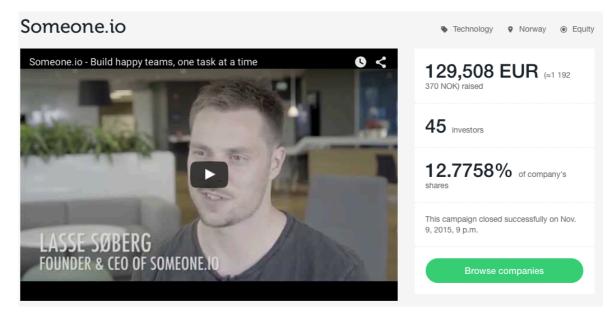
Prior to the campaign, the team focused on understanding success factors and differences between good and bad campaigns. The team spent one month on preparations for the campaign, and in hindsight they recognize they should have spent more. For future crowdfunding entrepreneurs, they emphasize the importance of understanding how a campaign works, along with the importance of lining up backers and news media from the beginning of the campaign.

Future Home today

The company has successfully brought in more investors. Board members, a business angel, employees and the initial founders have invested a total of NOK 10 million (\$1,16 million) in the company. Based on the recent emission of shares, the company is valued at NOK 50 million (\$5,78 million) (Gjerde, 2015).

8.4.2. Someone.io: Equity campaign

This case study is based on information gathered from FundedByMe, Someone.io's blog and email correspondence with Dan Hesketh, brand strategist at Someone.io.



Front page of Someone.io's crowdfunding campaign. From FundedByMe, 2015.

The company

Someone.io is a Norwegian IT company that sells a Social Task Management app. The purpose of the product is to increase employee job satisfaction and overall team productivity. Their team consisted of four experienced and highly educated individuals. Combined, their background comprised of management, creative studies, web development, computer science, communication, analytics, marketing, advertising, sales and branding.

The company launched a beta-version of the app in May 2015 and simultaneously created the campaign on FundedByMe, and the campaign went live on September 11, 2015. The campaign ended successfully November 9, 2015, receiving €129 508 from 45 different investors, 7,9% more than the initial goal of €120 000. Someone.io sold 12,7758% of total company equity via FundedByMe.

The campaign

The campaign included an informative video with the goal of highlighting the customer need and potential for their product. Furthermore, business plan, financial forecast and valuation were also included, although very simplified so that most people would understand it. After the campaign went live, approximately €40 000 was raised within the first three weeks, where many of the investments came from existing shareholders. After that, funding activity dropped significantly for five weeks. During those five weeks, the team participated in several pitching contests in Norway and Sweden, they advertised online, had personal meetings with potential investors and provided updates about their campaign to crowdfunders. The team used the feedback from crowdfunders to improve the campaign pitch. Even though Someone.io worked hard to sustain funding activity, they did not manage to avoid mentioned U-shape. The turning point came when Someone.io was featured in a headline article in the online newspaper "Hacker News". The team used this opportunity to build momentum, i.e. general interest and funding activity, before the last four weeks of the campaign.



Figure 21. Aggregate funding from campaign start until end. Numbers in Euro. Figure not selfconstructed (Someone.io, 2015)

After this, Someone.io pitched their campaign on several Norwegian investment forums, which attracted domestic and international attention. In the beginning of the final week, the campaign had still raised less than 50% of the funding goal. From their previous experience, they knew that investors responded well to positive key performance indicators (KPIs). The team included updated KPIs in the campaign, which showed potential investors historical growth in demand for Someone.io's product. This update caused an immediate spike in funding activity, and resulted in the funding goal being reached within days.

While not representative to generalize, financial forecasts and growth estimates did not have the desired effect on funding activity (could be because investors know the entrepreneur has incentive to be overly optimistic). What seemed to work for this particular campaign were hard facts, i.e. historical data from sales. Investors might have interpreted such data as a credible signal for the quality of the product, as it would be more difficult to manipulate by the entrepreneur.

Post-campaign

Someone.io chose to use FundedByMe mainly because the application process was considerably quicker than other equity CFPs. The process took them one week, whereas e.g. Seedrs has a minimum application process of 3-4 weeks. An advantage by using FundedByMe is that Someone.io could use the Norwegian limited company structure (AS). The team also emphasized that entrepreneurs considering using equity crowdfunding should start by securing funding from existing shareholders (to gain momentum), plan marketing and update the campaign, pitch and presentation throughout the campaign. One trait that Someone.io had, was the fact that their product was already being bought and used. This provided the team with the opportunity to "brag" about KPIs on their campaign.

9. Summary and final thoughts

Crowdfunding represents a new way for entrepreneurs to raise capital for a variety of projects, made possible with the existence of Web 2.0. This thesis has examined the crowdfunding industry and the leading European crowdfunding markets, in order to ascertain the possibilities for Norwegian entrepreneurs to participate in the crowdfunding environment. Our research suggests that reward crowdfunding could serve as a viable alternative to raise funds for Norwegian entrepreneurs, irrespective of country borders. In contrast, equity and loan crowdfunding are still often restricted to domestic residents due to legal constraints, limiting both the crowd and the amount of CFPs available to the entrepreneur. However, the crowdfunding environment is likely to adjust, as legislators across Europe strive to reduce barriers and facilitate the concept, both for domestic and cross-border transactions. With this in mind, one can expect loan and equity crowdfunding to evolve into more viable alternatives for Norwegian entrepreneurs in the future.

An extensive review of related literature has been performed in order to study the characteristics of traditional fundraising, signaling and crowdfunding. The literature emphasized the importance of network and preparedness for achieving crowdfunding success, which is also illustrated in the case studies. In addition, the literature suggested that crowdfunders are heterogeneous with respect to motivation and goals, although more so for non-financial crowdfunding than for financial crowdfunding. A reason for this heterogeneity is argued to be that crowdfunders, in addition to extrinsic motivation, often experience intrinsic motivation to fund. It is further suggested that in reward campaigns, this heterogeneity can be exploited by entrepreneurs by enabling crowdfunders to self-select reward levels that maximize their individual utility, thereby increasing both consumer and producer surplus. Crowdfunders in equity campaigns are generally more motivated by financial gain and therefore less heterogeneous. Even so, equity crowdfunders who are less motivated by financial returns could still choose to invest as long as they have intrinsic motivation towards the project that increases their willingness to support (illustrated in figure 20).

Both crowdfunding and traditional funding have unique individual benefits. Therefore, if both sources of capital are available to the entrepreneur, a trade-off evaluation has to be made when deciding how to raise capital. However, crowdfunding and traditional funding are not necessarily substitutes. Crowdfunding could serve as a viable seed-capital fundraising tool, which would give the entrepreneur enough funding to start a business. She would then have obtained credible validation from the crowd that her project is of value, signaling quality to potential external investors and banks. Therefore, it might be more likely that crowdfunding serves as a complementary form of funding, serving a gap previously unserved by traditional funding sources. How the phenomenon is adopted by entrepreneurs remains to be seen.

Moreover, there are distinctive variations in the characteristics of the different crowdfunding models that should be addressed by the entrepreneur, which are presented in the guide. Furthermore, the optimal choice of model depends on several entrepreneurial factors, e.g. venture stage and entrepreneur risk-profile. One can therefore not recommend one model over the others: It depends on entrepreneur preferences, and every entrepreneur is different.

10. Bibliography

ACPR Banque de France. (2014). Guide to the new framework for crowdfunding. *ACPR* Banque de France & Autorité des marches financiers. From: <u>https://acpr.banque-france.fr/en/customer-protection/crowdfunding.html</u>

Agrawal, A., Catalini, C. and Goldfarb, A. (2015). Crowdfunding: Geography, Social Networks, and the Timing of Investment Decisions. *Journal of Economics & Management Strategy*, 24(2), pp. 253-274. From: <u>http://onlinelibrary.wiley.com/doi/10.1111/jems.12093/full</u>

Ahlers, G., Cumming, D., Günther, C. and Schweizer, D. (2015). Signaling in Equity Crowdfunding. *Entrepreneurship Theory and Practice*, 39(4), pp. 955-980. From: <u>http://onlinelibrary.wiley.com/doi/10.1111/etap.12157/full</u>

Akerlof, G. (1970). The Market for "Lemons": Quality Uncertainty and the Market Mechanism. *The Quarterly Journal of Economics*, 84(3), pp. 488-500. From: http://www.jstor.org/stable/1879431?seq=1#page_scan_tab_contents

Altinn. (2014). *Aksjeselskap (AS)*. From: <u>https://www.altinn.no/no/Starte-og-drive-bedrift/Forberede/Velge-organisasjonsform/Aksjeselskap-AS/</u>

Bain & Company Inc. (2015). Global private Equity Report 2015. *Bain & Company Inc*. From: <u>http://www.bain.com/bainweb/publications/global_private_equity_report.asp</u>

Banerjee, A. (1992). A Simple Model of Herd Behavior. *The Quarterly Journal of Economics*, 107(3), pp. 797-817. From: http://www.jstor.org/stable/2118364?seq=1#page_scan_tab_contents

Barnett, C. (2015, 26.03). SEC democratizes equity crowdfunding with JOBS act title IV. *Forbes.* From: http://www.forbes.com/cites/chapsebarnett/2015/02/26/infographic/chapsebarnett/2015/02/26/infographic/chapsebarnett/2015/02/26/infographic/chapsebarnett/2015/02/26/infographic/chapsebarnett/2015/02/2015/

http://www.forbes.com/sites/chancebarnett/2015/03/26/infographic-sec-democratizesequity-crowdfunding-with-jobs-act-title-iv/4/

Bellaflamme, P., Lambert, T. and Schwienbacher, A. (2013). Crowdfunding: Tapping the Right Crowd. *Journal of Business Venturing*, 29(5), pp. 585-609. From: <u>http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1836873</u>

BrewDog. (2015a). *Equity for Punks IV: Share Offer Information*. From: https://www.brewdog.com/equityforpunks/prospectus-download

BrewDog. (2015b, 01.10). *Brewdog breaks world crowdfunding record, smashing £10M with Equity for Punks IV*. From: <u>https://www.brewdog.com/lowdown/press-hub/brewdog-smashes-10m-mark</u>

De Buysere, K., Gajda, O., Kleverlaan, R. and Marom, D. (2012). A framework for European Crowdfunding. From: <u>http://www.crowdfundingframework.eu</u>

Chatterji, A. K. (2005). Spawned with a silver spoon? Entrepreneurial performance and innovative performance in the medical device industry. *Strategic management journal.* 30. pp. 185-206. From:

http://onlinelibrary.wiley.com/store/10.1002/smj.729/asset/729_ftp.pdf?v=1&t=ihx9agzq&s =15b6563cf41ccd0bd1c826bed9998608ebd1515a

Chemmanur, T., J., Simonyan, K. and Tehranian, H. (2011) *Management quality, venture capital backing and initial public offerings*. From: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2021578

Chen, H. C. and Ritter, J. R. (2000). The Seven Percent Solution. *The journal of finance*, 55(3), pp. 1105-1131. From: <u>http://www.jstor.org/stable/222447?seq=1#page_scan_tab_contents</u>

Cholakova, M. and Clarysse, B. (2015). Does the Possibility to Make Equity Investments in Crowdfunding Projects Crowd Out Reward-Based Investments? *Entrepreneurship Theory and Practice*, 39(1), pp. 145-172. From: http://onlinelibrary.wiley.com/doi/10.1111/etap.12139/abstract

Cloud Imperial Games. (2015). *The Stretch Goals*. From: https://robertsspaceindustries.com/funding-goals

Companisto. (2015). *Legal structure of investments and participation process.* From: https://www.companisto.com/en/investment-model

Conti, A., Thrusby, M. and Rothaermel, F. (2011). Show me the right stuff: signals for high tech startups. *NBER*, Working Paper No. w17050. From: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1841287

Cosh, A., Cumming, D. and Hughes, A. (2009). Outside Entrepreneurial Capital. *The Economic Journal*, 119(540), pp. 1494-1533. From: <u>http://onlinelibrary.wiley.com/doi/10.1111/j.1468-0297.2009.02270.x/full</u>

Cumming, D. J., Leboeuf, G. and Schwienbacher, A. (2015). *Crowdfunding Models: Keep-It-All vs. All-Or-Nothing*. From: <u>http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2447567</u>

Dana Jr, J. (1988). Advance-Purchase Discounts and Price Discrimination in Competitive Markets. *Journal of Political Economy*, 106(2), pp. 395-422. From: http://www.jstor.org/stable/10.1086/250014

Davila, A., Foster, G. and Gupta, M. (2003). Venture capital financing and the growth of startup firms. *Journal of business venturing*, 18(6), pp. 689-708. From: <u>http://www.sciencedirect.com/science/article/pii/S0883902602001271</u>

Deci, E. and Ryan, R. (1985). *Intrinsic motivation and self-determination in human behavior*. New York: Plenum Press.

Downes, D. H. and Henkel, R. (1982). Signaling and the Valuation of Unseasoned New Issues. *The Journal of Finance*, 37(1), pp. 1-10. From: http://www.jstor.org/stable/2327113?seq=1#page_scan_tab_contents

ECN. (2015). Review of crowdfunding regulation: Interpretation of existing regulation concerning crowdfunding in Europe, North America and Israel. *European Crowdfunding Network: Tax & Legal Work Group.* From: <u>http://eurocrowd.org/2014/12/12/ecn-review-crowdfunding-regulation-2014/</u>

European Commission. (2015a). Crowdfunding. *European Commission*. From: <u>http://ec.europa.eu/growth/access-to-finance/funding-policies/crowdfunding/index_en.htm</u>

European Commission. (2015b). Action Plan on Building a Capital Markets Union. *European Commission.* From: <u>http://ec.europa.eu/finance/capital-markets-union/index_en.htm</u>

ESMA. (2014). Opinion: Investments-based crowdfunding. *European Securities and Markets* Authority. From: <u>https://www.esma.europa.eu/content/Opinion-Investment-based-</u> <u>crowdfunding</u>

EVCA. (2015). European Private Equity Activity Data 2007-2014. *European Private Equity and Venture Capital Association*. From: <u>http://www.investeurope.eu/research/activity-data/annual-activity-statistics/</u>

EY. (2013, 04.04). Global Venture Capital funds may turn the corner in 2013. *EY press* release. From: <u>http://www.ey.com/GL/en/Newsroom/News-releases/News_Global-Venture-Capital-funds-may-turn-the-corner-in-2013</u>

FCA. (2015). Review of the regulatory regime for crowdfunding and the promotion of nonreadily realisable by other media. *Financial Conduct Authority*. From: <u>http://www.fca.org.uk/static/documents/crowdfunding-review.pdf</u>

Financial Institutions Act. (1988). *Lov om finansieringsvirksomhet og finansinstitusjoner*. From: <u>https://lovdata.no/dokument/NL/lov/1988-06-10-40?q=finansvl</u>

Florida, R. and Kenney, M. (1988). Venture Capital, High Technology and Regional Development. *Regional Studies*, 22(1), pp. 33-48. From: http://www.tandfonline.com/doi/abs/10.1080/00343408812331344750

FundedByMe. (2015a). *Terms of Service*. From: <u>https://www.fundedbyme.com/en/terms-of-service/?next=/en/accounts/register/entrepreneur/?next=/en/d/campaign/prerequisites/equity/</u>

FundedByMe. (2015b). FAQ. From: https://fundedbyme.zendesk.com/hc/en-us

Future Home. (2015). Future Home Blog. From: https://futurehome.no/blog/en/

Gabison, G. A. (2015). Understanding Crowdfunding and its regulations. *European Commission, Joint Research Center, Institute for Prospective Technological Studies.* From: <u>http://works.bepress.com/garry_gabison/7/</u>

Galton, F. (1907). Vox Populi (The Wisdom of the Crowds). *Nature*, 75, pp. 450-451. From: <u>http://www.nature.com/nature/journal/v75/n1949/pdf/075450a0.pdf</u>

Gerber, E. and Hui, J. (2013). Crowdfunding: Motivations and Deterrents for Participation. *ACM Transactions on Computer-Human Interaction*, 20(6), article no. 34. From: <u>http://dl.acm.org/citation.cfm?id=2530540</u>

Gjerde, A., S. (2015, 10.07). Vil bli smartere. *Dagens Næringsliv*. From: <u>http://www.dn.no/nyheter/finans/2015/07/10/2145/Teknologi/vil-bli-smartere</u>

Gompers, P., Kovner, A., Lerner, J. and Scharfstein D. (2006). Skill vs. luck in entrepreneurship and venture capital: evidence from serial entrepreneurs. *National bureau of economic research*. From: <u>http://www.nber.org/papers/w12592</u>

Gompers, P. and Lerner, J. (2001). The venture capital revolution. *The journal of economic perspectives*, 15(2), 145-168. From: http://www.jstor.org/stable/2696596?seq=1#page_scan_tab_contents

Gov.UK. (2015a). *Seed Enterprise Investment Scheme*. From: https://www.gov.uk/guidance/seed-enterprise-investment-scheme-background

Gov.UK (2015b). *Enterprise Investment Scheme*. From: <u>https://www.gov.uk/government/publications/the-enterprise-investment-scheme-introduction</u>

Groom, B. (2015, 06.10). Equity Crowdfunding no longer the preserve of startups. *Financial Times*. From: <u>http://www.ft.com/intl/cms/s/2/c94a3714-313d-11e5-91ac-a5e17d9b4cff.html#axzz3stDVqAbL</u>

Guiness World Records. (2015). *Guinness World Records 2015 - page 17*. From: http://www.guinnessworldrecords.com/2015/preview/files/assets/basic-html/page17.html

Guzik, S. (2015, 09.11). *JOBS act crowdfunding in 2016 – Its time to connect the dots in this new era*. From: <u>http://corporatesecuritieslawyerblog.com</u>

Harjani, A. (2014, 18.12). Global IPO market booms 50% in 2014. *CNBC*. From: http://www.cnbc.com/2014/12/18/global-ipo-market-booms-50-in-2014.html

Hellmann, T. and Puri, M. (2002). Venture capital and the professionalization of start-up firms: empirical evidence. *The journal of finance*, 57(1), pp. 169-197. From: http://onlinelibrary.wiley.com/doi/10.1111/1540-6261.00419/abstract Hermansen, H. O. (2014). *Finansiell crowdfunding: En oversikt over sentrale problemstillinger ved den selskaps- og finansmarkedsrettslige reguleringen*. (Mastergradsavhandling, Universitetet i Oslo). H. O. Hermansen, Oslo. From: <u>https://www.duo.uio.no/handle/10852/42720</u>

Heyman, J. and Ariely, D. (2004). Effort for Payment. A Tale of Two Markets. *Psychological Science*, 15(11), pp. 787-793. From: <u>http://pss.sagepub.com/content/15/11/787.short</u>

Hull, C. L. (1932). The goal-gradient hypothesis and maze learning. *Psychological Review*, 39(1), pp. 25-43. From: <u>http://psycnet.apa.org/journals/rev/39/1/25/</u>

Hustedde, R. J. and Pulver, G. C. (1992). Factors affecting equity capital acquisition: The demand side. *Journal of business venturing*, 7(5), pp. 363-374. From: http://www.sciencedirect.com/science/article/pii/088390269290013H

Indiegogo. (2015a). *How much does Indiegogo cost? Fees & Pricing*. From: https://support.indiegogo.com/hc/en-us/articles/204456408-Fees-Pricing

Indiegogo. (2015b). *Greek Bailout Fund*. From: <u>https://www.indiegogo.com/projects/greek-bailout-fund#/</u>

Indiegogo. (2015c). Running a campaign. From: https://support.indiegogo.com/hc/en-us

Innovation Norway. (2015a). *Rådgivning*. From: http://www.innovasjonnorge.no/no/radgivning/

Innovation Norway. (2015b) Annual report 2014. *Innovation Norway*. From: http://www.innovasjonnorge.no/no/arsrapport-2014/

Invesdor. (2015). *How it works: For companies*. From: https://www.invesdor.com/finland/en/how-it-works/for-companies

Jeng, L. A. and Wells, P. C. (2000). Determinants of venture capital funding: evidence across countries. *Journal of Corporate Finance*, 6(3), pp. 241-289. From: http://www.sciencedirect.com/science/article/pii/S092911990000031

Kaplan, S. N. and Schoar, A. (2005). Private equity performance: returns, persistence and capital flow. *The Journal of Finance*, 60(4), pp. 1791-1823. From: http://18.7.29.232/handle/1721.1/5050

Kaplan, S. N. and Strömberg, P. (2001). Venture capitalists as principals: Contracting, screening and monitoring. *The National Bureau of Economic Research*. From: <u>http://www.nber.org/papers/w8202</u>

Kaplan, S. N. and Strömberg, P. (2004). Characteristics, Contracts and Actions: Evidence form Venture Capital Analyses. *The Journal of Finance*, 59(4), pp. 2177-2210. From: http://www.jstor.org/stable/3694821?seq=1#page_scan_tab_contents Kelly, E. (2015, 24.06). Germany to introduce crowdfunding restrictions. *Science Business*. From: <u>http://www.sciencebusiness.net/news/77099/Germany-to-introduce-crowdfunding-restrictions</u>

Kickstarter. (2015a). *Kickstarter Basics*. From: https://www.kickstarter.com/help/faq/kickstarter%20basics

Kickstarter. (2015b). FAQ. From: https://www.kickstarter.com/help/fag/kickstarter+basics?ref=footer

Kihlstrom, R. E. and Laffont, J. J. (1979). A general equilibrium entrepreneurial theory of firm formation based on risk aversion. *Journal of political economy*, 87(4), pp. 719-748. From: <u>http://www.jstor.org/stable/1831005?seq=1#page_scan_tab_contents</u>

Klöhn, L., Hornuf, L. and Schilling, T. (2015). The regulation of Crowdfunding in the German Small Investor Protection Act: Content, Consequences, Critique, Suggestions. *Dritto Della Banca e del Mercato Finanziaro*. From: <u>http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2595773</u>

Kuppuswamy, V. and Bayus, B. (2015). Crowdfunding Creative Ideas: The Dynamics of Project Backers in Kickstarter. *UNC Kenan-Flagler Research Paper No. 2013-15*. From: http://papers.ssrn.com/sol3/Papers.cfm?abstract_id=2234765

Lee, I., Lochhead, S. and Ritter, J. (1996). The costs of raising capital. *The Journal of Financial Research*, 19(1), pp. 59-74. From: <u>http://onlinelibrary.wiley.com/doi/10.1111/j.1475-6803.1996.tb00584.x/abstract;jsessionid=B534344BC42266CC40C006A81FB222AE.f01t03?u serIsAuthenticated=false&deniedAccessCustomisedMessage</u>

Limited Liability Companies Act. (1997). *Lov om aksjeselskaper*. From: https://lovdata.no/dokument/NL/lov/1997-06-13-44?q=aksjeloven

Massolution. (2015). The crowdfunding industry report. *Crowdsourcing LLC*. From: <u>http://reports.crowdsourcing.org/?route=product/product&product_id=54</u>

Mollick, E. (2014). The dynamics of crowdfunding: An exploratory study. *Journal of Business Venturing*, 29(1), pp. 1-16. From: <u>http://www.sciencedirect.com/science/article/pii/S088390261300058X</u>

Nordic Crowdfunding Alliance. (2015). *Members*. From: <u>http://www.nordic-crowdfunding.com/members.php</u>

NVCA.no. (2015). Private equity funds in Norway 2014, activity report. *NVCA.no*. From: <u>http://www.nvca.no/statistikk/</u>

NVCA.org. (2015). Annual venture capital investments 2014. *NVCA.org*. From: <u>http://nvca.org/pressreleases/annual-venture-capital-investment-tops-48-billion-2014-</u> reaching-highest-level-decade-according-moneytree-report/ OECD. (2015). Financing SMEs and entrepreneurs 2015: an OECD scoreboard. *OECD publishing*, Paris. From: <u>http://www.oecd.org/cfe/smes/financing-smes-and-entrepreneurs-</u>23065265.htm

Pierrakis, Y. and Collins, L. (2013). *Crowdfunding: A New Innovative Model of Providing Funding to Projects and Businesses*. From: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2395226

PROFF: the business finder (2015). *Future Home AS*. From: http://www.proff.no/selskap/future-homeas/stavanger/telekommunikasjonsutstyr/Z0IAWK6L/

Roberts, C. (2015, 31.03) Fans have dropped \$77M on this guy's buggy, half-built game, *WIRED*. Hentet fra: <u>http://www.wired.com/2015/03/fans-dropped-77m-guys-buggy-half-built-game/</u>

PwC. (2012). *Kvartalsbrev om viktige endringer*. From: https://www.pwc.no/no/ifrs/publikasjoner/pwc-pitstop-september-2011.pdf

PwC. (2015). *Considering an IPO? An insight into the costs post-JOBS Act*. From: http://www.pwc.com/us/en/deals/cost-of-ipo-july-2015.html

SEC. (2014). Regulation D offerings. From: http://www.sec.gov/answers/regd.htm

SEC. (2015a). Regulation D, rule 501: Definition accredited investor. From: <u>http://www.ecfr.gov/cgi-</u> <u>bin/retrieveECFR?gp=&SID=8edfd12967d69c024485029d968ee737&r=SECTION&n=17y3.0.1</u> .1.12.0.46.176

SEC. (2015b). Jumpstart our business (JOBS) Act. From: <u>https://www.sec.gov/spotlight/jobs-act.shtml</u>

SEC. (2015c). *SEC adopts rule to facilitate smaller companies' access to capital.* From: http://www.sec.gov/news/pressrelease/2015-49.html

SEC. (2015d). *SEC adopts rules to permit crowdfunding.* From: http://www.sec.gov/news/pressrelease/2015-249.html

Securities Trading Act. (2007). *Lov om verdipapirhandel*. From: https://lovdata.no/dokument/NL/lov/2007-06-29-75/

Seedrs. (2015a). Tax Relief. From: https://learn.seedrs.com/guides/uk-tax-relief/

Seedrs. (2015b). FAQ. From: https://learn.seedrs.com/faqs/

Solar Plaza. (2015). *Crowdfunding legal framework overview*. From: <u>http://www.recrowdfunding.eu/news-updates/2015/10/20/crowdfunding-legal-framework-overview</u>

Someone.io. (2015). Someone's official blog. From: http://blog.someone.io

Spence, M. (1973). Job Market Signaling. *The Quarterly Journal of Economics*, 87(3), pp. 355-374. From: <u>http://www.jstor.org/stable/1882010?seq=1#page_scan_tab_contents</u>

Statista. (2015a). *Percentage growth of crowdfunding platforms worldwide from 2008 to 2012*. From: <u>http://www.statista.com/statistics/251567/growth-r-of-crowdfunding-platforms-worldwide/</u>

Statista. (2015b). *Development in worldwide crowdfunding funding volume from 2009 to 2012 (in million U.S. dollars).* From:

http://www.statista.com/statistics/251572/development-in-worldwide-crowdfunding-funding-volume/

Sundvolden decleration. (2013, 16.10). *Politisk plattform for en regjering utgått av Høyre og Fremskrittspartiet*. From: <u>https://www.regjeringen.no/no/dokumenter/politisk-plattform/id743014/</u>

Sørensen, M. (2004). How smart is smart money? An empirical two-sided matching model of venture capital. *University of Chicago*. From: <u>http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.197.5070&rep=rep1&type=pdf</u>

Thomson Reuters Corporation. (2014). Debt capital markets review 2014 – managing underwriters. From:

http://dmi.thomsonreuters.com/Content/Files/4Q2014_Global_Debt_Capital_Markets_Review.pdf

Torris, T. (2015, 21.07). French Alternativa: Equity Crowdfunding with a Secondary market. *Crowdfundinsider*. From: <u>http://www.crowdfundinsider.com/2015/07/71505-french-alternativa-equity-crowdfunding-with-a-secondary-market/</u>

Vasagar, J. (2015, 22.06). German crowdfunders fear new risk rules. *Financial times*. From: http://www.ft.com/cms/s/0/e0382642-1681-11e5-8095-00144feabdc0.html#axz23rx2kZCbK

Villanueva, J., Yoo, S. and Hanssens, D., M. (2008). The Impact of Marketing-Induced versus Word-of-Mouth Customer Acquisition on Customer Equity Growth. *American Marketing Association*, 45(1), pp. 48-59. From:

http://www.jstor.org/stable/30162520?seq=1#page_scan_tab_contents

Wardrop, R., Zhang, B., Rau, R. and Gray, M. (2015). Moving mainstream: The European alternative finance benchmarking report. *University of Cambridge & EY*. From: <u>http://www.jbs.cam.ac.uk/index.php?id=6481#.VktKw4R93FI</u>

Webb, E. and Weick, K. E. (1979). Unobtrusive Measures in Organizational Theory: A Reminder. *Administrative Science Quarterly*. 24(4), pp. 650-659. From: http://www.jstor.org/stable/2392370?seq=1#page_scan_tab_contents Wenzlaff, K. (2014, 23.12). Crowdfunding is a race to win: How the French are using regulation to boost their national crowdfunding platforms. *Crowdsourcing.org.* From: http://www.crowdsourcing.org/editorial/crowdfunding-is-a-race-to-win-how-the-french-are-using-regulation-to-boost-their-national-crowdfunding-platforms/35184

Wickham P. (2006). Strategic Entrepreneurship. Great Britain. Pearson Education Limited

Williams-Grut, O. (2015, 14.05). This analyst note destroys BrewDog's 'punk' stock offering. *Business Insider UK*. From: <u>http://uk.businessinsider.com/should-i-invest-in-brewdog-</u> <u>crowdfunding-scottish-beer-brewery-expensive-punk-ipa-all-street-research-2015-5</u>

Zheng, H., Li, D., Wu, J. and Xu, Y. (2014). The role of multidimensional social capital in crowdfunding: A comparative study in China and US. *Information and Management*, 51(4), pp. 488-496. From: <u>http://www.sciencedirect.com/science/article/pii/S0378720614000305</u>

Yoshimura, M. (2015, 02.10). French Crowdfunding Platform Lendix raises €1M for building company Orexim. *Crowdfundinsider*. From: http://www.crowdfundinsider.com/2015/10/75216-french-crowdfunding-platform-lendix-raises-e1m-for-building-company-orexim/