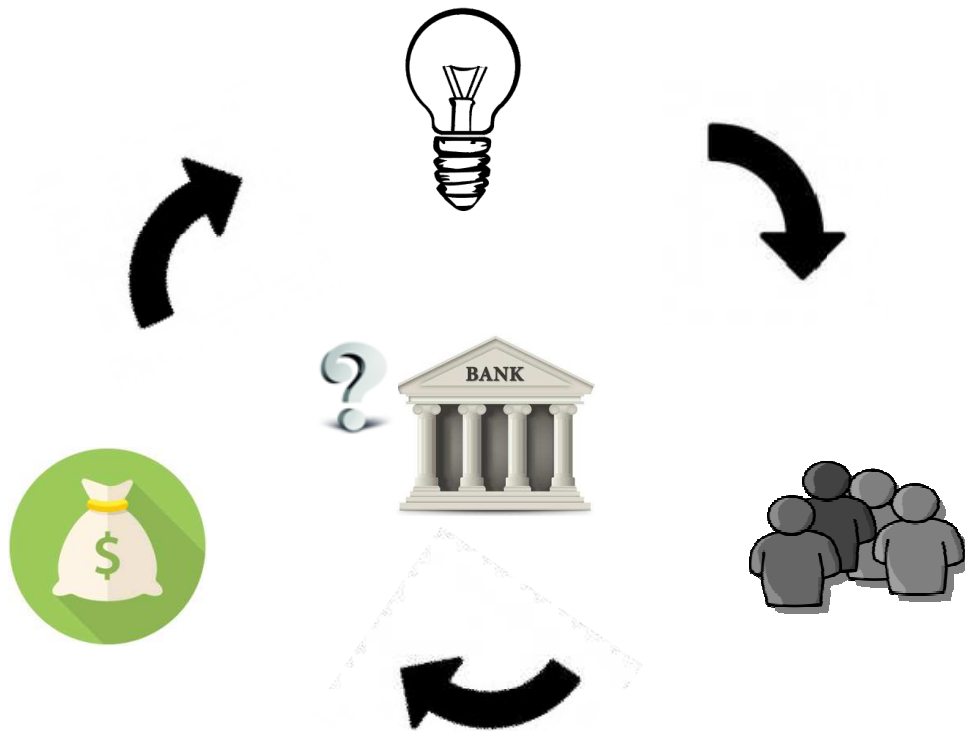


# Exploring Crowdfunding involvement of Dutch banks

A explorative study into the reactions and contributions of Dutch banks in crowdfunding



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## **List of abbreviations**

AFM - Authority Financial Markets  
AON - All or nothing model  
CSR- Corporate social responsibility  
KIA - Keep it All model  
KPI – Key performance Indicator  
KS - Kolmogorov Smirnov  
MKB - Midden en Klein Bedrijf (Dutch phrasing of SMB)  
P2PL - Peer to Peer Lending  
ROI -Return On Investment  
SMB - Small and Medium sized Businesses  
SW -Shapiro Wilk  
Wft - Wet op Financieel Toezicht (Law on financial control)

## **Foreword**

At the end of the year 2014 I was still contemplating which subject to chose for my master thesis. At that time the Dutch television broadcasted a news article about crowdfunding. I was immediately intrigued by the simplicity and possibilities that this financing method entailed and wondered about the impact it could have on more traditional financing intermediaries, especially banks. So I began my endeavour in trying to find out if banks had already ventured into crowdfunding and what benefits they could provide to investors and entrepreneurs. This thesis was conducted over a time span of approximately 1 year in which the crowdfunding sector was analyzed. Many changes have since then occurred. Platforms were closed down, including the bank backed up crowdfunding platform Seeds, and a steady stream of new crowdfunding platforms emerged. Aside from the changes within the crowdfunding sector itself, banks reactions towards crowdfunding are also changing and during my thesis new developments occurred regarding bank involvement. Many more research could therefore be conducted and new developments, regarding banks and crowdfunding, can be expected to take place. All recommendations and findings must be viewed with this in mind.

This thesis could not have been made possible without the help, guidance and advice of my two supervisors dr. Huang and dr. Harms. I would like to thank them for this. I would also like to thank the banks and the interviewees that helped this research as well as the participants in the questionnaire.

Lastly, I would like to thank my parents for their patience. Like I always say: "It will be done when it's done".

## Executive summary

This thesis was divided into two studies which were: first, investigate how banks have reacted towards crowdfunding and what their motives were for doing this. Secondly, analyze what banks have contributed to the crowdfunding sector and what they could furthermore contribute based on questionnaires sent to investors and entrepreneurs that had participated in crowdfunding. These investors and entrepreneurs had participated in crowdfunding platforms that had partnerships with a bank. The most important research questions in this thesis was: *What can banks contribute to the crowdfunding sector?*

Crowdfunding is a relatively new financing method in which projects are financed by means of a large group of investors which are placed on crowdfunding platforms (Mollick, 2013; Belleflamme, Lambert & Schweinbacher, 2013). Crowdfunding could be a disruptive technology, because crowdfunding platforms take over the roles of other financial intermediaries for sectors like new start up ventures or SMB (US economic outlook, 2013; De Buysere et al., 2012; Rossi, 2014; Strahan & Weston, 1998). This thesis concludes that crowdfunding matches certain aspects found that correspond to disruptive technology theory i.e. underperforms dominant technology (unattractive to large firms), attractive to customers in niche, rapidly growing and the reluctance of large incumbents to address new technology (US economic outlook, 2013; Tellis, 2006; Christensen, 1996). This thesis concludes that crowdfunding, at the moment, isn't a disruptive technology because it is still small, unattractive to large firms, not a threat to banks due to the market in which it operates and lastly is unsuccessful in later stage funding (Charitou & Markides, 2003; US economic outlook, 2013; Hemer, 2011).

The (potential) disruptive nature of crowdfunding could have posed problems for large incumbents because they have to opt how to react. Theory indicated that incumbents could either focus on their own business, strike back by disrupting the crowdfunding, play both games or embrace the innovation and scale it up (Charitou & Markides, 2003). Banks under analysis ventured into crowdfunding by means of their own crowdfunding platform (seeds) and partnerships with platforms. According to the interview the most important motives of the bank backed up crowdfunding platform were the unique value proposition and corporate social responsibility. Side motives were establishing relationships and knowledge acquisition. Partnerships of the bank were done because of the motives knowledge acquisition and also corporate social responsibility. The banks contributed differently to the crowdfunding sector. Seeds contributed to the crowdfunding sector because it reduced transaction cost by offering a voting system, extensive guidance and a new business model. These aspects also increased the transaction cost which prevented scalability and were the reason why it was closed. The partnerships that the other bank had contributed less to crowdfunding, only resulting in providing more openness and transparency. This due to the nature of the contract and motive to venture. The questionnaire identified the potential crowdfunding area's which banks could enhance and were identified to be: social capital, additional funding, guidance and tools. Awareness of partnerships and the crowdfunding area of platforms didn't lead to any differences in perception of investors and entrepreneurs.

This thesis recommends that banks should not venture actively into crowdfunding but stick to their traditional business, because crowdfunding isn't a threat. Banks should only venture into crowdfunding if they are able to keep transaction costs low whilst at the same time offer either: a new tool, better guidance and screening, their social capital and/or additional funding to projects.



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## 1.Introduction

Crowdfunding, as the term implies, enables entrepreneurs to fund their capital requirements by means of a large group of investors ('the crowd'), facilitated by crowdfunding platforms on the internet (Mollick, 2013; Belleflamme, Lambert & Schweinbacher, 2013). The investors or 'crowd' usually donate small amounts of money in return for a reward depending on the specific crowdfunding initiative employed, except for crowdfunding initiatives that are basically donations and revolve around social responsibility or desirability of the venture (Mollick, 2013; Belleflamme et al., 2013). Crowdfunding thus involves (a) a large pool of investors x (b) investing small amounts of money (c) to provide funding for a project, (d) facilitated by crowdfunding platforms who act as a financial intermediary (see figure 1) (Tomczak & Brem, 2013; Mollick, 2013; Hemer, 2011).



Figure 1: Crowdfunding, how it works (Singapore Entrepreneur, 2008 as found in Van Wingerden & Ryan, 2011)

Crowdfunding is evolving and expanding rapidly (5,1 billion alone in 2013) and literature, research, legislation and politics are trying to catch up on the phenomena and the implications it will have (Mollick, 2013; Hemer, 2011; De Buysere, Gajda, Kleverlaan, Marom, 2012). Research on crowdfunding has only recently begun, the term is pinpointed to have emerged around 2006, and researchers are determining the implications it will have on traditional economic models as well as the ways in which firms will be financed (Belleflamme et al., 2013; Mollick, 2013; Golić, 2014).

Specifically, crowdfunding could be useful for start up ventures and projects that are having trouble in finding adequate funding methods (Rossi, 2014; Mollick, 2013; Belleflamme et al., 2013; US economic outlook, 2013). Because of the crisis of 2007 trust in the economy is still at a low and start up ventures and projects have trouble in getting funded or are underfinanced (Rossi, 2014; Belleflamme & Lambert, 2014). Banks are increasingly hesitant to finance risky start up ventures because they don't have enough collateral, their risk of failure is high or they are unable to indicate their value potential (Golić, 2014; Mollick, 2013). Research of Robb & Robinson (2012) found that external financing is the primary source of funding for 80-90% of new US firms. This highlights the significant role of bank loans (and other external financing methods) in providing seed capital and the consequences the hesitance of banks in providing these bank loans has on this sector (Robb & Robinson, 2012). Crowdfunding opens up new opportunities in how ventures can be financed and provides these ventures with the needed financing, since they are underfinanced or unable to get a bank loan (Belleflamme et al., 2013; Mollick, 2013). Crowdfunding can thus fill the gap left by the inadequacy of 4F(founders, family, friends & foolhardy investors) in funding the capital needs of ventures and the hesitance of banks and other funding methods (Lasrado, 2013; Bygrave, Hay, Ng & Reynolds, 2003; De Buysere, Gajda, Kleverlaan, Marom & Klaes, 2012; Mishra & Koren, 2011).

Because crowdfunding platforms act as financial intermediaries the roles of traditional financial intermediaries (banks) can become smaller or even redundant for this sector (start up and SMB). This because crowdfunding platforms have lower operating costs, a regulatory vacuum and are serving an unprofitable (from a bankers perspective) niche market i.e. start up ventures and SMB (US economic outlook, 2013; De Buysere et al., 2012; Rossi, 2014; Strahan & Weston, 1998). Although crowdfunding platforms at the moment are unable or reluctant to finance projects that require large amounts of funding, the future is uncertain whether crowdfunding will grow in numbers & types and enter other areas of the funding market (US economic outlook, 2013; Rossi, 2014). Crowdfunding could represent a disruptive technology in that although it now operates only in the bottom market of funding (where projects are riskier) will eventually venture into the main market of banks, competing with or replacing bank loans as the primary source of funding (Christensen, 1997; US economic outlook, 2013). A disruptive technology is a technology that creates a new value proposition and/or new market and eventually will replace the existing technology present (Christensen, 1997; Christensen & Raynor, 2003). According to Christensen, author of the famous article: The innovators dilemma: when new technologies cause great firms to fail (1997) and coiner of the term disruptive technology, crowdfunding has the potential to become a disruptive technology in funding firms (Fortune, personal communication, June 2012).

With the hesitance of banks in providing funds for start up ventures and SMB, resulting in or further boosting the growth of crowdfunding platforms and their activity, problem now arises for traditional funding intermediaries in how to deal with the new competitor (Tomczak & Brem, 2013; Mollick, 2013; Hemer, 2011; US economic outlook, 2013). Should traditional intermediaries, like banks, ignore the new technology and continue with their business as usual or counter attack and disrupt the new competitor (Charitou & Markides, 2003; US economic outlook, 2013; Cocheo, 2013). Like previously in other industries (like the airline industry) the competitor has a new value proposition that is cheaper and more suited to the needs of a specific customer group that is difficult to serve for the more traditional incumbents (Noordhof, 2005; Christensen, 1997; Belleflamme et al., 2013). In the case of the airline industry, Ryan air competed with large incumbent companies by offering low cost carriers aimed at customers who wanted cheap flights without the luxuries offered by traditional airlines (Noordhof, 2005; Boddy, 2011). The same can be said of crowdfunding that operates in a risky and unprofitable market for traditional funding methods at a lower cost because of the architecture applied i.e. the internet and the absence of regulations (Belleflamme et al., 2013; De Buysere et al., 2012).

So how should banks react and if they already have reacted how did they react and for what reasons. Because the research on crowdfunding is rather new, not surprisingly for a phenomena that has only recently manifested itself, it was primarily focused on the aspects of the concept itself and the properties it had. Research was primarily conducted to research the different models employed, the success factors of crowdfunding, the geographical dispersion of investor participation in crowdfunding, the reasoning for investing or participating in crowdfunding, the potential of crowdfunding in providing funds for innovative products ect. (Tomczak & Brem, 2013; Belleflamme et al., 2013; Gerber & Hui, 2013; Agrawal, Catalini & Goldfarb, 2011; Bakker – Rakowska, 2014).

Few academic papers have taken into account the disruptive potential that crowdfunding entails for the traditional funding methods like banks and the possibilities of having crowdfunding as an additional asset in the normal operations of banks. For this academic paper the scope of research will

be restricted to the Netherlands and their crowdfunding platforms. In analyzing the crowdfunding sector, only crowdfunding platform that operate and are housed in the Netherlands will be included. The same applies to banks where only Dutch banks will be researched that have ventured into the realm of crowdfunding. Because crowdfunding is rather new, as well as the involvement of banks in crowdfunding, this paper is mainly exploratory of nature in researching how and why banks have ventured into crowdfunding and what attributes of crowdfunding bank involvement could influence or enhance.

Most banks (up to now) in the Netherlands are continuing with their business as usual, treating crowdfunding as something that won't affect their business dramatically and are watching the trends in crowdfunding, for it is only beginning to grow larger and is finishing its start up phase (oldest crowdfunding platforms in the Netherlands were only founded in 2010) (Douw & Koren, 2014; Rabo bank: banks should embrace crowdfunding, banken.nl, 2013; BNP PARIBAS Fortis, Banks and crowdfunding). Director of ABN AMRO Zalm stated in an interview that: "Crowdfunding, as an alternative funding method, will not replace banking" (Elsevier, personal communication, 25 Nov 2013). This indicates that banks aren't viewing crowdfunding as a competitor to their business as usual but this doesn't mean crowdfunding can't be used as an asset in the banks operation. Banks are contemplating whether to involve themselves with crowdfunding and how this should be done. Because crowdfunding is relatively new the big players are reassessing their grounds and opting which course to follow in implementing this new financing method (Cocheo, 2013; US economic outlook, 2013; Van der Laar, 2014). So what have banks done up to now? The simplest things are: banks that are partaking in national research on crowdfunding or are informing potential clients about crowdfunding on their website. More elaborate are the partnerships banks can have with crowdfunding platforms, as well as the fact that banks are contemplating a business model (involving crowdfunding) or indicating that bank loans and crowdfunding can be mixed (Van der Laar, 2014; Rabo bank: banks should embrace crowdfunding, banken.nl, 2013; Keswiel, 2015). Most active form of a bank initiative in crowdfunding is Seeds, a bank backed up crowdfunding platform. Seeds started in 2013 and acts as a crowdfunding platform for entrepreneurial ventures of a sustainable or green nature (Van Essen, CXO, 9-23-2014). Seeds is one of the first crowdfunding platform created by a bank and they state on their website that: "With Seeds we can connect the traditional 'old' and 'new' financial worlds" (Seeds: part of ABN AMRO, 7-2-2014). Seeds claims that banks have an obligation to connect parties that need money with parties that have money. When this is risky, as is the case with loans from banks, than other financial methods that suit the situation better should be utilised, like crowdfunding (Seeds: part of ABN AMRO, 7-2-2014). Seeds as of this year (2015, feb.) has stopped its operation, ending the role of the first crowdfunding platform owned by a bank. Still it is interesting to view what drove the bank to create Seeds, what lessons can be learned from their venture and what aspects of crowdfunding were potentially improved by bank involvement.

Banks, thus, are slowly implementing crowdfunding in different ways, are contemplating venturing into crowdfunding or have ventured into crowdfunding and retreated. The different ways in which banks have ventured into crowdfunding raises questions about their motives in following different courses faced with the same phenomena and the benefits that this creates for both investors and entrepreneurs in crowdfunding. Crowdfunding sector comprises factors which are interrelated and have different attributes that can be enhanced or influenced i.e. platform success factors, projects success factors & the motives of investors and entrepreneurs to engage in crowdfunding (Golić, 2014; Rossi, 2014; Gerber & Hui, 2013; Mollick, 2014; Mishra & Koren, 2011). This thesis

argues that bank involvement can be beneficial for the crowdfunding sector if certain crowdfunding sector factors can be enhanced (whether these are investors & entrepreneurs motives, project or platform success factors) and in doing so reduce transaction costs present in crowdfunding, or reduce these better than other crowdfunding platforms are doing. Transaction costs theory indicates why organizations are established, instead of leaving transactions to the market mechanism, and why some firms manufacture goods internally and outsource others (Klein & Shelanski, 1996; Tadelis & Williamson, 2012). Like the used car, crowdfunding can be plagued by adverse selection (lemon problem) as well as moral hazard because of asymmetric information between investors and projects on crowdfunding platforms. It is difficult for investors to differentiate between good and bad investments (lemon problem), because project initiators know more about the feasibility and achievability of their project than funders. Furthermore after the crowdfunding period entrepreneurs can take on excessive risk because investors can't be argued to monitor all the actions (and if these actions are sensible) (Belleflamme & Lambert, 2014; Stiglitz & Weiss, 1981; Thomson & Conyon, 2012). Crowdfunding platforms screen projects and ascertaining if they have a certain degree of quality, can guide projects in how to successfully portray their project (revealing all relevant information to investors) and can provide risk analyses giving investors an idea of the potential risk they face when investing on projects (Belleflamme & Lambert, 2014; Stiglitz & Weiss, 1981; Thomson & Conyon, 2012). This is one of the reasons why crowdfunding platforms act as financial intermediaries because they reduce transaction costs between funders and projects i.e. search and information costs, bargaining costs and policing costs (Hazue, 2007; Nederhof, 1996). Banks, as a traditional financial institution, could reduce transaction costs in the crowdfunding platforms if they are able to successfully enhance crowdfunding sector factors.

### **1.1. Research Question & Research goal**

The involvement and interaction of banks in crowdfunding are increasing, the research question therefore is formulated as:

#### ***RQ: What can Dutch banks contribute to crowdfunding?***

This research question can then be divided into sub questions

1. *What is crowdfunding and how does it work?*
2. *Is crowdfunding a disruptive technology and how can banks react?*
3. *How did Dutch banks react to crowdfunding?*
4. *What explains the different reactions of Dutch banks to crowdfunding?*
5. *What did these Dutch bank contribute to the crowdfunding sector?*
6. *What could Dutch banks potentially contribute to the crowdfunding success?*
  - 6.1. *Could banks enhance entrepreneurs motives to engage in crowdfunding?*
  - 6.2. *Could banks enhance the motives of investors to engage in crowdfunding?*
  - 6.3. *Could banks positively affect project success factors?*
  - 6.4. *Could banks positively affect platform success factors?*

Main goal of this academic paper is providing exploratory information about the Dutch crowdfunding sector, the motives of Dutch banks that already are involved in crowdfunding and the (potential) contributions of Dutch bank involvement in crowdfunding. Aside from providing a overview of the characteristics of Dutch entrepreneurial crowdfunding platforms, this academic paper will try to explain the distinct motives and characteristics of the involvement of Dutch banks in creating

partnerships with crowdfunding platforms and creating their own crowdfunding platform (Seeds). Furthermore aside from explaining why different strategies were pursued by different banks this paper will highlight potential characteristics of crowdfunding which banks could positively enhance, or are valued by investors and entrepreneurs of the crowdfunding platforms were bank involvement is in effect. These findings can provide (other) banks with recommendations whether it is wise to involve themselves with crowdfunding, how this could be done and what factors of crowdfunding banks could enhance.

## **1.2. Academic and practical relevance**

Although the research on crowdfunding is expanding, it is still a recent phenomena and therefore literature on the subject is minimal and most research has only recently appeared. Furthermore the topic of most research and literature have specified project success, geographic dispersion or motives why investors participate in crowdfunding of crowdfunding platforms. The roles and possibilities provided by other funding methods, besides or different from crowdfunding, have not been taken into account. The perspective of banks and their initiatives towards crowdfunding have not been researched as this trend has only recently begun to appear. Crowdfunding platforms like Seeds or partnerships that crowdfunding platforms have are recent. Therefore this research should be seen in the light of the recentness of this phenomena. Conclusions drawn by this thesis will shed a new and distinctive light on the aspects of crowdfunding and the possibilities of bank involvement thereby further enriching existing literature and providing recommendations for bankers in whether to respond to crowdfunding and how. However all of this should be viewed with the recentness of the phenomena in mind.

## **1.3. Relevant theories**

Due to the large scale and diversity of this thesis it is necessary to indicate what theories will be used to explain crowdfunding and answer the different research questions formalized.

### **RQ1: What is crowdfunding and how does it work?**

Main theory presented is the framework established by Tomczak & Brem (2013) which entails almost all the different investment types, pay out modes, investment models and business models present in crowdfunding. This theory will further be complemented by an in depth analyses of the crowdfunding market in the Netherlands, indicating the different attributes that Dutch crowdfunding platforms have.

### **RQ2: Is crowdfunding a disruptive technology and how can Dutch banks react?**

Main theory used to decide if crowdfunding is disruptive is the theory provided by Christensen (1997; 2003; 2013) on disruptive technology. This will be complemented with theory of Golić (2014), Schwenbacher & Larralde (2010) and others on crowdfunding, their attributes and possibilities for new start up ventures, as well as analysis of the growth of bank loans and crowdfunding in the Netherlands by means of research of Douw & Koren. How banks can react to disruptive technology is based on research of Charitou & Markides (2003) (strategy) and Burgelman (1984) (form)

### **RQ3 & R4: What explains the different reactions and what were there motives?**

A framework will be established by using corporate venture theory (dual transformation & ambidextrous organization), joint venture theory (partnerships) and corporate governance theory which will be used to explain the reaction of banks and their motives.

### **RQ 5 & R6: What did Dutch banks contribute & what can they potentially contribute?**

A conceptual framework will be established which will indicate the bank's assets and crowdfunding success factors present in crowdfunding. Crowdfunding success factors are theories about motives to

engage in crowdfunding, project success factors and platform success factors. These factors are established by combining different findings in literature which are:

**Motive to engage:** Rossi (2014), Golić (2014), Gerber & Hui (2013) and Bakker- Rakowska (2014)

**Project success factors:** Mollick (2014), Kuppaswamy & Bayus (2013), Fiddelaar et al. (2014), Ahlers, Cumming, Günter & Schweizer (2013) and Guidici, Guerini & Lamastra (2013).

**Platform success factors:** Belleflamme & Lambert (2014), Mishra & Koren (2011) and Gerber & Hui (2013).

Transaction cost theory will determine what banks are currently offering the crowdfunding sector and what they could potentially offer.

#### **RQ: What can Dutch banks contribute to the crowdfunding sector**

This question can be answered by combining all the relevant answers obtained from the sub questions. This thesis will indicate what banks can contribute and if they should contribute based on the disruptiveness of crowdfunding, the motives and reactions of Dutch banks towards crowdfunding, their contribution to crowdfunding and their potential contribution to crowdfunding.

### **1.4 structure**

This academic paper is composed of two studies. The first study analyzes the motives of Dutch banks that have ventured into crowdfunding (form & motive) while they were faced with the same phenomena. This part of the study is done by means of interviews that will be held with representatives of both banks. The second study deals with both the interviews held with banks and the questionnaires sent to investors and entrepreneurs on crowdfunding platforms with partnerships to a bank. The interviews are used to examine what aspects of crowdfunding banks have improved or contributed to, whereas the questionnaires will be used to analyze the aspects of crowdfunding which banks could contribute to. These two studies are organized into 4 chapters i.e. theoretical framework, methodology, results and discussion.

The theoretical framework is divided into 5 parts: (1) general information about crowdfunding, (2) theory about disruptive technology, (3) theory about crowdfunding success factors, theory about the role of banks in crowdfunding and lastly a conceptual framework. Study 1 uses part 2 of the theoretical framework in which the reaction of Dutch banks are explained by using theory about disruptive technology. This set of theories contains theory regarding general information about disruptive technology (and if crowdfunding fits the description of a disruptive technology), innovators solutions to disruptive technology and the respective form in which innovations can be implemented. Study 2 uses the last two parts of the theoretical framework i.e. theory about crowdfunding success factors and transaction theory. It is argued that banks can be beneficial to the crowdfunding sector if they are able to improve crowdfunding success factors, thereby reducing transaction costs found in the crowdfunding sector like adverse selection.

The methodology deals with the methods used in both studies (interview & questionnaire), sampling used, statistical tests used, validity and limitations. Finally the results will be presented and analysed and conclusions will be drawn what motives were prevalent in initiatives of Dutch banks and what possible areas of crowdfunding bank involvement has contributed and could contribute. Lastly, the discussion of this thesis will give recommendations towards banks and platforms, indicate theoretical contributions to existing theory, indicate what limitations this research had and advise about how future research could benefit the existing literature on crowdfunding.



## **2. Theoretical framework**

Theoretical framework comprises all the relevant theories about crowdfunding, disruptive technology, success factors of crowdfunding (project & platform), the motives of investors and entrepreneurs to engage in crowdfunding and transaction cost theory. Theoretical framework will elaborate and explain these concepts as they will eventually be used in a conceptual framework to illustrate the (potential) role that banks could play in crowdfunding.

First, crowdfunding theory will explain what types of crowdfunding schemes are being used and this theory is then used to describe the Dutch crowdfunding sector, their services and characteristics. This analysis will only include Dutch crowdfunding platform (based and operating in the Netherlands) and will be limited to those crowdfunding entrepreneurial ventures or ventures with a green or sustainable nature. Second, theory about disruptive technology and the solutions provided for large incumbents in addressing this disruptive technology will be presented. This paper will illustrate if crowdfunding is a disruptive technology and what implications this will have and what counter actions could be undertaken. Having explained the literature on disruptive technology and the solutions provided in academic literature, the actions of the Dutch banks that have ventured into crowdfunding will be examined according to the theory on disruptive technology. Ultimately this will result in the construction of 5 main reasons for bank involvement in crowdfunding. Information and theory is then provided about motives of investors and entrepreneurs in participating in crowdfunding and the success factors within crowdfunding (project & platform). Lastly, transaction cost theory will be used to explain why bank involvement in crowdfunding could reduce transaction costs by positively affecting motives to engage in crowdfunding (investors- entrepreneurs) or success factors within crowdfunding (project – platform).

### **2.1.Crowdfunding**

This section will indicate the various possibilities that crowdfunding entails i.e. different models (as described in figure 2), area of crowdfunding and lastly differences between crowdfunding platforms in the Netherlands. This is necessary to explain because these variables are related aside from the fact that the area of crowdfunding (entrepreneurial, creative and non profit) and business model used will have implications for the crowdfunding platform.

Crowdfunding is defined by research of Belleflamme et al. (2013) as:” allowing entrepreneurs to raise funding through an open call on the internet” (Belleflamme et al., 2013, p. 1). Crowdfunding is a rather new way, which has quickly gained popularity, in which money lenders can call on the general public to fund their undertakings (Tomczak & Brem, 2013; Schwienbacher & Larralde, 2010; Belleflamme et al., 2013). A large potential group of investors will each donate a small amount to fund the total funding amount a money lender requires and the transaction is facilitated and regulated by crowdfunding platforms, who act as financial intermediaries (Belleflamme et al., 2013; Mollick, 2013). Although crowdfunding is a relative new concept as a funding method, with the term being introduced in 2006 (although it was already practiced since the late 90’s), it is a internet based variation that draws on older concepts like crowd sourcing and micro financing (Hemer, 2011; Belleflamme et al.,2013; Tomczak & Brem, 2013; Mollick, 2013). In the past, before the internet, a large number of projects or start up ventures were financed by a large group of people or investors, constituting micro finance i.e. providing financial services to entrepreneurs and small enterprises who lack funds or fund access (Hemer, 2011; Feigenberg, Field & Pande, 2010). Crowd sourcing, on the other hand, is allowing a general undefined public through an open call (on the internet) to

participate in creating a good or a product for sale, a job traditionally reserved for employees of the company (Schwienbacher & Larralde, 2010; Tomczak & Brem, 2013; Mollick, 2013). Both concepts use the general public or “crowd” to satisfy the demands of a particular organization i.e. crowd sourcing to provide feedback, solutions and recommendations to a organization to better perfect or make better goods or services (Schwienbacher & Larralde, 2010; Mollick, 2013) and micro finance to fund the financial needs of persons without funds or lack of access to funds (Hemer, 2011).

### 2.1.1. Crowdfunding Models

Crowdfunding platforms act as financial intermediaries between money providers and money lenders and facilitate contact, interactions and transactions between these two parties (Mollick, 2013; Belleflamme et al., 2013; Noordam, 2014). The amount of interaction between crowdfunding platform and both parties, the legal issues, type of investment made, type of fundraising, the rewards available to investors and the motivations to participate differ according to the type of crowdfunding model employed by the crowdfunding platform (Tomczak & Brem, 2013; Schwienbacher & Larralde, 2010; Belleflamme et al., 2013). The conceptual framework established by research of Tomczak & Brem (2013) is a adequate representation of the complex nature of crowdfunding models displaying (almost) all scenarios possible, see figure 2.

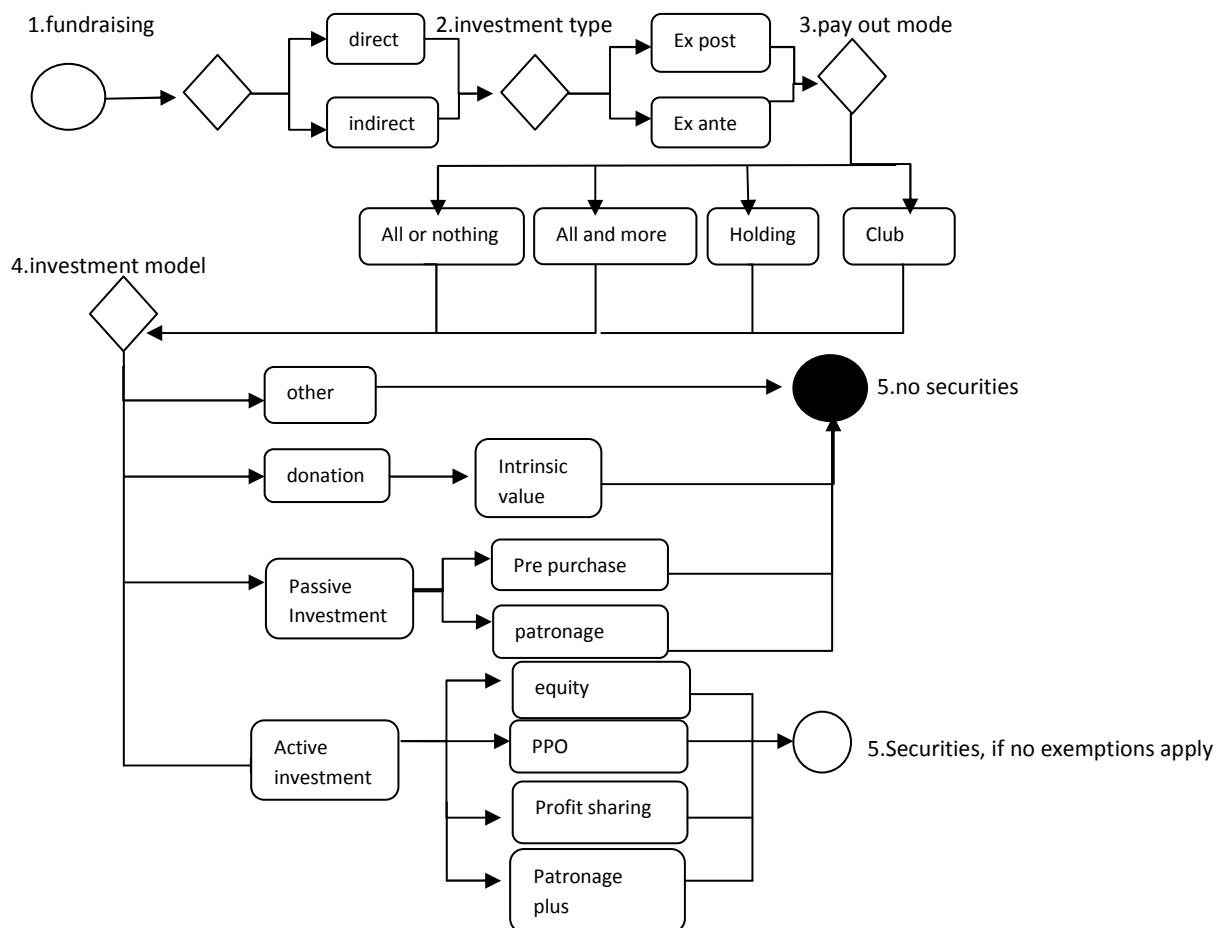


Figure 2: Crowdfunding investment model, adapted from (Tomczak & Brem, 2013).

Figure 2 displays the possible crowdfunding schemes which differ according to fundraising (indirect and direct), investment type (ex post and ex ante), pay out mode (all or nothing, all and more,

holding and club), investment models ( other, donations, passive investments and active investments) and the presence of securities with crowdfunding (Tomczak & Brem, 2013).

#### ***2.1.1.1 type of fundraising***

Figure 2 starts with the type of fundraising: indirect – direct. Crowdfunding can differ in how projects are displayed to potential investors. Direct investment involves projects where entrepreneurs use their own crowdfunding platform to come in contact with investors for their project. For example band members who want funds to publish their newest albums and contact fans through means of a crowdfunding platform set up specifically for the sole purpose of their band. Indirect is the more prevalent type of crowdfunding and involves a crowdfunding platform who acts as an intermediary for both investors and entrepreneurs and also deals with other projects and ventures apart from the organization under financing. Most important distinction between direct and indirect is that with direct an entrepreneur seeks funding from a more known crowd (fans, customers, family and relatives) whereas indirect involves the more unknown crowd that are contacted, not through their own crowdfunding platform (or pitch on their website) but through an intermediary (Tomczak & Brem, 2013; Mishra & Koren, 2011).

#### ***2.1.1.2.Type of Investment***

When the type of fundraising has been determined than the type of investment can change among projects. Most crowdfunding projects are ex ante where the project is not yet completed or clearly specified. Investors provide entrepreneurs with funds in order to meet a mutual goal but a project or product is not yet under construction, like for example a blue print for the production of high quality slippers. Products or services that are ex ante funded are not established yet by the entrepreneur. With ex post funding a product or services has a blue print or prototype already in production which investors will receive once the funding and production has been finished (Tomczak & Brem, 2013).

#### ***2.1.1.3.Type of pay out mode or business model***

Next are the business models applied by crowdfunding platform. Although type of fundraising and investment were up to the investor to decide (to invest in which crowdfunding platform (direct – indirect ) and which projects (ex post – ex ante), the business model applied is up to the crowdfunding platform itself.

##### **All or nothing model (AON)**

Also called threshold pledge model is the most applied business model amongst crowdfunding platforms. It implies that investors make a pledge to invest a certain amount of money in the funding project under finance. No actual payment towards the entrepreneur is being made, just a pledge in the form of a signed contract to allow the withdrawal of a specified amount of money towards the entrepreneur once the agreed threshold or target amount has been reached (see figure 3) (Hemer, 2011; Cumming, Le boeuf & Schwienbacher, 2014; Tomczak & Brem, 2013). If the entrepreneur fails to reach the target amount for the specific time period than the pledge to finance the entrepreneur ceases to exist and the amount isn't withdrawn from the bank accounts of investors, or if the amount has been relocated to the crowdfunding platform is deposited back. The stretch goals are goals attached to projects if the initial target amount should be surpassed. If the stretch goal, which is more than the target amount, is reached than additional features are available for the project. This could result in more possibilities available for the entrepreneur, like adding more features to products or more renovations ect. (Tomczak & Brem, 2013; Noordam, 2014; Hemer, 2011). The all or

nothing business model is mostly associated with donations and reward based investment types which will be explained later on, but are also used by other business models (Hemer, 2011).

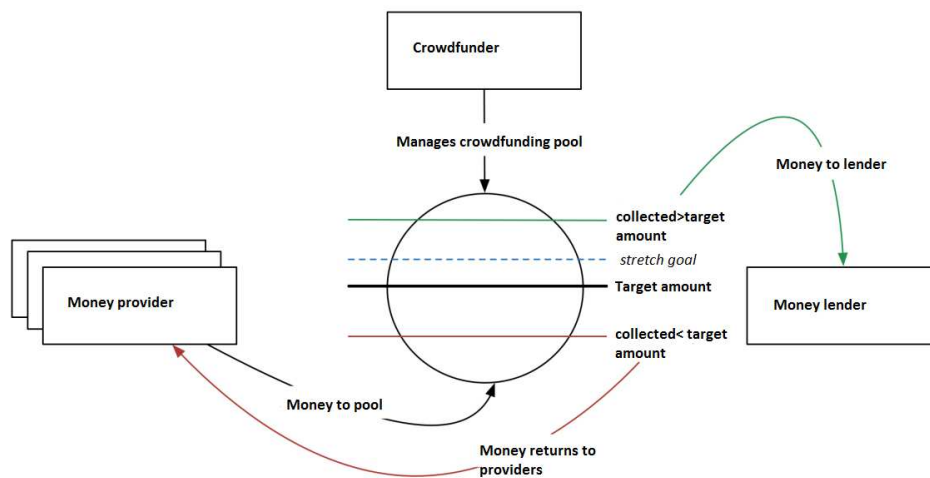


Figure 3: All or nothing model, adapted from (Noordam, 2014)

### Keep it all (KIA)

No matter if the target amount is reached the entrepreneur(s) get the funds raised from the investors. This shifts the risk from entrepreneurs to the "crowd", because whether or not the crowdfunding campaign was a success the entrepreneur will receive his funding (Cumming et al., 2014; Tomczak & Brem, 2013). Research of Cumming et al. (2014) has indicated that this business model is more successful for firms (in achieving their goals) if the target amounts are small. All or nothing models are more successful in achieving goals (and have larger capital goals) than keep it all models, because firms that lack investor participation (that don't get enough funds from investors) don't start off with insufficient funding (as can happen with KIA models) (Cumming et al., 2014).

### Club

In order to avoid regulations, while providing securities/ investments, investors are offered a club membership which groups them into so called investment club(s), a circle of investors. This way investors are not perceived, by the law, as shareholders of a venture but merely as members or qualified investors and so security regulations are less strict or won't apply. Furthermore investors are now able to influence governance of the company being funded without complying to laws and regulations specified to stakeholders (Tomczak & Brem, 2013; Hemer, 2011).

### Holding

A subsidiary holding firm is established to control, allocate and distribute the funds collected from the investors. The holding acts as the sole investor of the venture under funding and sells the shares of the company for which it acts as a holding firm (Tomczak & Brem, 2013; Hemer, 2011).

Not included in the research of Tomczak & Brem (2013) are micro lending business models and the investment/equity model (although club and holding business models are equity models, they are a distinction or supplement of the basic equity model) (Hemer, 2011). Equity model is dividing the target amount in equity shares of the company, basically the same as club and holding but without establishing a holding or renaming investors as club members (Hemer, 2011). Micro lending involves loans being distributed towards projects, a loan agreement between parties without the usual

financial intermediary (bank), where the crowdfunding platform can have a low or high degree of involvement. With a high degree of involvement the crowdfunding platform will remain an intermediary after the funding period has been concluded and will transfer interest and amortize from project initiators to investors. With a low degree of involvement the platform has no responsibilities after contact between parties has been established and the funding has been completed. Interest payment and paying off the loan will be settled by investors and project initiators themselves without the aid of the intermediary, this is called peer to peer lending (Hemer, 2011; Noordam, 2014; Röthler & Wenzlaff, 2011). Equity models (club and holding) and micro lending usually use all or nothing or keep it all as a way in which the target amount will be reached and distributed (Hemer, 2011; Tomczak & Brem, 2013).

#### ***2.1.1.4.Type of Investment model***

The investment model is largely determined by the type of pay out mode/ business model applied by crowdfunding models, with AON and KIA mostly linked to donations and passive investment (mainly reward based) and equity models (club & Holding) to active investment, because active investment deals with the distribution of shares (Cumming et al., 2014; Tomczak & Brem, 2013). The main investment models are donations, passive investment and active investment, with Other being reserved in the conceptual framework for investment models who are miscellaneous of nature (Tomczak & Brem, 2013)

##### Donations

Donations compromise the least amount of interaction between investors and entrepreneurs. The investors raise money for a project, the ideas and values it holds, that it perceives to be socially desirable. Investments are made without the need for a financial reward or reward in the form of product or services. The primary reason for investing by means of donations is the intrinsic value that investors obtain by being part of the project i.e. recognition and satisfaction from helping others and supporting ideas or businesses. Although a financial reward could be given (in some instances) this is of low concern for most investors (Tomczak & Brem, 2013; Noordam, 2014; Hemer, 2011; Schwienbacher & Larralde, 2010).

##### Passive investment (reward based)

Investments are made but the investors doesn't participate in the actions and decisions of the project it invests in. Sole purpose of investors and entrepreneurs are to raise money and receive a (financial) return on the investment made, in the case of investors. The control, actions and decision made by the company are made by those in charge and investors are not an important stakeholder in the company, except for the obligation to pay a (financial) return. Passive investment thus only gives investors an opportunity to get a (financial) return on their investment. (Tomczak & Brem, 2013; Schwienbacher & Larralde, 2010; De Buysere et al., 2012). Passive investments are reward based investments that can be divided in pre-purchase or patronage, according to research of Tomczak & Bern (2013). Pre- purchase means that investors have first pick if products or services are made available. The investors will hence become the first customers of the project being funded. Patronage on the other hand is gifts or products given as a way of saying "thank you for funding us". Patronage can range from dinners with the founders of a project, a tour given, t-shirts printed ect. (Tomczak & Brem, 2013; Mollick, 2014; Belleflamme et al., 2013).

### Active investment (equity based)

Instead of only getting a financial return on investment, as with passive investment, active investment establishes a more interactive relationship between investor and entrepreneur. Investors have more control, are a more important stakeholders and are able to direct actions or exact influence on decisions. Rewards for the investor are grouped as equity, PPO, profit sharing and patronage plus (Tomczak & Brem, 2013; Schwienbacher & Larralde, 2010; Noordam, 2014).

**Equity:** Investor obtains a share of the company funded and can influence actions made by the company. The security can be sold by the investor in order to retrieve his investment.

**PPO:** Private placing order is when investors have a personal relationship or are acquainted with the crowd funder. Experienced investors could also be included into these groups of investors who are given the name qualified recipients or qualified/sophisticated investors. These investors bypass European and American law regarding equity security rules.

**Patronage plus:** Apart from the reward as described with patronage (in passive investment) the investor is also entitled to a financial return or compensation.

**Profit sharing:** As the term indicates investor will get a share of the profit that the company makes according to the amount of investments made by the investors and any regulations that either the crowd funder or the platform have specified (Tomczak & Brem, 2013; Belleflamme et al., 2013).

Not included in the framework is the lending investment model where investors mainly want to invest because of the financial return (interest payment on the loan agreement) of the project and will eventually receive their financing back (Mollick, 2014; Noordam, 2014). Research of Douw & Koren (2013) found that different investment models invoke different amounts of investments of investors. Loan based models received the most amount of investment ranging from 51-100 euro, compared to 11-50 euro for reward based and 11-25 for donations (Douw & Koren, 2013).

Left in figure 2 is the question if securities are involved in the transaction between both parties. With the reward based types of investments (others, donations and passive investment) there are no securities involved. The active investments, where shares are obtained by investors, could have a security if no exemptions apply (Tomczak & Brem, 2013). For this academic paper it is not necessarily to elaborate further into this area because this would serve no cause for this academic paper.

### **2.1.2 Crowdfunding in the Netherlands**

Crowdfunding (in millions)	2010	2011	2012	2013	2014
<b>Total</b>	0.5	2.5	14	32	63
Growth % (total)	-	500%	560%	229%	197%
<b>Categories</b>					
Entrepreneurial	-	0.7	4.1	27.8	51.1
Creative	-	1.35	1.9	2.9	5.4
Social	-	-	-	1.3	6.5
International collaboration	-	0.3	0.7	-	-
Neighbourhood, Nature & sport	-	0.15	0.3	-	-
De Windcentrale	-	-	7	-	-

Tabel 1: Crowdfunding in numbers (Douw & Koren, 2011; Douw & Koren, 2012; Douw & Koren, 2013; Douw & Koren, 2014)

<b>Projects financed</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>
Total	-	250	570	1250	2000
<b>Categories</b>					
Entrepreneurial	-	17	108	367	602
Creative	-	111	262	482	752
Social	-	-	-	409	673
International collaboration	-	116	174	-	-
Neighbourhood, nature & Sports	-	3	25	-	-
De Windcentrale	-	-	1	-	-

Tabel 2: Crowd funded projects (Douw & Koren, 2011; Douw & Koren, 2012; Douw & Koren, 2013; Douw & Koren, 2014)

Last year (2014) 63 million euro's were crowd funded in the Netherlands alone (see table 1). The Dutch crowdfunding market is rapidly growing if one considers that in 2010 the amount of crowdfunding was a mere 0.5 millions making it a growth of 12,600% in 4 years time. Since 2010 crowdfunding has never achieved a growth of less than 100% although now the growth of crowdfunding is stagnating (still 197%). Biggest category now in crowdfunding are entrepreneurial ventures (in amounts), although they represent the lowest category in terms of projects crowd funded (602), they received the most funding (51 million). Representing approximately 80% of all crowdfunding undertaken in that year (see table 1 & 2). Table 1 indicates the total amount of crowdfunding between 2010-2014 (in millions) (data on 2010 categories could not be retrieved).

### **2.1.2.1. crowdfunding areas**

As data collected by Douw & Koren indicates, crowdfunding not only differs according to the business and investment models employed as was described in 2.1.1, but also differs in the areas in which crowd funding takes place which are presented in table 3. For this research, as was indicated, only Dutch crowdfunding platform will be included into this research and furthermore only the areas general and sustainable entrepreneurial crowdfunding will be analysed. Research of Douw & Koren (2014) divides crowdfunding in the Netherlands in three major main crowdfunding categories i.e. entrepreneurial, creative and non profit and subcategories within (see table 3).

<b>Entrepreneurial</b>	<b>Creative</b>	<b>Non profit</b>
<b>General</b>	apps	Durable energy
<b>Sustainable</b>	Books	international
Greenhouse industry	design	Nature
Real Estate	Movies	Education
	Journalistic	Law
	Art	sports
	Music	City and governance
	miscellaneous	Science
		Healthcare
		Miscellaneous

Table 3: Area of crowdfunding, Douw & Koren (2014). Scope of research is indicated red.

The two subcategories under analyse are general and sustainable entrepreneurial crowdfunding. General deals with the crowdfunding of start up ventures, entrepreneurs, funding of small and medium sized businesses or just providing a platform for money lenders and money providers (Douw & Koren, 2014). All the projects displayed on the crowdfunding platforms within the general category have an entrepreneurial nature i.e. providing working capital for investments, funding renovations or expansions, business lending's or seed capital for start up ventures. This category also includes peer to peer lending (P2PL) which is lending between parties without an financial intermediary ( part of

micro lending business model) and this aspect can lack a clear business aspect. Crowdfunding platform that employs a P2PL model is Geldvoorelkaar. (Douw & Koren, 2014; Moenninghoff & Wieandt, 2013). The sustainable entrepreneurial crowdfunding category are crowdfunding platforms that fund projects and ventures that have a social desirable or green nature. Examples could be ventures that aim at social and sustainable innovations (Oneplanetcrowd), sustainable companies and firms (share2start), firms that are aimed at bringing a positive impact on society (Seeds) and crowdfunding of entrepreneurs in second and third world countries (Lendahand) (Douw & Koren, 2014).

The 17 entrepreneurial crowdfunding platforms are displayed in table 4 indicating founding year, description of their target group within entrepreneurial and the used business model.

Dutch Crowdfunding platforms	Founding year	Description	Model
<b>Entrepreneurial</b>			
Crowdaboutnow	2010	entrepreneurs	Loans, donations, shares and reward based
Viviad	2014	SMB	Loans, shares and current account
WeKomenErWel	2011	entrepreneurs	Loans and shares
Geldvoorelkaar	2010	SMB, entrepreneurs, association, foundation and individuals	Loans
Kapitaalopmaat	2014	entrepreneurs	Loans
TheDutchDeal	2014	entrepreneurs	Loans
Fundme	2014	SMB	Loans
Onderlingkrediet	2013	Lender and borrowers	Loans
Geldoverenweert.nl	2014	Money lenders and providers	Loans
massafinanciering	2014	SMB	Loans
Collin crowdfund	2014	SMB	loans
Symbid	2013	entrepreneurs	shares
Leapfunder	2013	Business financing	Convertible obligations (shares)
Doorgaan.nl	2014	Existing and starting ventures	Non financial reward
<b>Sustainable</b>			
Oneplanetcrowd	2014	Sustainable and social innovations	Loans, shares and combinations
Share2start	2011	Sustainable organizations and firms	Loans, donations and reward based
Seeds	2013	Positive social impact	Combination reward based and financial reward

Table 4: Dutch crowdfunding platforms, retrieved from (Douw & Koren, 2014; Schwiendach, 2014) & respective website of crowdfunding platforms

### Founding year

Observing table 4 indicates that the Dutch crowdfunding platforms are relatively new. Most crowdfunding platforms started operations in 2014 and the oldest crowdfunding platforms like Crowdaboutnow and Wekomenerwel only started in 2010 (Douw & Koren, 2011;Douw & Koren, 2014).

### Descriptions

The descriptions applied by Douw & Koren (2014) (entrepreneurs, SMB, money lenders ect.) don't necessarily mean that crowdfunding platforms differ in the type of entrepreneurs they finance,



although with some crowdfunding platforms this is the case. The descriptions applied could merely imply a reframing of concepts that are alike or almost identical. Without a clarification of the definitions applied by Douw & Koren (2014) the descriptions applied will remain vague. For instance the crowdfunding platforms Symbid and Collin crowdfund are described as serving entrepreneurs and SMB, however offer similar ranges of funding (see table 8). On the other hand geldvoorelkaar is labelled as individuals and business, but only between 1000-5000 euro. Small and medium businesses (SMB) deals with extensive amounts of funding and have ranges up to 2,500,000 whereas with crowdfunding platforms that are categorised as entrepreneur the maximum amount isn't specified. Probably the terminologies will overlap at certain ranges or characteristics of funding.

### Business model

The predominant type of crowdfunding used by Dutch crowdfunding platforms operating in the Netherlands are Loans which make up 50% of all crowdfunding models used. Most crowdfunding platforms solely use this type of crowdfunding as their only ways of business. 2 crowdfunding platforms use only equity based models, shares, in crowdfunding i.e. Symbid and leapfunder ,whereas only doorgaan.nl uses reward based model as its main source of business. Other crowdfunding platforms offer different ways of crowdfunding projects. CrowdAboutNow & Oneplanetcrowd being the most complete in terms of offering all forms of business models. Combinations or hybrid forms of crowdfunding are being employed by crowdfunding platforms operating in the durable, sustainable or green area of entrepreneurial ventures, Seeds.

### **2.1.3 crowdfunding platforms**

Having indicated what business models can be employed by crowdfunding platforms and what sectors they crowdfund this chapter will indicate the other differences found between crowdfunding platforms which are: minimum amount of investment for investors, funding range of entrepreneurs, length of crowdfunding period, duration of crowdfunding contract, tariffs on entrepreneurs and investors, screening and risk analyses and AFM licenses. Differences between crowdfunding platforms can indicate the reasons for investor and entrepreneur motivation to participate in one of these crowdfunding platforms. And because crowdfunding platforms differ slightly to large on these characteristics this presents control variables that could explain the preference for certain crowdfunding platforms. Because Seeds is a bank backed up crowdfunding platform and crowdfunding platforms have partnerships with banks, examining the characteristics of the crowdfunding platforms can indicate motives for establishing these platforms (Seeds) or partnering up with crowdfunding platforms. What do these crowdfunding platforms deliver in comparison to other crowdfunding platforms that attracts investors and entrepreneurs, adds additional value to these groups and justifies the creation of and partnering with the above mentioned crowdfunding platforms. Table 8 indicates the differences found between crowdfunding platforms.

#### **2.1.3.1. Minimum amount of investment**

Although the maximum amount of investment is regulated not to exceed 40.000 Euros for individual investors, or an equivalent of 100 projects on crowdfunding sites, the minimum amount needed to invest differs per crowdfunding platforms. AFM (Authority Financial Markets), a Dutch institution that governs and controls behaviour in the financial markets of the Netherlands, has picked this number (<40,000) so that investors are protected against excessive risk. This way the investments of investors are being spread and their overall risk is impeded. With equity crowdfunding this number is lowered to 20.000 because shares are perceived to be a riskier investment than lending. These

rules do not apply to businesses or angel investors who can take on larger amount of investments, although some restrictions also apply with these categories as stated on particular crowdfunding platforms. (Dijsselbloem, personal communication, April 25, 2014; Röthler & Wenzlaff, 2011)

The minimum amount of investments differs between crowdfunding platforms and between crowdfunding business models, as indicated in table 8. Geldoverenweer has the highest threshold in order for investors to participate (2000) followed by leapfunder (1000). The other amounts are much lower ranging between 1-500. The sustainable area of crowdfunding have much lower thresholds for investments than the “regular” entrepreneurial crowdfunding platforms. Oneplanetcrowd, share2start and Seeds all specify 10 euro’s as the minimum investment.

#### ***2.1.3.2. Minimum and maximum amount that entrepreneur can acquire***

Aside from restrictions on investor participation in crowdfunding, crowdfunding platforms also specify the requirements to which entrepreneurs have to oblige. Crowdfunding platforms operate with different amount specifications for projects ranging from minimum amounts only to minimum and maximum amount specified. With this characteristic the different areas of entrepreneurial crowdfunding have to be taken into account. Geldvoorelkaar being a peer to peer lending crowdfunding platforms restricts projects to a much lower amount, 1000-5000. Massa financiering, crowdfunding small and medium sized Dutch firms applies a different set (>25.000) with no specific restriction on the maximum amount that is being lend. According to research of De Buysere et al. (2012) 5 million will remain a threshold because below this point lawmakers will promote crowdfunding instead of restrict its operations (De Buysere et al., 2012). As is indicated in table 8 the crowdfunding platform differ slightly in their usage on minimum and maximum amounts. Some crowdfunding platforms don’t restrict projects based on their funding needs and will individually judge projects for their funding requirements. Other crowdfunding platforms only specify the minimum funding amount needed in order for it to be published on their platform, whereas the last group of crowdfunding platform have clearly stated their range of operations. Crowdfunding platforms can offer entrepreneurs the opportunity to attract more capital than they originally indicated and hoped for. In case the crowdfunding operation goes smoother than expected, and the 100% mark has been reached, than some crowdfunding platforms will allow additional financing. In this way a project can be financed more than initially thought and exceed 100% financed status (Noordam, 2014).

#### ***2.1.3.3. length of crowdfunding period***

The length and duration wherein entrepreneurs have time to contact their network and mobilize friends, family, fans and other investors to fund their project slightly differs. Time allowed to fund projects ranges between 30 days and 120 days. Crowdfunding platforms have also contemplated about projects who fail to attract enough funds (100%), but have reached a certain mark (more than 90% funded). These situations are being dealt with by giving the entrepreneur some extra time (Hemer, 2011; Rossi, 2014; Bakker – Rakowska, 2014).

#### ***2.1.3.4. duration of the contract***

Crowdfunding platforms sometimes specify the contract requirements in terms of minimum and maximum amount of time. Geldvoorelkaar uses a contract ranging between 6 months and 7 years whereas fund me only allows contracts to exist for 5 years. Seeds has one of the highest maximum duration in which a entrepreneur can use a contract (10 years).

#### ***2.1.3.5. tariffs of crowdfunding platform for entrepreneurs***

There are 3 ways in which a crowdfunding platform can generate revenue, 2 of which involve allocating cost to entrepreneurs. Entrepreneurs are mostly borne with the cost of facilitating crowdfunding because allocating costs to investors could discourage them from participating (Belleflamme & Lambert, 2014). First off entrepreneurs must pay an initial fee in order to be allowed to start their crowdfunding project. The initial fee to publish ones projects can have different names but it all comes down to paying for publishment and starting the entrepreneurs crowdfunding project. If the entrepreneur is unable to attract enough funding in the allocated time period, than the crowdfunding period is closed. No other costs will be assigned to the entrepreneur besides the initial fee which will be paid regardless the success or failure of the project (Hui, Gerber & Greenberg, 2012). Only Symbid doesn't seem to employ a initial fee to place a project on their website.

When the crowdfunding period is over and the target amount is collected than the majority of crowdfunding platforms will have a predetermined percentage of the target amount that will be paid to the crowdfunding platform. With crowdfunding platforms that offer different sets of business models (loans, shares, reward ect.) the percentage placed on the target amount will differ according to the crowdfunding model employed (Gerber et al., 2012; Hui et al., 2012; Tomczak & Brem, 2013). This percentage fluctuates between 2% -7% in the sample of this research. Research of Gerber et al. (2011) states that percentage range between 4-5%, mostly in line with findings in table 8.

Lastly, some crowdfunding platforms issue a further percentage charge for the duration of the contract. Example: If a project funds its financial requirement by means of a loan for a duration of 6 years than a percentage of 1% will be charged, one time only, on the target amount acquired. This percentage mark is added to the percentage mark already mentioned above.

#### ***2.1.3.6. tariffs of crowdfunding platforms for investors***

Not all crowdfunding platforms charge their investors for investments made on the crowdfunding platform, like wekomenerwel, leapfunder and doorgaan.nl. The other crowdfunding platforms charge their investors very much alike. Most seen, as presented in table 8, is a percentage of 0,9% that is withheld from the benefits later on acquired by the investors. Alternatively the cost of operating ideal or transferring funds from investors to entrepreneurs are charged to investors. The percentage is low, because a higher percentage might discourage investors from participating (Belleflamme & Lambert, 2014).

#### ***2.1.3.7 Risk analyses***

Risk analyses can be offered by the crowdfunding platform although many crowdfunding platform use the "crowd" argument i.e. the crowd must decide and judge for themselves if a project is viable (Hemer, 2011; Belleflamme & Lambert, 2014). A example of risk analyses is risk analyses employed by crowdfunding platform geldvoorelkaar, see table 5 & 6. This risk rating helps investors to differentiate between project risk levels. Projects are grouped in 6 categories and revolves around relief capacity, the amount of money that entrepreneurs can enough money to reduce their loan. This is calculated according to the information provided by the entrepreneur at the start of the crowdfunding campaign. **Example:** entrepreneur borrows 20,000 and repayment and interest per month are 100. Because of his lifestyle the entrepreneur can only use 1,000 per month for interest and loan (re)payment. His relief capacity is  $(100/1,000)=10\%$

The six categories: defensive, cautious, offensive, speculative, very speculative and very speculative (with no relief capacity know) indicate the amount of risk involved with investing in projects. Defensive being a more safe/reliable investment whereas speculative indicates high risk levels but also probably higher interest rates or rewards. Furthermore geldvoorelkaar, and other crowdfunding platforms, use Graydon rating which indicates the probability of default (non payment)with borrowers. Geldvoorelkaar doesn't publish projects that receive a Graydon rating of CCC or lower. Graydon rating are established according to probability of default caused by: age, size of company, legal entity form, financial ratios, actual paying behaviour and possible defaults found in licensed companies.

PD rating	PD range	Categories risk analyses
AAA	0.00%-0.15%	1.defensive: < 30%
AA	0.16%-0.30%	2.cautious: < 50%
A	0.31%-0.62%	3.offensive: <70%
BBB	0.63%-1.24%	4.speculative: <85%
BB	1.25%-2.49%	5.very speculative: < 100%
B	2.50%-4.99%	5s.very speculative: relief capacity unknown
CCC	5.00%-9.99%	
CC	10.00%-19.99%	
C	>20%	
D	Insolvent	

Table 5 & 6 risk analyses

### 2.1.3.8. AFM licenses

AFM (Authority Financial Market) is a Dutch institution that regulates and monitors the behaviour on the financial markets. Because crowdfunding platforms represent a financial intermediary, consulting and providing investors and entrepreneurs the opportunity to invest and fund projects ,they will have to conform to certain types of laws. These laws are not specifically meant or constructed for crowdfunding platforms, but instead apply to all participants on the financial market that have a consultancy nature. Which specific laws (wft, laws of financial control) apply will depend on the business model, type of crowdfunding, employed. Furthermore different laws will apply if crowdfunding platforms deal with individuals and/or businesses. (Dijsselbloem, personal communications, April 12, 2014; AFM, 2013; Noordam, 2014). Table 7 indicates Dutch financial laws that can apply to crowdfunding depending on the scheme employed.

2:55 Wft	Provision of investment objects
2:60 Wft	Offering credit in the form of loans or obligations.
2:65 FSA	Offering units in an investment scheme, in the case of the holding business model, where a investment fund is established and rights/shares are being offered.
2:80 Wft	A financial service provider permit, if they interact with individuals on their crowdfunding platform. Primarily focused on safeguarding borrowers. For the intermediary role that crowdfunding platforms have.
2:96 Wft	Providing investment services or performing investment activities if crowdfunding platforms have a obligation or shares based crowdfunding model. This permit, and regulations implied, primary role is to protect the role that investors play in crowdfunding.
4:3 Wft	Crowdfunding platforms will have to obtain an exemption (intermediary of collectable funds) if they deal with consultancy of businesses. No additional mandatory's can be placed on crowdfunding platforms that have this exemption. This in contrary to the aforementioned wft 2.96 and 2.80.
5:2 Wft	Transparency to be provided, in the form of a approved prospectus by the AFM, in case of the offering of effects

Table 7: Laws applying to crowdfunding (AFM, 2013; Dijsselbloem, personal communications, April 12, 2014; Doorman, 2014)

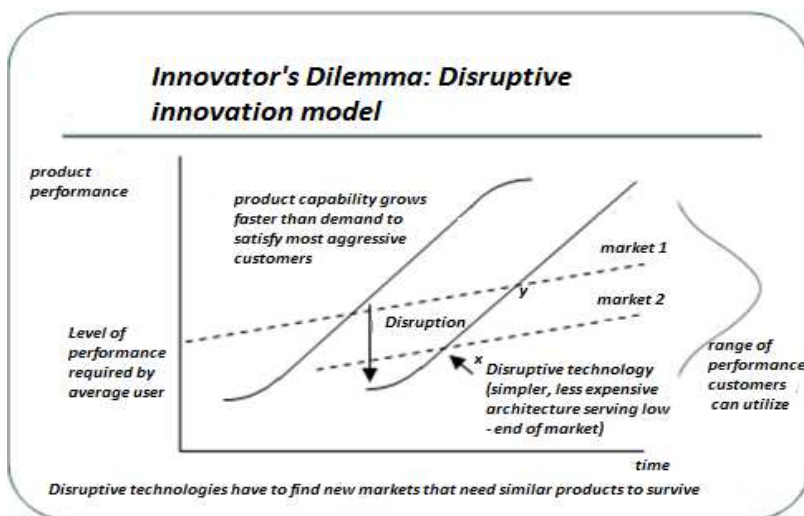
Crowdfunding platforms in NL	Type	Min. Investment	Amount	Crowdfunding period	Duration contract	Funded Projects	Tarifs entrepreneurs Initial fee	Tarifs entrepreneurs Success fee	Tarifs investors
<b>Entrepreneurial</b>									
Geldvoorelkaar	Loans	100	1,000-5,000	120	6 months – 7 year	410	Private: 125 business: 349	1,25% +0,95% (duration)	0,9%
Kapitaalopmaat	Loans	100	25,000-2,500,000	100	-	18	249	3,25%	0,9%
TheDutchDeal	Loans	25	>5,000		-	6	250	2%	0,9%
Fundme	Loans	150	>750	120 days	6 months – 60 months	-	250	3,75%	0,9%
Onderlingkrediet	Loans	250	>10,000	90	12 - 60	1	250	3,5%	0,9%
Geldoverenweer.nl	Loans	2000		3-6 months	60 months	1	27,50 – 3months 45,00 – 6 months 65,00- 1 year		60,00
massaфинanciering	Loans	100	25,000	120	-	3	499	3%	0,8%
Collin crowdfund	Loans	500	50,000-2,500,000	29	-	6	800	2,5%	(0,85%) Min 10\$
Symbid	shares	20	20,000-2,500,000	-	-	49		5%	(2,5%) 20-5000 >5000 (1%)
Leapfunder	shares	1000	-	-	-	12	-		-
Doorgaan.nl	reward	1		30-60	-	11	150	3%	none
Crowdaboutnow	Loans, shares, donations and reward	10	5,000-100,000	-	-	70	Loans: 1% (minimum 250) Donations: (1%) (minimum 250) Equity: 1% (minimum 500)	Loans: 2% Donation:5% Equity:7%	0,77
Viviad	Loans, shares and current account	-	>750	160	-		150	3,5%	0,9%
WeKomenErWel	Loans and shares	250	>25,000	3- 6 months	-	>7	300	4%	-
<b>Sustainable</b>									
Oneplanetcrowd	Loans, shares, reward and donations	1-10.000	1,000-1,000,000	30 - 90 days	-	56	200	7%	0,90
Share2start	<del>Loans, donation and reward</del>	<del>25</del> Donations: 10\$		-	-	14	100	<del>Donations:3%</del> Loans:5%	1,50
Seeds	<del>Combination Financial and reward</del>	10	20,000-150,000	<del>10 weeks voting</del> 10 weeks crowdfunding	Max. 10 years	7	300	5%	0,45

## 2.2. Study 1: Disruptive technology

If crowdfunding represents a disruptive technology for banks and other traditional funding methods will be analyzed in this outline. Theory about disruptive technology will be presented and parallels with crowdfunding will be indicated, most importantly for small and medium sized businesses and start up venture financing. Lastly this sector will conclude with solutions for firms facing disruptive technology and the course of actions they can follow.

### 2.2.1. Disruptive technology: main theory

Disruptive technology or innovation, first coined in the article: the innovators dilemma: When new technologies cause great firms to fail by Christensen (1997), are technologies or innovations that: “create substantial growth by offering a new performance trajectory that, even if initially inferior to the performance of existing technologies, has the potential to become markedly superior” (Johnson, Scholes & Whittington, 2010, p. 309). According to Christensen (1997) the technology that disrupts the mainstream technology initially performs worse than the original technology for the mainstream and larger customers base of this technology (Christensen, 1997; Yu & Chieh Hang, 2009; Tellis, 2006). Because the disruptive technology has a value proposition that isn’t valued by the customer base of the current technology, the disruptive technology grows in a niche of the market where customers value the performance that the technology holds (Christensen, 1997; US economic outlook, 2013; Paap & Katz, 2004). This niche can be found either at the low end of the market of the established technology or is an entirely new market outside the market of the current technology (Yu & Chieh Hang, 2009; Christensen & Raynor, 2003). Figure 4 shows the disruptive technology compared to the main technology where the disruptive technology can serve market 2 (the niche)



better than the mainstream technology because of certain aspects i.e. simpler, less expensive, better suited or smaller. Tellis (2006) argues that findings in the field, reality, indicate that technologies can have values different that the four above mentioned by the research of Christensen (1997). The dotted lines represent the two different markets (market 1 and market 2) and their respective performance

figure 4: Innovator's dilemma requirement, the performance that customers can absorb or fully use (Christensen, 1997; Christensen & Raynor, 2013). The straight lines are the two technologies i.e. the main and disruptive. The performance of the main technology is better than the disruptive technology in performance terms because the main technology, over time, innovates their products to serve their most demanding customers i.e. the high end of the market where high margins of profits can be placed on services or products. The main technology is better in terms of product performance or capabilities than the disruptive technology because the disruptive technology introduces products that target the low end market customers that perceive the products more suited, convenient, simpler or cheaper at performance point x, disrupting the main technology.

Eventually the disruptive technology will venture into market 1 and will have a performance and value proposition that will satisfy the main customer base at performance point y, diluting or completely replacing the main technology (Christensen, 1997; Christensen & Raynor, 2013). The new technology has a value proposition that is attractive to the bottom end customers that are either underserved by the mainstream technology, are more price sensitive or have a value proposition in line with the performance offered by the disruptive technology i.e. the technology is cheaper, simpler, smaller or more suited (US economic outlook, 2013; Christensen, 1997; Tellis, 2006; Yu & Chieh Hang, 2009).

Large incumbent firms are reluctant to invest in the new technology because it isn't strategically wise to venture into this new technology that isn't valued by their customer base. Without these counter actions the disruptive technology can grow fast and undisturbed in the niche market (Robb & Robinson, 2013; Mollick, 2013; Tellis, 2006; Christensen, 1997) The new technology will grow fast in volume and will eventually venture into the main market when the performance of the technology and the products and services provided become attractive to the larger customer base. The new technology then surpasses the old technology, making it obsolete (Christensen, 1997; Yu & Chieh Hang, 2009).

### 2.2.2. crowdfunding as a disruptive technology

Crowdfunding is argued to represent a funding method that is a addition to as well as replacement of traditional funding methods, like funding from 4F (founders, family, friends and fools), bank loans, business angels, venture capitalist and grants from government (Tomczak & Brem, 2013; Schwienbacher & Larralde, 2010; Belleflamme et al., 2013; Hemer, 2011; Mollick, 2013). Research and academics state that crowdfunding is (and could be) especially important in funding seed capital for start up ventures and providing funds for small and medium sized businesses i.e. the bottom of the funding market (Rossi, 2014; Mollick, 2013; Belleflamme et al., 2013; US economic outlook,

2013). And in so could represents a disruptive technology for traditional funding methods (US economic outlook, 2013). Start up ventures require numerous capital injections in order to start their business and escape the "valley of death", as indicated in figure 5. The valley of death entails the area in which firms have the highest probability to fail before a steady revenue stream has been established (Tomczak & Brem, 2013; Rossi, 2014). Figure 5 indicates the numerous funding methods that are

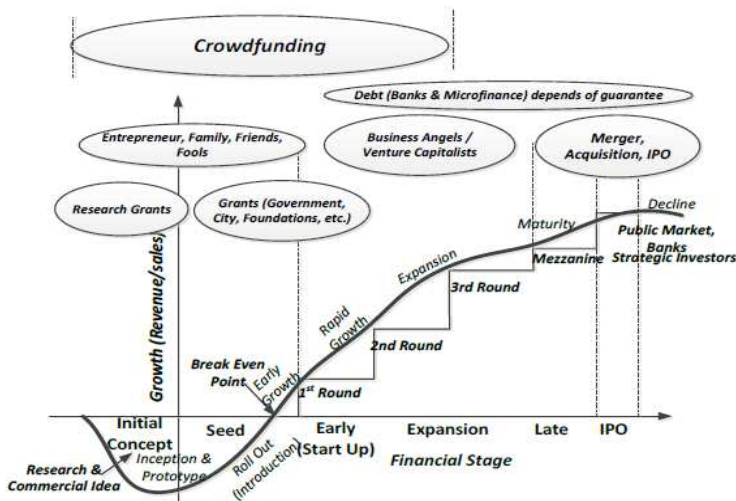


figure 5: Valley of death

present in order to fund the start up venture and the period (initial concept, seed, early, expansion, late, IPO) in which it is most prevalent. The 4F represents the capital that the entrepreneur, family, friends and eventual foolish investors or fans of the idea bring into the business and is, according to research of Bygrave, Hay, Ng & Reynolds (2003), the main source of funding for start up ventures in the beginning phase. However research of Robb & Robinson (2013) found that 80-90% of new US firms used external financing as their main source of funding, rejecting the conclusion drawn by research of Bygrave, Hay, Ng & Reynolds (2003). This

would alter figure 5 in shifting the debt (banks and microfinance) more to the left of the financial stage. This doesn't alter the implications that crowdfunding has for the established ways of funding ventures. Since the credit crisis, banks are more hesitant to fund start up ventures & small businesses and have created more regulations that apply to small business compared to large businesses (Belleflamme & Lambert, 2014; Rossi, 2014). New start up ventures are unattractive to banks because first off all small loans are costly to set up and maintain, from a banks point of view, compared to larger more profitable bank loans (Strahan & Weston, 1998). Secondly, since the credit crisis banks are more regulated, monitored and prohibited from engaging in risky transactions and are required to have higher levels of money internally to safeguard them from unforeseen contingencies (Hellwig, 2010; Friedman, 2014). Banks are more hesitant to involve themselves in financing risky start ups or small and medium sized ventures that are unable or have trouble in indicating their business value to banks (Golić, 2014; Belleflamme et al., 2013; Mollick, 2013).

### ***2.2.2.1. facts and figures: crowdfunding and banks***

According to research by CBS (central bureau of statistics) of the Netherlands, SMB are having trouble in acquiring bank loans and have indicated that they perceive banks increasingly reluctant to finance their sector. Small and medium sized businesses in the Netherlands are defined, by the European commission (2005), as firms that have less than 250 employees working at their businesses. Furthermore they are specified to have less or equal to 50 million annual revenue and 43 million on their balance sheet. There are broadly three categories within MKB, midden en klein bedrijf, (Dutch phrasing for SMB): micro, small and medium large which each have their ranges of employees employed, annual revenue and total amount specified on the balance sheet (European Commission, 2005). The statistics of the CBS indicate that banks loans are an important type of funding for the sector (94%). Of the businesses which applied for bank loans in 2010 (94%) only 64% where able to get a bank loan whereas in 2007 this number was significantly higher (84%). Banks are increasingly declining requests of businesses for bank loans. Furthermore entrepreneurs indicate that they feel that the effort in getting a bank loan has increased and the willingness of banks have decreased in providing a bank loan (between 2007-2010). Lack of capital and collateral are reasons, indicated by the entrepreneurs, for the above mentioned. (Central bureau of statistics, 2011). The hesitance of banks is only observed for small and medium sized where respectively 52% and 28% of request for loans are denied compared to only 6% for large firms (Minister of Economic Affairs Henk Kamp, personal communication, 21 November, 2013)

These facts are in line with the numbers provided by De Nederlandsche Bank (Dutch central bank) for last year's quartile growth of bank loan which are negative. All three categories of bank loans (<250,000; 250,000-1,000,000; >1,000,000) have declined respectively -1.6%, -0.6%, -0.9% and the total of bank loans declined with -0.9% (see table 9). The small bank loans face the sharpest decline, between 2010-2012 this category had a negative growth of 14% whereas the total volume of bank loans declined with 4% (Hebbink, Kruidhof & Slingenberg, 2014; De Nederlandsche Bank, 2014).

In contrast, crowdfunding as a funding method is growing extremely fast according to research by Douw & Koren (2014), a crowdfunding consultancy. The market in the Netherlands for crowdfunding has grown from a mere 2.5 million in 2011 to 63 million (2014). The category within crowdfunding that receives the most spending are ventures who comprise approx. 86% of total crowdfunding, see table 9 (Douw & Koren, 2014).



Bank loans (in billions)	2013Q4	Growth				
Bank Loans (Total)	143 billion	-0.9%	<b>Crowdfunding (in millions)</b>	2012	2013 (growth)	2014 (growth)
Bank Loans <250,000	15 billion	-1.6%	Total	14	32 (229%)	63 (197%)
Bank Loans 250,000-1,000,000	35 billion	-0.6%	entrepreneurial	4.1	27.8 (678%)	51.1 (183%)
Bank Loans >1,000,000	93 billion	-0.9%				

Table 9: Growth of bank loans and crowdfunding (Douw & Koren, 2013; De Nederlandsche bank, 2014)

Although crowdfunding in 2013 represent only 0.0002% of total bank loans and 0.002% of bank loans up to 250,000, the growth in the sector is astounding and represents an ideal way in which start up ventures who require seed capital and small and medium sized ventures who are denied a bank loan can fill the gap of funding left by the withdrawal and hesitance of the banks and other funding methods that are inadequate to wholly fund the undertakings, 4F, angel investors ect. (See figure 5) (Tomczak & Brem, 2013; Belleflamme et al., 2013; Mollick, 2013; De Buysere et al., 2012).

#### **2.2.2.2. Attractiveness of crowdfunding**

Crowdfunding is funding the gap between funds provided by the 4F and the more professional funding like bank loans, business angels or venture capitalist i.e. the bottom end market of businesses (initial stage of start up ventures and small and medium sized businesses) (Tomczak & Brem, 2013; Belleflamme et al., 2013; Mollick, 2013; De Buysere et al., 2012). Crowdfunding is, of this moment, an unattractive funding method to provide funds to the later stages of start up ventures and funding of medium – large firms. According to research of Hemer (2011) crowdfunding the later stages of start up ventures is best left to funding methods like private equity because of the larger amounts of money that needs to be funded and the few examples found in the field of successful later stage funding (Hemer, 2011). Using crowdfunding is unattractive to these medium -large businesses because, again, of the large amounts of money involved, the extent to which banks can tailor their financial portfolio and the more complex assortment of financial products in their disposal (US economic outlook, 2013).

What makes crowdfunding attractive to the bottom end of the business market is first off all the hesitance and reluctance of bank (and other funding methods) in providing funding, leaving the bottom end market underserved (Golić, 2014; Belleflamme et al., 2011; Belleflamme et al., 2013; Mollick, 2013). Crowdfunding deals with small amounts of investments made by many investors and hence the loss in terms of money provided is low for investors whereas a bank is possibly the sole investor or a major investor of projects. The risk of failure is spread (diluted) over a larger group of investors in the case of crowdfunding (Schwienbacher & Larralde, 2010; Rossi, 2014; Belleflamme & Lambert, 2014). Second, crowdfunding is much simpler and cheaper than bank loans because the business, as of now, is not heavily regulated (in contrast to banks which have to apply to more regulations) and the internet is being used to contact and facilitate transactions between money providers and lenders without the use of a physical location (and the costs involved). Furthermore only one financial product is being offered, loan or funding capital (a simpler value propositions), whereas banks have a larger range of financial products like credit cards, mortgages, loans, insurances, mutual funds ect. (US economic Outlook, 2013; Mishra & Koren, 2011) Having a simple value proposition, no physical location, a regulatory vacuum and using the internet as a platform and network to facilitate transactions cuts cost and keeps operating expenses low (US economic outlook,

2013; De Buysere et al., 2012). Furthermore crowdfunding has elements that distinguish itself and which make it more preferable than other funding methods i.e. diminished geographical proximity, “wisdom of the crowd” argument, retaining management control, market test/ marketing and value creation (Agrawal et al., 2011; Golić, 2014; De Buysere et al., 2012; Schwienbacher & Larralde, 2010).

Crowdfunding, using the internet, can reach a huge number of potential investors for projects and isn’t bound by geographical barriers. Research of Agrawal et al. (2011) indicated that the geographical proximity of the project and investors isn’t linked, projects displayed on the crowdfunding platforms are not just being funded by investors that are located in a close proximity to the project but are funded by investors over longer distances (Agrawal et al., 2011). Because of the internet a large number of diverse investors each with different expertise and skills located in different places are being reached which can benefit businesses i.e. wisdom of the crowd, feedback, product recommendations (Agrawal et al., 2011; Rossi, 2014). Wisdom of the crowd means that the large group of investors have their own ideas, expertise and skills and are able to solve problems faced by the businesses being funded, because they are diverse (have multiple views on problems) and aggregate their combined knowledge. This can make the crowd more effective and efficient than the individuals of the company (Hemer, 2011; Rossi, 2014; Schwienbacher & Larralde, 2010). Furthermore crowdfunding certain projects indicates a demand from the general public for products and services (market research), which are in some instances co created by the investors who provide feedback and product recommendations and become customers after the crowdfunding period. A successful crowdfunding thus lowers the cost and the time for companies in creating products because investors (who latter on become customers) indicate their preferences (Mollick, 2013; Rossi, 2014; Hemer, 2011). Because investors are possible customers they will market the crowdfunding project because they want other people to get involved and participate (they use their social network), so that the project may succeed. Crowdfunding thus becomes a marketing tool because investors highlight the project they are funding, capturing the attention of potential investors, customers, suppliers ect. (Rossi, 2014; Mollick, 2013; Hemer, 2011). In contrast to other funding methods the project initiator can determine the amount of control that he wishes to sacrifice in order to fund his undertaking. Management control can be retained in the case of crowdfunding (except for certain types of crowdfunding i.e. equity) and could be a (extra) reason why project initiators use crowdfunding instead of other funding methods (Lasrado, 2013; Schwienbacher & Larralde, 2010). Table 10 list the several attributes of crowdfunding that could be and are attractive to customers of the niche i.e. start up ventures and small and medium sized ventures.

<b>Attractiveness of crowdfunding to customers in niche</b>
Underserved and underfinanced
Simpler and cheaper than other funding methods
Wisdom of the crowd argument
Co creation of value
Marketing tool
Retain management control

Table 10: Attractiveness of crowdfunding to bottom end of market i.e. start up ventures and SMB

### ***2.2.2.3. Disruptiveness of crowdfunding***

Crowdfunding, as of now, has complied only to a few aspects of disruptive technology, described above. It has grown rapidly but still only makes up a very small percentage of bank loans. Furthermore banks have done little in adapting to or countering crowdfunding, because of their

customer base and the perceived notion that crowdfunding will not disrupt their businesses. See table 11 for disruptive technology characteristics of crowdfunding.

Disruptive characteristics of crowdfunding	
Disruptive technology underperforms dominant technology i.e. unattractive to main customer base	Preferred customers of banks are large firms who prefer large loans, range of financial products and financial portfolio tailored to their needs
Attractive to customers in a niche because of certain aspects: simpler, cheaper, smaller or more suited to their needs	Crowdfunding serves the bottom end market compromising start up ventures and small and medium sized businesses because they are simpler and cheaper. Crowdfunding is simpler, cheaper and more suited to this market because of the absence of regulation, absence of physical location, use of internet ect.
Rapidly growing	Rapidly growing, growth of 460% and 128% between 2012-2014
Reluctance of large incumbents to address new technology	Only sporadic attempts by banks across the globe in adopting the new technology.
Venture into main market	-
New technology becomes main technology	-

Table 11: Disruptive technology characteristics of crowdfunding (Tellis, 2006; Us economic outlook, 2013; Christensen, 1997)

Whether crowdfunding is a disruptive technology or can become a disruptive technology is up to discussion and debate. First off researchers have argued that the concept of disruptive technology, introduced by Christensen (1997), has ambiguity in definitions applied, remains vague and has little predictive value in determining whether a disruptive technology is disruptive (Tellis, 2006; Danneels, 2004). Only when the disruptive technology has ventured into the main market and performs better on all dimensions then the main technology, only then can the technology be labelled as disruptive (Tellis, 2006). Although crowdfunding has disruptive technology elements, serving a niche market, being cheaper and simpler than bank loans or other funding methods and rapidly growing, it is only a small percentage of the main source of funding (bank loans) as was illustrated in table 9 (only 0.0002% of total bank loans). The question will be if crowdfunding is able to legally and economically serve the main market and perform better on the performance dimensions then the main technology. Whether crowdfunding thus constitutes a disruptive technology is questionable. Zalm, director of ABN AMRO indicated in an interview that: "Crowdfunding, as an alternative funding method, will not replace banking" (Elsevier, personal communication, 25 Nov 2013). Christensen himself indicates, and has crowd funded himself (indirectly through one of his investment companies), that crowdfunding has the potential to become a disruptive technology. The next two outlines are taken from an interview in Fortune magazine: "I do think it can be disruptive (depends on the business model, and the target market)" and "I would say that for now the areas where it has the most opportunity to disrupt is by taking root in these underserved areas that traditional financiers have traditionally found unattractive. This is a classic entry point for disruption – expand participation in the market by lowering cost at the low end of the market, where incumbents don't see profit opportunities. Later, as the platforms gain scale, then they may start to add scope, or may start to add later – stage funding opportunities. That's likely where all of this goes next" (Fortune, personal communication, June 13 2012).

Whether crowdfunding is a disruptive technology will have its implications for incumbents but not necessarily because:

(1) Disruptive technologies don't always capture the entire market and thus don't replace all the main businesses who employ the main technology. Although the disruptive technology changes the market it will not replace the main technology completely. Usually the upper end of the market remains in hands of incumbent firm(s) who can survive by serving the non price sensitive customers who demand the services of the main technology (Yu & Chieh Hang, 2009)

(2) The main technology, although crossed by the disruptive technology in performance, can later on re cross the disruptive technology and regain the notion of main technology if incumbent businesses of the main technology alter and improve their technologies to better suit customers. This means that disruptive technologies are disrupted by the main technologies (Yu & Chieh Hang, 2009; Tellis, 2006).

### **2.2.3. Innovator solutions**

If a new technology is disruptive, then the innovator dilemma arises because big firms have to opt whether to ignore and carry on with their core business or pay attention and resources to the new technology (crowdfunding) and make it part of their operation (Christensen, 1997; US economic outlook, 2013; Tellis, 2006). Big, large incumbent firms have been argued to be unable to initiate radical innovations or adapt to disruptive new technologies because of their largeness, the established networks that they have and the inability or reluctance to cannibalize existing assets or customers in order to address the new technology (Tellis, 2006; Yu & Chieh Hang, 2009; Johnson et al., 2011). Research of Tellis however indicates that large firms are the introducers of more than half of the new technologies and visionary leadership is the characteristic that determines the adaptability of companies in addressing disruptive technologies (Tellis, 2006; Tidd & Bessant, 2009). Visionary leadership is the ability of leaders in persuading and indicating their vision to the company in regards to the long term future of (emerging) mass markets, their perception on the perceived gap between their performance and the actual desired performance by customers (Tellis, 2006; Daft, Murphy & Willmott, 2010). Firms that succeed in thriving on disruptive technologies or countering them are focusing on what lies ahead, what customers will value in the future instead of what they are valuing now (Tellis, 2006; Christensen & Raynor, 2013; Daft et al., 2010). The inability to react to disruptive technologies comes from the inability of leaders to change or overcome barriers of resistance found in the internal structure (resources, processes, values) of large incumbent firms (Tellis, 2006; Christensen & Raynor, 2013; Tidd & Bessant, 2009; daft et al., 2010). Companies can differ in how they react to disruptive technology and how they implement the innovation needed to deliver the same products or services as the disruptive technology in their companies structure (Charitou & Markides, 2003; Burgelman, 1984). So companies may differ in:

- How they react to disruptive technologies (Charitou & Markides, 2003)
- How they implement the disruptive technologies or generate innovations inside their companies (Burgelman, 1984)

#### **2.2.3.1. Reactions towards disruptive technologies**

Research of Charitou & Markides (2003) has created a matrix indicating the possible actions of large incumbent firms to disruptive technologies based on two variables: the ability to respond and the motivation to respond, see table 12.

	<b>Motivation to respond</b>	<b>Ability to respond</b>
1.Focus on and invest in the traditional business	<b>Low</b>	Low /high
2.Ignore the innovation – it's not your business	<b>Low</b>	High
3.attack back – disrupt the disruption	<b>High</b>	Low /high
4.adopt the innovation by playing both games at once	<b>High</b>	High
5.embrace the innovation completely and scale it up	<b>High</b>	Low

Table 12: 5 responses to disruptive technology (Charitou & Markides, 2003).

The 5 reactions that firms have at their disposal, and that are observed, are determined by the ability to respond and the motivation to respond, with motivation to respond being the most important variable of the two. If this motivation is low than now matter how high their ability to respond might be the company shouldn't follow or adapt to the disruptive technology because the will to adapt or imitate the disruptive technology is low or absent. A company within an industry that faces disruptive technology should focus on its own business or ignore the innovation if their motivation to respond is low. If the motivation to respond is high than the company should attack back and disrupt the innovation (ability low), adopt the innovation by playing both games (ability high) or embrace the innovation completely (ability low) (Charitou & Markides, 2003). Key elements in both variables that indicate the motivation to respond and ability to respond are listen in table 13.

<b>Motivation to respond</b>	<b>Ability to respond</b>
Strategically relatedness to existing business	Nature and degree of conflict between traditional and new business
Growth of innovation	Portfolio of skills
Amount of threat to existing business	Resources & time

Table 13: elements with the two variables: motivation and ability to respond (Charitou & Markides, 2003)

The first listed elements in table 13 for both variables are the most important elements of both variables indicating the motivation and ability to respond. The motivation to respond is linked to the strategically relatedness to existing business, if this is high than the motivation to respond will be high because the disruptive technology will be a threat to the firm (Charitou & Markides, 2003). Same applies to the nature and degree of conflict between traditional and new businesses, if this is high than the ability to respond will be low (Charitou & Markides, 2003). Furthermore the growth of the innovation and the amount of threat to existing business are important factors in how motivated firms will be to respond to the disruptive technology (the factors described are linked in that a steep growth in the disruptive technology will represent a higher amount of potential threat, especially if the innovation is strategically related). In the case of the ability to respond the portfolio of skills and resources and time are factors that determine the degree of ability to respond. If the company lacks resources or the time to pursue the disruptive technology than it will have to forsake other activities (to make time for the disruption) or acquire resources to pursue the disruptive technology. Furthermore if the company lacks the skills to acquire resources and how to handle these to imitate the disruptive technology than the company is ill prepared for the disruptive technology (Charitou & Markides, 2003).

The motivation and ability to respond are also linked to the (visionary) leadership of the company because he can motivate why the disruptive technology is a threat and has the portfolio of skills to ease the degree of conflict between the traditional and new business. The 5 main reactions to disruptive technology are:

(1) Focus on and invest in the traditional business

A disruptive technology or strategy doesn't necessarily have to take over the main market of established businesses or eradicate the competitive advantage that major companies have in their market. A disruptive technology can grow large and take over a certain percentage of a market but doesn't replace the normal way of businesses. An incumbent in the industry thus, realizing that the technology or strategy will not replace its core business but merely be a new player in the market serving a niche, will focus on its core business and make it more attractive to its customers. The response of the incumbents is focused on what it does best and shields it from the introduction of the disruptive technology. The business focuses on its core competence and leaves the niche market to the disruptive player, if the market is felt unable or unprofitable to serve (Charitou & Markides, 2003; Yu Chieh Hang, 2009; Tellis, 2006; Tidd & Bessant, 2009; )

(2) Ignore the innovation – it's not your business

A disruptive technology might seem to be in the same industry but because of the different value proposition, skills and tasks involved or customers focused upon has created a new market. Following or adapting the new technology or strategy might harm the incumbent because it is not their market under attack. They are basically devoting resources to a market wherein their core business doesn't lie. This is the distinction with response 1. In response 1 the new technology is a threat to the normal ways of business, although it doesn't have to replace it completely it will take a percentage of the market and hence the companies will try to shield their operations. In response 2 the incumbents acknowledge that the new technology or strategy has created a new market different from their market which doesn't directly compete with them, it's of no or lesser threat (Charitou & Markides, 2003; Christensen & Raynor, 2013; Tellis, 2006).

(3) Attack back – disrupt the disruption

Involves disrupting the disrupter. The new technology and strategies have values that compete with the established values of the incumbent firms. Whereas the large incumbent offers service and quality, the new technology focuses on cost and convenience. To disrupt the new technology a new strategy or technology could be introduced that adopts a policy that attacks the new value proposition. For example: Ryan air emphasized low cost transportation, no frills flights instead of full service carriers of established players in the airline industry which had more service to customers. The reactions of British airways was to disrupt the innovation of Ryan air by focusing on new values like comfort and luxury in their flights (Charitou & Markides, 2003; Noordhof, 2005; Boddy, 2011)

(4) Adopt the innovation by playing both games at once

the disruptive innovation can be adopted if the company feels that the innovation is there to stay and that adapting now is in the best interest of the company in the long run. Now companies have to decide how to play two games simultaneously without harming their established customers (Charitou & Markides, 2003). Research of Charitou & Markides (2003) states that companies included in their research had two different ways of doing this i.e. establishing a separate business unit from the actual organization with high degree of autonomy while being linked to services (back office ) of the organization or establishing the business in the existing organization structures and divisions.

How the business unit should be implemented or structured inside or outside of the business is depended on the relatedness of technology and market considered to the business, the strategic importance, the amount of control that the company wants to retain and the amount of resources, capabilities and competences required and their relatedness (Charitou & Markides, 2003; Tidd & Bessant, 2009; Burgelman, 1984). Figure 6 illustrates the 4 possible actions i.e. internal, corporate venture, joint venture or acquisition (Tidd & Bessant, 2009; Burgelman, 1984).

#### (5) Embrace the innovation completely and scale it up

Last option is abandoning the normal way of doing business and embracing the disruptive innovation, making it their own, and scaling it up establishing a potential new mass market (Charitou & Markides, 2003).

#### **2.2.3.2. Implementing the innovation in the company**

If a company decides on actively engaging the disruptive technology i.e. attack back, adopt the or embrace the innovation than the way in which this technology or strategy is implemented inside the company can differ according to the relatedness of the technology and the market of the innovation being pursued as well as other factors, see figure 4 (Burgelman, 1984). 4 ways of implementing or generating innovation within organizations are internal development, corporate venture, joint venture or acquisition.

		TECHNOLOGY		
		Base	Related	Unrelated
MARKET	Base	Internal Development		Joint Venture
	Related	Corporate Venture		
	Unrelated	Joint Venture		Acquisition

Figure 6: Adapted from Burgelman (1984) Managing the internal corporate venturing process, as found in Tidd & Bessant (2009)

#### Internal development

The corporate venture is strategically important and has technology similar to the core technology of the business and serves the same main market of, or related to, the company. Venture is thus structured within the companies division and structures itself (Charitou & Markides, 2003; Tidd & Bessant, 2009; Burgelman, 1984).

#### Corporate venture

Create a venture outside the company because technology or markets are related to the core of the company but has unrelated elements inside i.e. new market or new technology that is unrelated. This action is in line with theory of dual transformation (Gilbert, Eyring & Foster, 2012) and ambidextrous organization (O' Reilly III & Tushman, 2013).

### Joint venture

Two possible explanations according to the theory of Burgelman (1984) for establishing a joint venture. Scenario 1: the market is unrelated but the technology used within this market is the same as that of the company. Scenario 2: the technology is unrelated however the market is the same as that of the company's main operation.

### Acquisition

If both the technology and market are unrelated to the core technology and market of the company, then resources and capabilities have to be acquired by means of acquisition. This should only be done if the company feels that the resources that the business applies or the market that it serves are strategically important (Burgelman, 1984; Johnson et al., 2011).

Banks have ventured into crowdfunding by means of two different actions i.e. creating one's own crowdfunding platform and partnering up with crowdfunding platforms. This could be attributed to the different perceptions on how to take actions faced with crowdfunding and how to implement the new innovation in one's company (even differing benefits expected from crowdfunding could be a reason for different actions). Seeds was created as a daughter company, a crowdfunding platform established in 2013 that deals with sustainable and green entrepreneurial crowdfunding. With Seeds the bank has chosen to adopt the innovation by playing both games at once and Seeds constitutes the corporate venture that is established and structured outside the main company. This is in line with dual transformation theory and ambidextrous organizations. The partnerships that other banks have is in line with theory on joint ventures (Burgelman, 1984)

### ***2.2.3.3. Corporate venture theory: Dual transformation & ambidextrous organizations***

Corporate venture theory is, in this thesis composed of dual transformation and ambidextrous organizations theory.

### Dual transformation

Dual transformation theory is specified specifically for disruptive technology. Dual transformation theory entails two transformations i.e. shield the established ways of business (core competence and capabilities) that it does the best and launch a business of its own, separate from the mother company, that utilizes and mimics the disruptive technology (Gilbert et al., 2012; Kraaijenbrink, Spender & Groen, 2010; Christensen, 2003). In case of the first transformation, businesses should assess which competences and capabilities give them a competitive advantage. The first transformation thus follows the logic of resource based view theory indicating that: "the competitive advantage and superior performance of an organisation is explained by the distinctiveness of its capabilities" (Johnson et al., 2011, p. 83). These resources or capabilities that create sustainable competitive advantages are distinctive and achieve competitive advantage by means of 4 criteria: value, rarity, inimitability and non substitutability (table 14) (Johnson et al., 2010; Kraaijenbrink et al., 2010).



Resource based view VRIN	Definition	Examples
Value	Capabilities are valuable when they (a) neutralize threats and seize opportunities in the environment, (b) deliver products that are valued by customers, (c) have a potential competitive advantage in that competitors don't have these capabilities and the products they produce, (d) and at a cost level that allows for acceptable profit/ return	
Rarity	Capabilities are owned only by a few companies (otherwise it wouldn't be rare).	-patents -brands
Inimitability	Capabilities are difficult to obtain or to imitate because of the way the resources are used and integrated, their complexity and the inability of competitors and the organization itself to discern what caused the competitive advantage (causal ambiguity)	-Competence being embedded in the culture of organization or because of its history -training, motivating, recruitment of employees -linkage of activities, resource, competences in networks
Non substitutability	Capabilities can be substituted by other products and services (e- mail) or by other competences (mechanisation). The value, rarity and inimitability don't matter if capabilities can be easily substituted by other capabilities or competences	-e- mail system substituting postal services - competent craft workers replaced by mechanisation

Table 14: resource based view elements (Johnson et al., 2011; Kraaijenbrink et al., 2010)

The activities that banks display in their value chain are marketing, sales, products and transactions which are backed up and supported by infrastructure, technology and human resource. In the case of banks, risk management is an additional supporting role (Lammers, Loehndorf & Weitzel, 2004). Banks should assess which activities and capabilities are VRIN and hence their core business and shield these competences from the disruptive technology (Johnson et al., 2011; Gilbert et al., 2012; Lammers et al., 2004). The second transformation is launching a separate unit that will learn and acquire knowledge about the disruptive technology, that will ultimately lead to a possible competitive advantage. Firms (including banks) should learn more from the environment than the change happening in, said, environment in order to create and maintain a comparative advantage (Gilbert et al. 2012; Holland, 2010; US Economic outlook, 2013).

### Ambidextrous organizations

Ambidextrous organizations on the other hand are organizations that: "have the ability to simultaneously pursue both incremental and discontinuous innovation from hosting multiple contradictory structures, processes and cultures within the same firm" (Tushman III & O'Reilly, 1996, p. 24). Ambidextrous organizations have two different types of businesses in their firms which have different structures, culture and strategies. The established business is tasked with exploiting the innovations made in the past and making profit, whereas a separate business unit is tasked with exploring in order to generate innovations and possible growth (Tushman III & O'Reilly, 2004; Daft et al., 2010). Table 15 indicates the elements (strategy, task, competencies etc.) found in both businesses.

Alignment of:	Exploitative business	Explorative business
Strategic intent	Cost, profit	Innovation, growth
Critical tasks	Operations, efficiency, incremental innovation	Adaptability, new products, breakthrough innovation
Competencies	Operational	Entrepreneurial
Structure	Formal, mechanistic	Adaptive, loose
Controls, rewards	Margins, productivity	Milestones, growth
Culture	Efficiency, low risk, quality customers	Risk taking, speed, flexibility, experimentation
Leadership roles	Authoritative, top down	Visionary, involved

Table 15: exploitative and explorative business characteristics (Tushman III & O'Reilly, 2004).

Seeds could thus constitute the corporate venture that is established and structured outside the main company that imitates the disruptive technology and learns about the disruptive technology i.e. the second transformation according to Gilbert et al. (2012) or the explorative venture according to Tushman III & O'Reilly (1996) (Charitou & Markides, 2003; Gilbert et al., 2012; Burgelman, 1984; Tushman III & O'Reilly, 1996).

#### **2.2.3.4. Joint venture theory: Partnerships**

The terms joint venture, alliances, networks and partnerships are frequently used synonymous in describing the relations between companies, although the terms have somewhat different meaning and (legal) implications. Some authors furthermore differ in their notion of joint venture, some argue that it is part of a strategic alliances whereas others disagree (Koleva, Thrane & Mouritsen, 2002; Todeva & Knoke, 2005). The definitions applied by research of Daft et al., 2010; Johnson et al., 2011; Koleva et al., 2002; Mohr & Spekman, 1994) are:

**Joint venture:** "creation of a new organization that is formally independent of the parents, although the parents will have some control" (Daft et al., 2010, p. 160). "That serves a limited purpose for its parents, such as R&D or marketing" (Todeva & Knoke, 2005, p. 3).

**Strategic alliances:** "where two or more organizations share resources and activities to pursue a strategy" (Johnson et al., 2011, p. 338).

**Networks:** "A firm's set of relationships, both horizontal and vertical, with other organization – be they suppliers, customers, competitors, or other entities – including relationships across industries and countries" (Koleva, Thrane & Mouritsen, 2002, p.4 ).

**Partnerships:** "purposive strategic relationships between independent firms who share compatible goals, strive for mutual benefits, and acknowledge a high level of mutual interdependence (Mohr & Spekman, 1994, p. 135). For the rest of this research the term partnership will be applied because crowdfunding platforms have partnerships with banks.

As the definitions applied indicate, the terms represent different framing of compatible concepts although with differences in legal issues and duration (Jaeger, 1961). Because this research is only interested in the purpose of the chosen form, and these are almost similar, the rest of this research will use partnerships in describing relationships between companies that pursue a shared goal and share resources between them. The purpose of Strategic alliances, partnerships and joint ventures are: generating knowledge and shared learning, reduce risk and cost of developing products or entering markets, acquire resources and assets that are costly or outside of their businesses or enhance the capabilities in house ect. (Tidd & Bessant, 2009; Todeva & Knoke, 2005; Gulati, Nohria & Zaheer, 2006; Koleva et al., 2002).

In case of uncertainty in a market or technology a partnership is better than internal development or acquisition, because if it turns out to be a failure the costs will be shared and are probably minimal. Furthermore knowledge acquisition and utilization are more efficient in partnerships where products and services can create a first mover advantage and/or where the future is uncertain. If the market or technology however turn out to be a success the partnership could mean that a company has evaded a potential lock out of a certain market, knowledge, customers and technology (Gulati et al., 2006; Johnson et al., 2011; Grant & Baden- Fuller, 2004). This means that it has secured entry or access to these elements by means of a partnership which it established before other competitors could partner up with the company that had access or entry to these elements.

### ***2.2.3.5 Corporate governance theory***

Aside from the reasons described in the theories explaining either corporate ventures (dual transformation & ambidextrous organizations) or joint ventures (partnerships), corporate governance theory could also elaborate why banks have ventured into crowdfunding. Corporate social responsibility indicates why banks, as a funding method, should endeavour into the realm of crowdfunding. Corporate social responsibility is: “the way in which firms seek to voluntarily align the interest of owners and other stakeholders with the long term best interest of society” (Thomson & Conyon, 2012, p.110). If banks launch crowdfunding initiatives of their own they will indicate the credibility of crowdfunding to potential players i.e. entrepreneurs, investors, general public ect. By seeing the involvement of banks in helping crowdfunding or setting up crowdfunding platforms the legitimacy and effectiveness of the funding method is being conveyed. More importantly by venturing into crowdfunding banks will help (indirect or direct) with the funding of start up ventures, green initiatives or other project which are beneficial to society and economy (Thomson & Conyon, 2012; Simpson & Koherns, 2002; Cocheo, 2013). Aside from the benefits to the economy and general public the actions of the banks in helping ventures and green initiatives could lead to a better social image which in terms could lead to a better financial performance. This because funded ventures will become potential future customers once they achieve a steady revenue stream and have escaped the valley of death (previously described), ultimately venturing into later stage financing needs (Tomczak & Brem, 2012; Us economic outlook, 2013; Thomson & Conyon, 2012; Simpson & Koherns, 2002; Cocheo, 2013). Furthermore the general public could perceive banks that venture into crowdfunding to be better than banks that are not and could lead to more customers (saving loans), more investors (for their crowdfunding platform or crowdfunding partners) ect. (Cocheo, 2013) A worse image could also be the result of banks engaging in crowdfunding because they are reluctant to finance start up ventures through bank loans (high risk involved), have left a gap which is being filled by crowdfunding and are then using the new funding method in which they mitigate all risks of project failure to the investors (Us economic Outlook, 2013; Belleflamme et al., 2013)

Corporate governance theories dictate that banks exist because of moral hazard and adverse selection in financing. Adverse selection revolves around the inability of most investors to distinguish a good investment from a bad investment while moral hazard deals with the excessive risk taking of borrowers. Because of these agency problems described with borrowers (moral hazard) and lenders (adverse selection) banks are used to solve these agency problems where asymmetric information exist (Stiglitz & Weiss, 1981; Thomson & Conyon, 2012). These problems also exist with crowdfunding and although some crowdfunding platforms use screening and risk analyses the system isn't fool proof and projects could fail. By engaging in crowdfunding, banks would uphold the roles that banks have traditionally had i.e. providing transactions between borrowers and lenders

and solving agency problems like moral hazard and adverse selection (Thomson & Conyon, 2012; Simpson & Koherns, 2002).

#### **2.2.4. Banks motives**

Summarizing the above this academic paper argues that banks can have 5 main motives to engage in crowdfunding: counter strategy, knowledge acquisition, establishing relationships, corporate social responsibility and a unique value proposition. See table 16.

<b>Motives</b>	<b>Meaning</b>	<b>Theories</b>
Counter strategy	Venture into crowdfunding because it is a threat to existing business	-Charitou & Markides (2003) attack back – disrupt the innovation
Knowledge acquisition	Learn about the (disruptive) technology	-Dual Transformation (Gilbert et al., 2012) -Partnership theories
Establishing relationships	Establish relationships with partners i.e. investors, entrepreneurs, crowdfunding platforms ect. in order to create a value chain or establish important relationships (lock in or lock out of network)	-Partnership theories
Corporate social responsibility	Create a positive social image or because society simply demands this	-Corporate governance theories
Unique value proposition	A niche has been identified where a unique value proposition can satisfy a certain group of customers	- Dual Transformation (Gilbert et al., 2012) -Ambidextrous organization (O'reilly & Tushman III, 1996) -Partnership theories

Table 16: 5 motives for engaging in crowdfunding

The different motives can overlap or interact with each other and are probably pursued with different intensity. Interaction and overlapping occurs when two or more motives are being pursued. For example the company has identified that the technology is a disruptive technology and represents a threat to business, the company will want to undertake actions (counter strategy) by learning about the technology (knowledge acquisition). Furthermore knowledge acquisition can happen by means of establishing relationships with partners. After the company learns about the technology it finds a niche where a unique value proposition can be introduced. Banks by involving themselves in crowdfunding can have multiple motives and the intensity in which they involve themselves in crowdfunding can also differ according to the motive present. A company that only ventures into a market because of its social image will pursue this strategy less rigorously than a company that introduces a unique value proposition or launches a counter strategy. Because of the different reactions observed by banks (and their motives), the benefits that bank involvement in crowdfunding could represent could differ according to the degree of involvement. Hence this paper will analyze the different reactions that banks have displayed in order to derive what differences this delivers to investors and entrepreneurs.

### **2.3. Success factors in crowdfunding**

Having stated the possible motives of banks to venture into crowdfunding this section will indicate the possible contributions that banks can provide to the crowdfunding sector. To indicate what banks can offer to investors and entrepreneurs, the factors that make crowdfunding successful should be listed. This represents the participation of investors and entrepreneurs and the quality of projects

and the platform itself. Attracting investors and entrepreneurs to respectively invest on crowdfunding projects placed and place crowdfunding projects to invest on is the primary goal of crowdfunding platforms. How can banks positively attract investors and entrepreneurs to participate in crowdfunding and balance their mutual needs. Furthermore how can banks enhance the success factors that literature has identified for crowdfunding projects and crowdfunding platforms. 2.3.1. & 2.3.2 will list the participation motives of investors and entrepreneurs. For this thesis the possible motives have been narrowed down to 4 motives for each group (investor – entrepreneur) as depicted in appendix A. The motives, of this thesis, utilize the main and most mentioned motives of the listed motives in the appendix. 2.3.3. & 2.3.4. will indicate the success factors identified for crowdfunding projects and crowdfunding platforms which banks could positively enhance.

### ***2.3.1. Investor motives to engage in crowdfunding***

The four main motives of investors to engage in crowdfunding are (financial) reward, participation in community, supporter of ideas and trust.

#### ***2.3.1.1. (Financial) reward***

(Financial) reward entails all rewards, whether financial or material, obtained by the investors by participating in crowdfunding (Mart Evers, 2012; Gerber & Hui, 2013; Bakker-Rakowska, 2014). In contrast to other investment opportunities, crowdfunding projects can be a worthwhile endeavour for investors because the return on investment could be more than interest obtained on a savings account or other investment opportunities (shares, obligations ect.). Furthermore investors could receive innovative products more earlier than other people (with specific reward models) and this could be a motivation to invest. A negative motive for not engaging in crowdfunding is the substantial delay in reward delivery. After the crowdfunding was successful an agency problem arises because investors and the crowdfunding platforms are not aware how their funds are being utilized and if promises will be uphold (moral hazard) (Belleflamme & Lambert, 2014). Research has indicated that delay in products are frequent in crowdfunding with a mean of 2.4 months delay in delivery of products (Mollick, 2014; Belleflamme & Lambert, 2014).

#### ***2.3.1.2. Participation in community***

Participation in community constitutes all elements of helping others, building networks and being part of a community (Rossi, 2014; Bakker-Rakowska, 2014; Gerber & Hui, 2013).

#### ***2.3.1.3. supporter of ideas***

Supporter of ideas should be seen as a construct that differentiates itself from participation. Whereas participation in community entails the “we” feeling of being part of something bigger and helping others. Supporter of ideas is supporting ideas that are beneficial and have value potential. It is not so much the helping of people or building networks but the actual idea that is important. (Rossi, 2014; Bakker-Rakowska, 2014; Gerber & Hui, 2013).

#### ***2.3.1.4. Trust***

Investors are mostly concerned with the possibility of fraud and the distrust of creators use of funds i.e. agency problems because of the asymmetric information between investors and entrepreneurs (Thomson & Conyon, 2012; Gerber & Hui, 2013; Bakker – Rakowska, 2014). Investors are concerned that entrepreneurs will misuse their funding i.e. fraud. There is still an absence in crowdfunding specific rules in the EU, making fraud in crowdfunding a possibility that could arise ,however crowdfunding platforms have implemented mechanism that reduce information asymmetric and the

possibility of fraud and second fraud is mostly absent in crowdfunding (De Buysere et al., 2012; Bakker – Rakowska, 2014; Belleflamme & Lambert, 2014). Misuse of funds in that entrepreneurs waste precious funds on minor aspects or incompetence is the second deterrent motive for (some) investors. Here it is not so much the case that entrepreneurs con investors but that they waste funds by incompetence, inexperience or overconfidence ect (Belleflamme & Lambert, 2014).

#### ***2.3.1.5. empirical findings in the Netherlands***

National crowdfunding research of 2013 conducted by Van den Akker, Kleverlaan, Koren and Van Vliet (2013) indicates additional positive as well as negative motives for engaging in crowdfunding in the Netherlands that are insightful to review. Positive motives for investor participation in this research were: (perceived) quality of the project and the passion/motivation of and or relation with the entrepreneur in question (see appendix B). Highest listed deterrents were the financial space of the investors (40-41%), not being asked (38%) and no interesting projects available (31%).

Noteworthy variables in this research in relation to bank involvement are the variables “involvement of trustworthy partners with the platform” which received scores of 3.68 placing this 10 on the list. Furthermore the low amount of people who indicated lack of trustworthiness of the financing type (crowdfunding) is notable. 7% for people who considered participating but didn’t and 4% for people who didn’t participate and not even considered this. Lastly, the 13 percent who indicated that it was too much of a hassle are interesting, indicating that the layout of platforms are too troublesome or time consuming for investors and this prevents them from participating in crowdfunding. This large percentage of people who considered to crowdfund but didn’t could be easily solved if resources were spent on making crowdfunding a more pleasant and easy experience.

#### ***2.3.2. Entrepreneur motives***

The four main motives of entrepreneurs are costs, control, trust, crowdfunding opportunities.

##### ***2.3.2.1. Cost***

Cost of capital is argued to be lower for crowdfunding in relation to other funding methods (Bakker – Rakowska, 2014). For entrepreneurs the cost of capital are the costs made by using a crowdfunding platform (initial fee and percentage on target amount), managing the crowdfunding project and the amount of return promised to investors. Cost of capital can be lower than other funding methods because investors across a more wider area (not bound to the local area of the project) are matched with the project who have a willingness to invest in the company. The company doesn’t have to try to mobilize investors located near their project but can also utilize investors that are geographically more distant to the project, possibly easing the cost of capital. These investors furthermore aren’t all attracted by the prospect of a financial return but can also be persuaded to invest in the company by means of a non financial rewards such as being able to receive a innovative product before other costumers, feeling proud to have helped or be part of a project and other non financial rewards. Lastly, the information obtained before, during and after crowdfunding could indicate valuable market information about the demand for products or services being crowd funded (Bakker – Rakowska, 2014; Agrawal, 2013). Negative motive in relation to cost are the time and resource commitment needed to find investors and satisfy their needs and also the number of funders are higher than with other more traditional funding methods (Gerber & Hui, 2013; Bakker – Rakowska, 2014).

#### **2.3.2.2. Control**

Entrepreneurs use crowdfunding because they will maintain more control over their project or venture than is the case with other funding methods (Gerber & Hui, 2013; Golić, 2014). Different types of crowdfunding methods have varying ways of distributing funds (loans, shares, donations ect.). These types of crowdfunding thus have different responsibilities for investors. In the case of shares some control of the entrepreneurs is given to the investors who will have a say in the ways in which the company will be led and decisions are made

#### **2.3.2.3. Trust**

As with investors, entrepreneurs have trust issues related to the new funding method. These trust issues are twofold: fear of failure and fear of disclosure of information. If the crowdfunding project fails than the company has a negative image i.e. entrepreneurs were unable to motivate and attract investors to participate in crowdfunding and this will look negatively if other funding methods (bank loans, angel investors ect.) are afterwards involved. It leaves a negative track record and entrepreneurs don't want to waste the opportunity of getting funds from other funding methods because they were unable to get their funds in a crowdfunding project. Furthermore failure, and with this public embarrassment, will be known because if the crowdfunding project fails than (if the all or nothing model is employed) investors will receive their money back. Because investors foremost include people from the personal social network (since they form the first line of investors) public failure will be known by all your relatives, family and or friends. Fear of public failure thus entails the fear of losing the chance of employing future investors (bad track record) and fear of loss of reputation. Fear of disclosure of information on the other hand is fear that disclosure of information will lead to competitors early on mimicking the innovative products or services being crowd funded. Because crowdfunding deals with more investors than other traditional funding methods (banks, angel investors ect.) there are more persons involved with the project and information must be submitted to these persons in order to persuade them to invest in the crowdfunding projects. This way more people will be made aware of what product is going to be launched and what its features are, leading to an increased change that persons will mimic this or if the crowdfunding project fails ,steal the idea and get it funded (Gerber & Hui, 2013).

#### **2.3.2.4. Crowdfunding opportunities**

crowdfunding opportunities constitute multiple opportunities that can be grouped in three categories i.e. personal, relations and market (research).

##### Personal

(gain approval, expand awareness of work, raise producers profile and improve reputation): This construct is established by combining all the relevant motives of entrepreneurs that are personal i.e. that increase their reputation or makes persons aware of their work.

##### Relations

(The wisdom of the crowd, form connections, participate with audiences, removing geographic barriers): construct of all motives relevant for the connections made by crowdfunding. The investors that invest in the crowdfunding project of the entrepreneurs provide more than just funds and can be located in a wide area (because crowdfunding using the internet can reach more investors). The investors can participate with the entrepreneurs creating a value adding network for the entrepreneur and help solve problems faced by the company (wisdom of the crowd).

### Market research

(test for potential market, more information, good marketing test feedback, market research + purposes) Because crowdfunding involves interaction with a high number of investors information retrieved will indicate more information about potential markets, product demand and feedback regarding their product or services. (Rossi, 2014; Bakker-Rakowska, 2014; Gerber & Hui, 2013; Golić, 2014)

### ***2.3.3. Success factors in crowdfunding projects***

According to research of Mollick (2014) failed crowdfunding projects fail by a large margin i.e. they only collect a small percentage of their target amount (mean of 10.3%). Of the crowdfunding project that fail only 3% was able to reach half of their target amount (50%). Success on the other hand is achieved by reaching the target amount or surpassing the 100% mark by a small percentage (50% of successful project raised 110% target amount). After crowdfunding platforms are able to attract enough investors and entrepreneurs to maintain their business as financial intermediary they want to uphold this by displaying quality projects that are able to reach their threshold. A crowdfunding platform with a bad success ratio could be branded as poorly in terms of screening and selecting projects that are approved to collect funding or are unqualified to guide entrepreneurs and provide them with the necessary tools to attract and collect funding from investors (Belleflamme & Lambert, 2014). Question is what characteristics differentiate a successful crowdfunding project from a unsuccessful. Research has been undertaken to determine what the critical success ratios of a crowdfunding project are and these insights could indicate the areas in which crowdfunding platforms should more extensively screen or guide. First off research has indicated that the selected target amount is very important in deciding whether a project will be a success or a flop. Unsuccessful project tended to be way higher than successful projects in terms of the selected target amount (3x times higher). Unsuccessful projects thus aim at an unrealistic target amount considering the proposed project quality or goals (Mollick, 2014).

The success factors in crowdfunding are related to the business model employed by crowdfunding platforms because different business models reward investors differently and have different relations with them. Because of this investors will have different motives to engage in crowdfunding dependent on the crowdfunding scheme employed and will expect and demand different aspects whereas entrepreneurs will have to provide investors with different attributes or have a more intensive relationship during and after the crowdfunding period. Table 17 highlights research indicating success factors for crowdfunding, their research area, crowdfunding platforms and business models employed.

The success of crowdfunding projects is determined by the involvement of investors, their volume and commitment (Mishra & Koren, 2011). To generate this commitment and volume research indicates, as presented in table 17, that the following factors are important (and most found in research) which are being grouped in three variables in this thesis as: quality of project, social capital and interaction with investors. The entrepreneurs effort and dedication are crucial, combined with the guidance offered by the crowdfunding platform, in making sure that these three factors are present in their crowdfunding project (Mishra & Koren, 2011; Fiddelaar et al., 2014).



Research	Crowdfunding platform(s)	Business model	Success factors
Mollick (2014)	Kick –starter	Reward based and patron based	Social capital (networks) & preparedness (positive) Increased goal size and longer duration (negative) geography of crowdfunding project
Kuppuswamy & Bayus (2013)	Kick –starter		Reduced diffusion of responsibility and more support in final stage of crowdfunding
Fiddelaar et al. (2014)	Geldvoorelkaar, symbid crowdaboutnow, oneplanetcrowd		<u>Crowdfunding as investment</u> : Financial information (backing) <u>Crowdfunding as involvement</u> : Visibility, innovative products, nature of products, identity or identifiable entrepreneur and interaction with investors
Ahlers, Cumming, Günter & Schweizer (2013)	Australian	Equity	Credible signals, sound information disclosure and quality of the start up ventures
Guidici, Guerini & Lamastra (2013)	11 Italian crowdfunding platforms with 461 projects		visible platforms deadline extension
Zvilichovsky, Inbar & Barzilay (2014)	Kick –starter		Owners – backing history

Table 17: Research on success factors in crowdfunding projects

### 2.3.3.1. Quality of project

This concept is multisided in that it deals with the quality of the entrepreneurs partaking (identity and quality), the quality of the products (nature and innovative) and quality of the project (visibility and preparedness). Research of Ahlers, Cumming, Günter & Schweizer (2013) indicates that the perceived quality and expertise of the board members of a crowdfunding project will attract more investors and hence will lower the amount of time needed to attract the necessarily capital. Furthermore research on Dutch crowdfunding platforms revealed that investors value information about the identity of entrepreneurs. Entrepreneur were identifiable in 77% of the successful crowdfunding project in the research sample of crowdfunding projects. The quality of the product furthermore compromises the innovativeness of the product and its nature. Successful crowdfunding projects tend to have innovative products, 81% of the times in the research of Fiddelaar et al. (2014), which could mean that investors value products in crowdfunding products that have an innovative nature (explanation could be that they will receive this innovative product as a reward). The nature of the product indicates how well explained and meaningful the invention is. If the product solves a well explained and evident problem than investors will be more persuaded to invest (Fiddelaar et al., 2014). Lastly, the quality of the project itself is a success factor which compromises the visibility of the project on the crowdfunding platform and the preparedness of the project (no spelling errors, video presentation and frequent updates) which will result in trying to attract the largest number of investors and indicating the quality and preparedness of the entrepreneurs to the investors. Having spelling errors reduce the chance of success with 13%, no video presentation 26% and lack of early updates 13% (Mollick, 2014).

### 2.3.3.2. Social capital

Crowdfunding platforms can advise, during their guidance, which social media to use to reach a maximum number of potential investors, generating a social network for your project larger than that of your own and creating an awareness that spreads through different social networks (Mishra & Koren, 2011; Fiddelaar et al., 2014). Entrepreneurs that have a large social network tend to have a higher chance of success in crowdfunding their project because they can attract more potential investors (Mollick, 2014). The platform employed is also important in this aspect, because projects

displayed on visible platforms could attract more investors and furthermore platforms have their own network of dedicated investors who invest regularly (Fiddelaar et al. 2014; Guidici et al. 2013).

### 2.3.3.3. Interaction with investors

How entrepreneurs interact with investors before, during and after the crowdfunding projects will have its implications for the crowdfunding project (Mishra & Koren, 2011; Fiddelaar et al., 2014; Ahlers et al., 2013). Having a high quality project will not necessarily generate the required target amount. Project should emanate credible signals and information which should indicate the quality of the project. 55% of the successful project had interaction with their investors in research of Fiddelaar et al. (2014). Entrepreneurs that lack early updates in the beginning of their crowdfunding projects tend to decrease their chance of crowdfunding success by 13% because this indicates unpreparedness i.e. a lack of project quality (Mollick, 2013). Furthermore adequate information disclosure throughout the project will help clarify the project value and quality to potential investors (Ahlers et al., 2013). Lastly, research of Kuppuswamy and Bayus (2013) argue that reward based crowdfunding projects have high investor support in the beginning and ending of their crowdfunding process with relative low support in the middle. This because of the diffusion of responsibility where, after a certain amount of project support has been achieved, the project losses momentum because potential investors don't feel the urge and need to help the project. Social information provided about other backers discourages potential investors to fund the project because it has already received initial funding and investors feel that other investors will provide the required funding. Succesfull crowdfunding projects interact with their investors near the deadline of the project by means of private and public updates to generate new motivation and excitement to fund their project and receive final stage support (Kuppuswamy & Bayus, 2013).

### 2.3.4. Crowdfunding platform

Success of a crowdfunding platforms lies in providing transactions between investors and entrepreneurs on their crowdfunding platform using a architecture or business model which generates profit. Crowdfunding platforms compete with traditional funding methods and other crowdfunding platforms for the preference of investors and entrepreneurs as a funding method. Crowdfunding platforms want to attract entrepreneurs, who want to display their projects and raise funds, which will subsequently attract investors who want to invest in projects in order to receive a return on their investment (Belleflamme & Lambert, 2014)

#### 2.3.4.1. Balance of investors & entrepreneurs

Attractiveness of platforms depend on how they deal with the these two parties (investors & entrepreneurs) (see figure 7). And which business model it uses i.e. loan , equity, donations or reward (Belleflamme & Lambert, 2014).

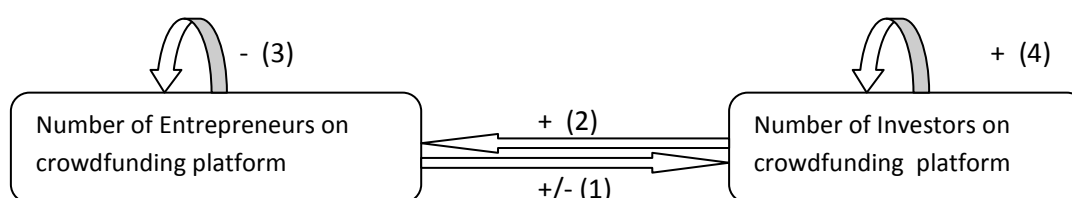


Figure 7: Interaction of entrepreneurs and investors on crowdfunding platforms

Figure 7 indicates that an increase in entrepreneurs on crowdfunding platforms will have two possible impacts on investors (Belleflamme & Lambert, 2014).

(1) The positive reaction is an increase in investors because they can choose between different interesting projects. The higher amount of projects will furthermore increase the chances of finding projects which adhere to the specific (financial) return they want. The negative reaction is that investors will decrease because they fear that projects will not reach their threshold amount because the ratio entrepreneurs/ investors is unbalanced. The pool of investors are spread over a larger group of entrepreneurs, meaning that the chance of successfully funding projects has decreased. Furthermore investors might find that with the amount of projects posted their relationship and interaction with the project will be less than on a crowdfunding platform where fewer projects are posted.

(2) Overall the increase in investors is larger than the decrease in investors leading to an increase in entrepreneurs. A large pool of investors on a crowdfunding platform increases the chance that a project will be financed and furthermore will have more market testing and marketing potential (more investors are made aware of the project). Aside from the effects between the two parties each party has inside effects on its own group.

(3) Entrepreneurs will want to avoid crowdfunding platforms that display a large amount of projects because competition for funds will be extremely high.

(4) Investor participation on a crowdfunding platform however will have a positive impact on potential investors because this will indicate that the required threshold of projects will be reached. A large pool of investors can fund a large number of projects meaning that more projects will reach 100% financed status and subsequently investors will receive their rewards (Belleflamme & Lambert, 2014; Van Wingerden & Ryan, 2011)

Overall the interaction between entrepreneurs and investors are strong and positive leading to a concentration of both entrepreneurs and investors on big crowdfunding platforms because big platforms have a wide offering of projects leading to more investors scanning these platforms for profitable projects. Hence big crowdfunding platforms will become bigger and small crowdfunding platforms will remain small (Belleflamme & Lambert, 2014). However, as indicated, certain aspects diminish this trend i.e. entrepreneurs wanting less competition on crowdfunding platforms and investors wanting to be more important for the projects they finance (less projects on a platform will mean that investors will be more involved with project and more important for its survival). Secondly, crowdfunding platforms use differentiation as a strategy i.e. different business models are employed, different areas are crowd funded and crowdfunding platforms operate in different countries. This way they don't compete directly with other crowdfunding platforms. A crowdfunding platform that operates in the USA will probably not compete with one in the Netherlands, a crowdfunding platform that crowd funds innovative projects will likely not compete with a crowdfunding platform that crowd funds non profit projects ect. Successful crowdfunding platforms must balance the positive and negative interactions between entrepreneurs and investors and within these groups to ensure that both parties will be fairly balanced resulting in long term growth of the platform. To ensure that investors and entrepreneurs will respectively display projects and invest in projects the above mentioned motives in 2.3.1 investors and 2.3.2 should be taken into account.

#### ***2.3.4.2. Crowdfunding platform success factors***

Mishra & Koren (2011) argue that crowdfunding platform should have the following characteristics to be successful: Openness, crowd sourcing, tools, community and jurisdiction.

### Openness

Because crowdfunding involves co creation and open innovation in which investors and entrepreneurs together create, manage and add value to a company the platform itself must also be open to input provided by investors and entrepreneurs (This characteristics should become clearer in another characteristics i.e. tools). Furthermore the platform should be transparent how transactions are being managed, what the business model entails and how costs are structured (Mishra & Koren, 2011). This is in line with one of the three recommendations made by Gerber & Hui (2013) in their research, namely provide transparency. This, according to Gerber & Hui (2013), is explaining the risks that are involved in crowdfunding (for both investors and entrepreneurs) without scaring off these groups by using threatening terms or hard to understand concepts. Risks involved in crowdfunding could be copyright issues related to the uploaded work by the entrepreneurs and in the case of investors personal data about their preferences and amount invested in projects (Gerber & Hui, 2013).

### Crowd sourcing

Crowdfunding is built upon the notion of crowd sourcing i.e. that co creation can occur between customers and companies (in this case investors and entrepreneurs) and this should be facilitated on crowdfunding platform. The wisdom of the crowd argument and co creation options should be available to investors and entrepreneurs, otherwise it would only resolve around the financial transaction and this doesn't create a value adding dimension. According to Gerber & Hui (2013) resource and community support should be coordinated by the crowdfunding platform before, during and after the crowdfunding period. A example given for resource exchange is implementing forums on the crowdfunding platform where investors and entrepreneurs can exchange production needs in the form of information and (human) resources.

### Tools

Even more value can be added if crowdfunding (as a funding method) is used not only to provide the company with the necessary financial means but also looks into other aspects that could be satisfied by crowdfunding.

### Community

Platform should have its own investor group that invests in projects displayed on its crowdfunding platform. This will create more success for crowdfunding platforms because they have a dedicated investor group present which will increase the likelihood of entrepreneurs reaching their threshold. Research of Fiddelaar et al. (2014) indicated that crowdfunding platforms Geldvoorelkaar, Symbid, crowdfunder and oneplanetcrowd have investors that come from the network of the entrepreneur ( $\pm 33\%$ ), are attracted by the platform ( $\pm 33\%$ ) and the other 33% are dedicated investors on their platform. This community should be supported before, during and after the crowdfunding project to increase the opportunities for entrepreneurs to make investors aware of their projects. This support will vary according to the stage in which the crowdfunding project is (before: meet up with potential investors, during: channels to inform investors offline and online, after: updates to investors). Community support of and participation in crowdfunding project before, during and after crowdfunding project could be beneficial in terms of feedback provided, inspiration received and encouragement given. Recommendation, given by research, is to create the opportunity where investors and entrepreneurs can meet each other (Gerber & Hui, 2013).

## Jurisdiction

Crowdfunding platforms should operate according to the laws and regulations that apply to them. Unfortunately, there are no regulations that are specified directly towards crowdfunding platforms leaving a regulatory vacuum in which crowdfunding platforms don't have to adhere to any specific regulations (Mishra & Koren, 2011; De Buysere et al, 2012).

## **2.4. role of banks**

This academic paper argues that banks can possibly benefit the factors described in 2.3.1. -2.3.3 by means of the following resources they have i.e. network, brand name, guidance, risk management, financial portfolio and jurisdiction according to transaction cost theory.

### **2.4.1. transaction cost theory**

Transaction cost theory, as formulated by Klein & Shelanski (1996): "Sees economic organizations as an attempt to guide, moderate, and mediate economic activities – to "govern" transactions" (Klein & Shelanski, 1996, p. 281). Transaction cost theory explains why organizations exist in markets and how come some products or services are manufactured internally and others are left to other players, or are outsourced, preferably at the lowest cost (Klein & Shelanski, 1996; Tadelis & Williamson, 2012). Transaction cost theory deals with the cost of transactions between actors that have to be made in order to facilitate, said transaction like search (and information) cost, bargaining costs and policing and enforcement costs (Hazue, 2007; Nederhof, 1996).

**Search and information costs:** All cost necessarily to derive information about markets, products and services in order to make a well informed decision

**Bargaining costs:** all cost associated with bargaining with the other party which is involved in the transaction

**Policing cost:** all cost that are made when enforcing the contracts and rules made (by means of a legal framework) i.e. observing that rules and contracts are upheld and if not undertake actions.

Transaction cost can occur at different levels i.e. within a organization (in the form of, for example, contracts between employer –employees) or between organizations (Hazue, 2007; Nederhof, 1996; Klein & Shelanski, 1996). Transaction cost theory is a departure from neo classical models where assumptions are made like rationality (actors are rational and will chose the option that satisfies their goals), transparency (all actors are aware of all relevant information) and transactions occur without costs (aside from production) and don't have external effects (like pollution) (Hazue, 2007). Transaction cost theory doesn't have these assumptions, instead transaction cost theory describes the presence of bounded rationality, risk and uncertainty within the market(s), opportunism, incomplete contracts and asymmetric information (Hazue, 2007; Tadelis & Williamson, 2012; Nederhof, 1996). Organizations or other actors are bounded in their rationality because the world is too complex for them to obtain the optimal solution for problems in all situations that could occur, especially because information is withheld from them, difficult to obtain, exclusive to other parties (information asymmetric) or unknown at that time (due to changes in the world) (Hazue, 2007; Nederhof, 1996). Furthermore contracts established between parties are incomplete because all eventualities that could occur can't be incorporated into contracts (changes in the world will redefine the contract established between parties) (Klein & Shelanski, 1996; Nederhof, 1996). Because of the information asymmetric and incomplete contracts between parties risk, uncertainty and opportunism could occur. Parties who have more information to their disposal

during negotiations and transactions might use this to their advantage, or in the case of incomplete contracts can be opportunistic in their behaviour ex ante (Nederhof, 1996).

Given these factors (bounded rationality, uncertainty, information asymmetric and incomplete contracts), transaction costs might be higher for certain parties. Organizations can now arise because transaction costs present in a market can be minimized, if these transactions take place in organizations rather than being operated by free market mechanism or can be done better than other parties (Williamson, 1975). Aside from why organizations arise, transaction cost theory also explains why make or buy decisions are related to transaction cost theory. Make or buy decisions within organizations depend on the internal transaction costs that have to be made in order to produce goods versus the external transaction cost that have to be made if the good is bought (Klein & Shelanski, 1996; Hazue, 2007). The height of transaction costs, and thus actions of organizations, are depend on the transaction cost characteristics present i.e. frequency, uncertainty and necessity (Williams, 1975; Fritz, 2006; Hazue, 2007; Klein & Shelanski, 1996)

**Frequency:** If transactions occur more than once, than there could be a necessity to establish a organization in which to house those transactions. This would reduce transaction cost aspects like search cost, information costs and bargaining costs.

**Uncertainty:** If transactions have a certain degree of uncertainty, in that other party might display opportunistic behaviour, than having the transaction within the organization will increase the amount of control over the transaction this could reduce monitoring and information costs of transactions

**necessity:** If large investments are necessarily in order to facilitate the transaction than establishing an organization is better. (Williams, 1975; Fritz, 2006; Hazue, 2007).

#### ***2.4.1.1 Transaction cost theory: Crowdfunding platforms***

Crowdfunding platforms are financial intermediaries that connect parties that either want to borrow money or want to lend money (Mollick, 2013). Crowdfunding platforms minimize the transaction costs needed for both parties to fulfil their goals. First of crowdfunding platforms try to display a large number of projects that require funding and offer these projects a platform to use in order to gather funds. This could have been left to market mechanisms where investors and entrepreneurs find each other without the involvement of intermediaries (free market mechanism). Crowdfunding platforms thus group transactions (contact between investors and entrepreneurs) within platforms because these actions are now more frequently made and easier to make, probably due to the architecture applied (low cost & internet), absence of regulations and decline in regular funding which boost the rise of crowdfunding ( If only a few projects were being crowd funded than the site of the project or company could have been used ,direct crowdfunding). Now more and more crowdfunding platforms are being established to control the transaction between investors and entrepreneurs. In so they reduce transaction cost between investors and entrepreneurs because search, bargaining and policing cost are being reduced. The rise of more crowdfunding platforms also raises transaction costs because searching and information costs about crowdfunding platforms will increase. The great rise and growth of platform and their diversity will make it harder for entrepreneurs ,and to a lesser degree investors, to be able to discern between crowdfunding platform and which platform is ideal for their project. Hence the introduction of summary sites like fundipal or Douw & Koren

Crowdfunding platforms show and display the projects on their site making potential investors aware of profitable investment options. Search and information are reduced because all projects are displayed on crowdfunding platforms with the relevant information. Furthermore projects that are alike will probably be placed on the same site. For example social ventures are placed on Oneplanetcrowd. It helps that similar projects are placed on the same site since investors that are willing to invest in project A might be tempted to also invest on project B.

#### Adverse selection

Most investors can't (arguably) differentiate between good and bad investments creating lemon problem because of the information asymmetric between parties. Bad and good investment will seem the same for most investors, crowdfunding platforms can screen projects and ascertaining if they have a certain degree of quality, can guide projects in how to successfully portray their project (revealing all relevant information to investors) and can provide risk analyses giving investors an idea of the potential risk they face when investing on projects (Belleflamme & Lambert, 2014; Stiglitz & Weiss, 1981; Thomson & Conyon, 2011). In this way uncertainty about the quality of projects is reduced, thereby minimizing transaction cost for investors in obtaining relevant information to make a good investment and searching for good investments. Furthermore the threshold agreement of 100% prevents projects from receiving funds below their target amount which research indicated would lead to less success for these projects later on (as is the case with KIA model) (Cumming et al., 2014). Aside from this investors will receive their investment back if projects don't reach their target amount, preventing adverse selection because projects deemed by investors to be a good investment will reach their target amount (Belleflamme & Lambert, 2014). Reducing adverse selection will reduce ex ante transaction costs, before the contract (investors pledge to fund) has been signed, between investors and entrepreneurs.

#### Moral hazard & opportunism

Moral hazard can be reduced by crowdfunding platforms (in the form of hidden actions) because platforms are more able to evaluate the business plan (gauging if it is feasible and realistic) and observe the behaviour of the entrepreneur i.e. if entrepreneurs are excessively taking risks. Furthermore entrepreneurs could exhibit opportunism and misuse funds or commit fraud based on incomplete contract (information asymmetric). It would be troublesome for investors to unite and legally prosecute entrepreneurs since this would have extensive transaction costs. Therefore crowdfunding platforms reduce policing and monitoring cost for individual investors who can't be argued to monitor all the actions of projects. Furthermore platforms are more suitable in upholding contracts between projects and investors and take action when this is deemed necessarily (excessive risk taking of entrepreneurs, delaying rewards or returns to investors ect.) (Belleflamme & Lambert, 2014; Stiglitz & Weiss, 1981; Thomson & Conyon, 2012).

Crowdfunding platforms thus reduce transaction cost in the form of search and information costs and policing costs (possibly also bargaining costs, but sometimes this is left to the investors and entrepreneurs themselves with some platforms). Banks could, arguably, involve themselves with crowdfunding if they are able to reduce transaction costs by enhancing all relevant aspects of the crowdfunding success by either completely taking over functions of crowdfunding platforms or involving themselves in other forms, reducing certain transaction cost in the crowdfunding sector.

### **2.4.2. Banks assets**

The resources that banks poses, and could theoretically reduce transaction costs, are network of the bank, brand name or reputation, expertise of the bank (guidance, screening and risk analysis), jurisdiction and variety of financial products. These factors can influence entrepreneurs and investors motives to participate in crowdfunding & the success factors of crowdfunding projects and platform.

#### **2.4.2.1. Network**

Banks have a network of relevant players i.e. investors, entrepreneurs, companies, financial institutions, government agencies ect. which can be beneficial to crowdfunding. Involvement of banks would mean that an additional pool of potential investors could be added to the social capital of crowdfunding platform and projects. Mishra & Koren (2011) indicated that it is important which social medias are used by projects and that entrepreneurs need to find enough “ambassadors” to make sure that awareness about their project is being spread through multiple networks. Network of the bank will help this and furthermore banks could have more relevant players in their network that are diverse and have knowledge which could benefit other elements of crowdfunding i.e. co creation, market research and wisdom of the crowd. This way banks could potentially add more crowd sourcing (co creation) and community elements to crowdfunding.

#### **2.4.2.2. Reputation**

Crowdfunding projects signal trust through means of quality signals (Ahlers et al.,2013). The platform on which the crowdfunding platform is displayed will also indicate trust, legitimacy and quality. Crowdfunding platforms who have displayed successful projects in the past will attract more investors and entrepreneurs (Belleflamme & Lambert, 2014). Involvement of banks in crowdfunding could lead to increased reputation of crowdfunding platform, because it is bank backed up or bank has allied itself with certain platforms (indicating trust and signal of quality in these platforms). Furthermore bank involvement could give legitimacy to the crowdfunding sector, which as of now isn't regulated extensively. Credibility of crowdfunding could be improved if bank partner themselves up with platforms, begin their own crowdfunding platform or include this funding method into one of their financial products.

#### **2.4.2.3. Guidance**

Crowdfunding projects need to signal their quality, employ their social capital and keep contact with (potential) investors in order to successfully crowdfunding their project (Mishra & Koren, 2011; Fiddelaar et al., 2014; Ahlers et al.,2013). This can be difficult since crowdfunding could be relative new to crowdfunding projects. How entrepreneurs are helped and guided throughout the crowdfunding process may differ and bank involvement in the form of one's own crowdfunding platform could help this. Alternatively crowdfunding platforms could be more than adapt in this regard since they are already dealing with this on a daily basis.

#### **2.4.2.4. Screening & risk analyses**

Banks normal line of work is reducing information asymmetric between parties and calculating or assessing risk (risk management) (Stiglitz & Weiss, 1981; Thomson & Conyon, 2012). Banks could be more adapt at gauging the quality of projects who want to be displayed on crowdfunding platform since this is part of their normal operation. Furthermore they can be better at assessing risks of project (risk analyses) as a service to investors. Otherwise banks could involve themselves with crowdfunding by only taking on these two roles i.e. screening projects and providing risk analyses without creating their own crowdfunding platform.



#### **2.4.2.5. Financial products**

Banks have a wide array of financial product to their disposal such as credit cards, mortgages, insurances, mutual funds ect. Banks can combine their financial products with crowdfunding in order to generate financial products that are complex, hard to imitate and combine the best of two worlds i.e. the simplicity of crowdfunding with complex and variety of financial products of crowdfunding before, during and after the crowdfunding period (US economic outlook, 2013; Assenberg van Eysden, 2015). If crowdfunding platforms are owned by a bank additional funding can be sought with the bank reducing cost of entrepreneurs in searching additional funding. As of now banks are experimenting with for example funding a loan by means of 50% crowdfunding. If this is successful banks will provide the other 50% as a loan. Or alternatively banks can provide projects with growth capital once crowdfunding has financed the start phase (Assenberg van Eysden, 2015; Van der Laar, 2014). Some banks are even contemplating implementing crowdfunding in their business model (De, 2015). Most active forms are crowdfunding platforms owned by a bank which offer entrepreneurs and investors something different than other platform like was the case with Seeds.

#### **2.4.2.6. Jurisdiction**

Banks have to comply to more regulation and laws as it is, being a financial intermediary, and are more aware of which regulations apply to certain issues. They are experienced in enforcing rules and complying to them. Monitoring entrepreneurs and policing them, enforcing the legal framework, could be more suitable for banks. Bank involvement in the form of a own crowdfunding platform could provide a more reliable (or perceived credible) legal framework for the crowdfunding sector, increasing trust of both investors and entrepreneurs in legal matters of crowdfunding. Furthermore it can be argued that banks have more (perceived) leverage when dealing with both parties. Because of the regulatory vacuum crowdfunding platforms at the moment have low operating costs. However governments in different countries are contemplating whether to enforce specific rules and regulations on the transactions made and operations of crowdfunding platforms (Debuysere et al., 2012). This could result in increasing regulatory cost for crowdfunding platform even at the point where bank loans are less costly than crowdfunding. Banks having experience with complying to regulations, presumably can operate faster under these regulatory conditions because they are used to this which could lead to competitive advantage on this aspect.

#### **2.4.3. Reducing transaction costs**

Banks could reduce certain transaction cost present in the crowdfunding sector or do this better than crowdfunding platforms at the moment by using their bank assets in crowdfunding. Bank involvement can reduce transaction cost by attracting more investors and entrepreneurs, because the motive to engage in crowdfunding are influenced as well the success factors of platforms and projects. Main emphasis of this research is on trust related issues of entrepreneurs and investors although other motives and success factors will also be mentioned. The crowdfunding sector success factors are interrelated and therefore some aspects will only described once. Therefore only trust for entrepreneurs & investors, quality of project (project success factors) and platform success factors (tools) will be described.

##### **2.4.3.1. Motive to engage: trust**

Entrepreneurs barrier towards crowdfunding were fear of public failure and fear of disclosure of information (Rossi, 2014; Gerber & Hui, 2012). Reputation, jurisdiction and network of bank backed up crowdfunding platforms could reduce these fears because the possibility of attracting more

investors reduces the chance of project failure. Furthermore the extensive regulations which banks have to apply to will diminish fear of brand or patent infringement by this party and the bank will try to uphold the investor from doing this. Motive to participate in crowdfunding for entrepreneurs is therefore enhanced because uncertainty is being reduced about inability to attract investors, network fatigue and fear of disclosure of information. Because network and reputation of banks attract additional investors, search costs for both parties are reduced because visibility of projects are enhanced on platform with bank involvement. Furthermore banks can be argued to be better at monitoring and policing transaction costs upholding the contracts between investors and entrepreneurs and making sure that sensitive information remains on the platform.

As for investors trust, this was conceptualized as (a) distrust that investors have because of fraud possibilities, (b) distrust of creatures use of funds and (c) distrust in relation to that the crowdfunding project will be successful i.e. that the project they are crowdfunding doesn't reach its threshold and the funds will be returned (opportunity cost and loss of time) (Bakker-Rakowska, 2014; Rossi, 2014; Gerber & Hui, 2012). All these trust issues i.e. fraud, misuse of funds and successfully crowdfunding are related to agency problems that arise because of asymmetric information (entrepreneurs knows more about his project in terms of quality and feasibility). Crowdfunding platforms have established mechanism that reduce asymmetric information and prevent the possibility of fraud. All or nothing model, pre screening, risk analyses and regulations & contracts are ways in which crowdfunding platform can reduce the number of low quality projects and reduce information asymmetries and fraud (Belleflamme & Lambert, 2014). In this way transaction costs are reduced. As with entrepreneurs trust factors, bank involvement could reduce transaction costs because of better screening, risk analyses and jurisdiction leading to more high quality projects and prevention of misuse or fraud. i.e. thus reducing uncertainty, policing and monitoring costs for investors.

#### ***2.4.3.2. Crowdfunding project success factors***

Banks first of could screen projects better than other crowdfunding platform and could help these projects through means of guidance (signalling quality, mobilizing network & how to interact with investors) as well as the extra network that can be employed (network of bank). This could reduce information costs for investors because projects are better at signalling quality to their investors, search cost for entrepreneurs in finding additional investors and monitoring cost for investors because updates and information are more frequently given.

#### ***2.4.3.3. Platform success factors***

Community and jurisdiction are in line with arguments presented in either motive to engage (trust) or crowdfunding project success factors. As for the others, openness is something that platforms could manage by themselves in which this thesis assumes that bank involvement wouldn't be the greatest contribution and furthermore won't necessitate this. Only Tools could have a contribution aspect, not already described in motives to engage or project success factors, that also reduces transaction costs. As for crowd sourcing this doesn't really have a transaction reducing cost aspect but merely the fact that bank involvement, and their network, could constitute a more diverse and value adding component. Because investors are from a bank's network they could be more professional, leading to better market research, problem solving or co creation.

### Tools

Bank involvement could bring fourth hybrid financial products like business model incorporating crowdfunding. Examples are already used like collecting 50% through means of crowdfunding and if this succeeds than banks will lend the other 50% as a loan (Van der Laar, 2014; Groot, 2013 crowdfunding alternative for bank loan). Other examples are the business model of Seeds (see appendix E). The revenue marks and maximum on financial return gave entrepreneurs more financial flexibility and less uncertainty in crowdfunding their project. Furthermore additional funding can be sought if banks involve themselves with crowdfunding reducing uncertainty, search and information costs because banks are already familiar with the projects (because they received crowdfunding through means of their platform) or this information can be more easily obtained.

## 2.5. conceptual framework for crowdfunding

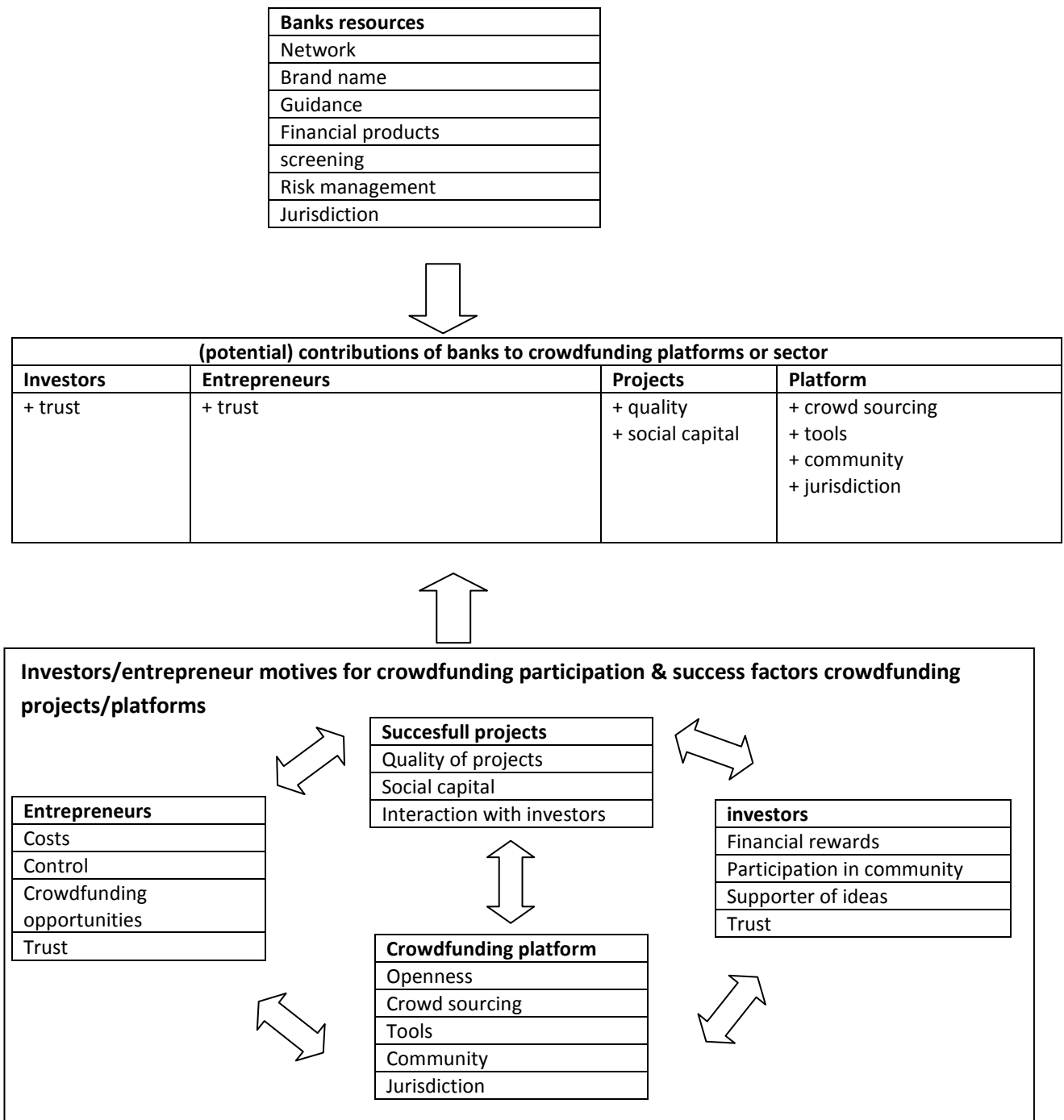


Figure 8: Conceptual framework crowdfunding

### 3. Research design

The next outline will describe how the research will be conducted. This comprises the methodology used in this research, the operationalization of variables, interview protocols, selecting the research sample and the validity, reliability as well as the limitations of this research design.

#### 3.1 Study 1: Analyse of banks motives

This thesis research is exploratory in nature and broadly viewed consist of two parts. First part is examining the banks motives, whereas the second part analyses how investors and entrepreneurs perceive crowdfunding success factors (motives, project & platform) and how banks can contribute on these aspects. Because crowdfunding initiatives deployed by banks are recent, as well as crowdfunding, study 1 is mainly exploratory dealing with how and why questions (Babbie, 2007). Because Seeds has its own website, platform information about Seeds is more readably available than information about partnership concerning crowdfunding platforms. For Seeds the why and how questions of founding and ways of operating (as well as goals) are stated on their website. Although these aren't adequate enough to suffice for research purposes they indicate to some extend in advance certain aspects, whereas partnerships remains vague and how and why questions can only be determined by means of interviews. Interviews will thus be held to clear up aspects, for example services lend to partners and vice versa and the relationships among them.

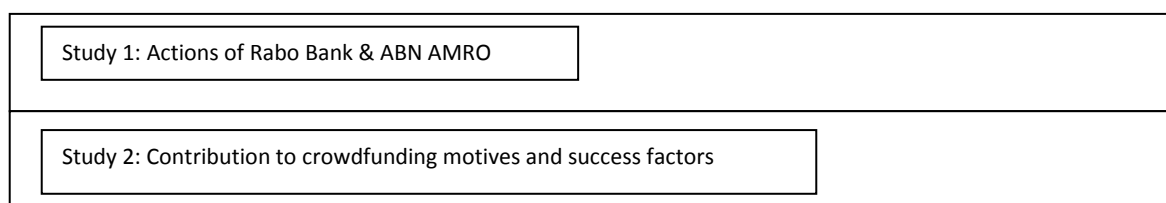


Figure 9: Study 1 & 2

A literature review was undertaken, as was described in the theoretical framework, and the 5 motives presented in the conceptual model will be used for the exploratory part of study 1, determining which motives were prevalent in banks decisions to involve themselves in crowdfunding and why this was done in their respective forms (partnership – own crowdfunding platform) and area (social –entrepreneurial).

##### 3.1.1 Data gathering

Semi structured interviews will be held with representatives of both banks. Semi structured interviews will have an advantage compared to structured interviews because it allows interviewers to ask additional questions should interesting information come forward during the interview, requiring extra questions (Babbie, 2007). Semi structured interviews will be held with persons with both banks who have knowledge, time available, are willing, are in a position within the company to answer the questions, are impartial and finally are communicable (Marshall, 1996). The semi structured interview will differ for both banks because they employed different strategies and information about the partnership is more unknown than the creation of Seeds. See appendix C for the semi structured interview.

### 3.1.2. Operationalization

For study 1 a coding schema has been made to describe all the relevant motives for bank engagement in crowdfunding (table 17) i.e. counter strategy, knowledge acquisition, establishing relationships, corporate social responsibility and unique value proposition. The semi structured interviews will be coded in order to determine what motives Dutch banks had for their strategy. This however should not be taken too seriously. The first three questions are the most important, because they revolve around the purpose of engaging in crowdfunding and why this was done in their respective form and area. These 3 questions alone will probably determine what the motive(s) were, leaving the rest of the interview to focus more in-depth on the 5 motives i.e. elaborating on the crowdfunding initiatives. The full protocol of the interviewees will be coded because information given after the initial 3 questions could prove to contradict or further enlighten the banks motives. Table 17 entails the measurable coding parameters. Citations of interviewees might place emphasis on other crowdfunding motives after the first three questions. However with these in – depth questions the risk arises of directing interviewees to certain answers.

<b>Counter strategy</b>	1.Negative or positive answer to interview question 5 (see appendix) 2.Counter/react/dilute/oppose/answer initiatives of crowdfunding, banks or expected occurrences in the future 3.Gaining of (long term) competitive advantage
<b>Knowledge acquisition</b>	comprehend/ learn/observe crowdfunding and gain intelligence/know-how/expertise/insights/education.
<b>Establishing relationships</b>	alliance with/associate with/create affinity with/ select partners with, establish relations with key players: entrepreneurs, investors, crowdfunding platforms and/or others
<b>Corporate social responsibility</b>	1.social (image) 2. Duty to/take care/obligation to/responsibility to facilitate transactions between borrowers and lenders and boost new start up ventures.
<b>Unique value proposition</b>	1.demanding/ desiring/liking/wanting certain characteristics of the crowdfunding platform i.e. reward marks, length crowdfunding period, duration contract ect. by investors and entrepreneurs. 2.Deliberate placement of crowdfunding platform in a niche.

Table 18: Coding interview

If quotes are made outside the initially asked question category, questions are grouped in categories established in the conceptual model, than these will be highlighted as they indicate importance of a certain motive. Example: if during a question involving unique value proposition the interviewee would indicate the importance of having relationships with entrepreneurs than this will be highlighted as establishing a relationship.

### 3.1.3. Validity

Validity can be divided into internal and external validity which can be influenced and compromised differently (Babbie, 2007). First of the question arises if this research will observe and measure what it wants to measure i.e. the banks motives in involving themselves with crowdfunding. The questions asked might fail to contain the relevant motives for Dutch banks that have ventured into crowdfunding.

### ***3.1.3.1. internal validity***

Internal validity occurs when the dependent variable is influenced or altered by other factors other than the independent variable and the conclusions drawn in the experiment won't describe what actually happened (Babbie,2007). In study 1 the greatest threat to validity is instrumentation. The fact that both interviews are semi structured could lead to instrumentation, because interviewees were asked different questions. Comparing the interviews is therefore questionable since interviewees were asked different questions.

After the interview, protocols were established and coded based on the coding scheme described in chapter 3.1.2. operationalization. However answers given by interviewees might not fall neatly into the established categories and this would require making assumptions (it might even be that the coding scheme doesn't capture the essence of bank motives). Furthermore the three questions in the beginning of the interview hold the most importance, in terms of chance of identifying the underlying motives for banks reactions. Less importance will be placed on the subsequent sections of the interview. Because questions are grouped into categories belonging to the 5 motives described, there is a chance that the interviewer is directing the interviewee into a certain area. The first three questions are neutral and don't correspond to a certain motive. After the three questions, questions concerning the 5 motives will be presented, however this could influence the interviewee. Coding these questions belonging to, for example, knowledge acquisition would unsurprisingly be coded as knowledge acquisition. This is the reason that the first part of the interview with the neutral questions is the most important and will be valued more than the other coding sections.

Furthermore the length of the mentioned codings might differ. How will 5 sentences of knowledge acquisition be valued compared to 10 sentences of counter strategy. Lastly, interviews were held in Dutch but were later on translated in English. Validity issues might arise because sentences could be mistranslated, or now hold a somewhat different meaning than before, and the protocols were not completely written in English. With protocols you have to write down every word the participant says because it could hold value and dismissing words could compromise validity (babbie,2007). However because interviewees talk in everyday speech and more importantly rephrase their sentences, or abandon their previous thought line, the transcripts were written in more or less broken Dutch. It would be very difficult, time consuming and trivial to translate the Dutch protocols in English as this could create even more ambiguity over what the interviewee has said. Instead this thesis chose to translate the Dutch protocols without adding unnecessary words like euh, ah ect. and also without writing sentences which were abandoned abruptly in favour of another line of thought. This however has the risk that protocols were not translated accurately.

### ***3.1.3.2. External validity***

Only the motives and reactions of two Dutch banks are being examined. This is mainly due to the fact that not many banks have ventured into crowdfunding. Due to the small sample this could lead to incorrect generalization about Dutch banks venturing into crowdfunding. For example indicating that the most active form of crowdfunding (own crowdfunding platform) is due to counter strategy motive. However due to the small sample these conclusions will not be made i.e. making conclusions between forms of venturing. This thesis must be seen as exploratory in nature, only describing how Dutch banks reacted and what their main motives were for doing so.

### 3.2. Study 2: Contribution to crowdfunding success factors

Study 2 aims to identify possible areas of crowdfunding (motive to engage and success factors) where bank involvement could potentially reduce transaction costs. This study is also exploratory, like the first study.

#### 3.2.1. Data gathering

Entrepreneurs and investors on crowdfunding platforms that had partnerships and Seeds were sent a questionnaire dealing with 12 variables identified i.e. motives to participate (investor-entrepreneur) in crowdfunding, project and platform success factors. Aside from the 12 variables, the questionnaires will have a general part in which investors and entrepreneurs will have to indicate which crowdfunding model was used, times invested, length of crowdfunding period, platforms known to investors and entrepreneurs etc. This because these concepts could be variables that could affect the proposed proposition in the theoretical framework or could provide more information on investor and entrepreneur perception, for example trust values could be more related to a loan business model whereas this isn't the case for other business models. These general questions could also provide the necessarily control variables.

#### 3.2.2. research sample

Units of analyse in this research are investors and entrepreneurs on crowdfunding platforms. Aside from the crowdfunding platforms who had partnerships this research also contemplated other "normal" crowdfunding platforms. However because of numerous reasons no other crowdfunding platforms were included. First off, the crowdfunding sector is still growing and changing and hence during the course of this thesis some were closed and others started. Furthermore crowdfunding platforms differ in their chosen area of crowdfunding, business model, minimal investment, funding range, selection procedures etc. It is problematic to devise a research sample where crowdfunding platforms don't differ extremely in characteristics. Allowing crowdfunding platforms in the research sample that differ extremely would weaken conclusion drawn because of the number of additional variables that could explain the connections found. The "normal" crowdfunding platforms contacted had to comply to table 19 displayed below in terms of characteristics.

Requirements "normal" platforms	
Business model	Loans
Minimum investment	10-100
Funding range	5,000-150,000
Projects funded	>10

Table 19: requirements normal crowdfunding platforms contacted

Finding crowdfunding platforms that fit these descriptions was troublesome and a hindering construct leaving only a few entrepreneurial crowdfunding platforms. These crowdfunding platforms indicated that they could not fulfil the request of my research i.e. contacting investors and entrepreneurs and this left only one other crowdfunding platform. At that time only 18 projects were funded at that platform. Therefore this crowdfunding platform was also omitted from the planned research sample leaving only the crowdfunding platforms that had ties to banks.

form	partnerships								Bank
type	Investors		Entrepreneurs		Investors		Entrepreneurs		Entrepreneurs
awareness	unaware	aware	unaware	aware	unaware	aware	unaware	aware	aware
area	entrepreneurial				social				

Table 20: research sample



Foremost, the goal of this research is to identify areas of crowdfunding which investors and entrepreneurs value and how bank involvement could potentially enhance these attributes i.e. motives to engage & success factors of platforms and projects. Furthermore differences between aware and unaware investors and entrepreneurs and differences between area(s) of crowdfunding can be analyzed (entrepreneurial – social) (table 20&21). If investors and entrepreneurs were unaware of the partnership that crowdfunding platforms have with banks than these investors or entrepreneurs will view the crowdfunding platforms as “normal” crowdfunding platforms. Investors and entrepreneurs could view variables differently or experience the crowdfunding process differently based on their awareness of bank involvement. This could highlight negative, neutral or positive emphasis on variables directly linked to bank involvement. The distinction between social and entrepreneurial could further highlight potential contribution of bank involvement because the social component is more prevalent with social crowdfunding whereas entrepreneurial crowdfunding has less of a social component. Ultimately three crowdfunding platforms were included in this research of which two were social entrepreneurial area and one was entrepreneurial.

<b>1.Aware</b>	<b>Unaware</b>
Investors aware	Investors unaware
Entrepreneurs aware (including seeds)	Entrepreneurs unaware
<b>2.entrepreneurial</b>	<b>social</b>
Entrepreneurs	Entrepreneurs
Investors	Investors

Table 21: analyzing research sample

### 3.2.2.1. Descriptive statistics

Of the approx. 260 entrepreneurs approached for taking part in the questionnaire 66 entrepreneurs responded. 52 completed the questionnaire whereas 14 didn't complete the whole questionnaire. Some entrepreneurs argued that the questionnaire was lengthy, which it was. Partial responses were also given to likert scale questions. Every question seen but not answered was coded as -99. For important questions like crowdfunding platform used and awareness of partnerships -99 can't be taken into account. For crowdfunding platforms there were 11 non respondents, however awareness was filled in by all applicants. Of the approx. 500 investors contacted 112 investors responded and 80 completed the questionnaire. As was the case with entrepreneurs, investors have responded partially on questions. Table 22 indicates the composition of entrepreneurs, investors and projects i.e. their gender, age, distribution and project information.

<b>Gender</b>	<b>M</b>	<b>F</b>	<b>Total</b>	<b>Age</b>	<b>minimum</b>	<b>maximum</b>	<b>mean</b>	<b>std</b>	<b>kurtosis</b>	<b>skewness</b>	<b>total</b>
Entrepreneurs	28	23	51	entrepreneurs	21	72	38.98	12.24	-0.29	0.65	51
Investors	37	37	74	investors	20	67	45.07	11.56	-1.07	-0.13	73

table 22: gender & age

The entrepreneurs gender is evenly distributed among the research samples with both investors and entrepreneurs having an almost 50/50 distribution of females and males. The youngest entrepreneur that completed the questionnaire was 21 and the oldest 72. The average age of the sample of entrepreneurs was 39 years (38.98). The negative kurtosis means that distribution follows the shape of platykurtic, meaning that distribution is flatter i.e. the distribution has less of a peak meaning variables are more evenly distributed among age groups. Entrepreneurs age is skewed toward the right i.e. long tail to the right of the mean, meaning that more entrepreneurs are aged below the

mean of 38 years old (De Veaux et al., 2008). The distribution of investor age is similar to that of entrepreneurs with a minimum of 20 and maximum of 67. Average age in the sample was somewhat higher (45 years). Age of investors also has a negative kurtosis but also a negative skewness meaning that more data is allocated in the right side i.e. there are more investors that are older than 45 years.

<b>Entrepreneurs</b>	Seeds	Entrepreneurial partnership platform	Social partnership platform	total
N	1	37	17	55
%	1.8%	67.3%	30.9%	100%
<b>Investors</b>				
N	-	36	44	80
%	-	45%	55%	100%

<b>Project</b>	minimum	maximum	mean	std	kurtosis	skewness	total
Target amount	2500	250000	44635.94	56580.65	6.66	2.59	64
days	2	90	48.02	24,62	-0.66	-0.19	52

Table 23: descriptive table of research sample

As for the population of entrepreneurs and investors. Number of projects on Seeds was small to begin with, only 7 projects of which 2 had gone bankrupt. Only 1 seeds entrepreneur is present in this sample. As for partnership platforms, the entrepreneurial platform is more present in this research 67.3% than social 30.9%. The investors are more evenly distributed with almost 50/50 distribution. As for project information the target amount of projects was approx. 45,000 with a std of 7000. Lowest target amount was 2500 and largest 250,000. Time needed to fund the target amount had a mean of 48 days with minimum days needed being 2 and maximum being 90 days (which is also the maximum amount of time provided by platforms).

### 3.2.3. Operationalization

Study 2 utilizes the motives of investors and entrepreneurs to engage in crowdfunding & the success factors found in crowdfunding projects and platforms. Table 24 and 25 indicate the meaning of these constructs as well as the sub variables of which they are composed. This operationalization is important for chapter 4.3.7. impact of awareness and 4.3.8. impact of area of crowdfunding because then differences between variables will be analyzed.

#### 3.2.3.1. *Investors motives to engage in crowdfunding: trust*

The questionnaire to investors mostly deals with the motive to engage in crowdfunding i.e. trust that investors have. This investor variable is defined as the trust that investors have in both the crowdfunding project being invested upon as well as the crowdfunding platforms on which the project is placed. Sub variables are trust in the project invested in that they will reach their target amount (or at least have a reassuring feeling that these project will gain enough funds). Secondly, the trust of the investor that projects invested upon are of quality and financially feasible. Not so much the fact that the project reaches its target amount but the fact that it will be able to give a return on investments to investors later on (if this business model is applied) or at least investors will have a positive feeling that the project or company won't fail after the crowdfunding period. Thirdly, the trust that investors have that projects won't misuse their funds or commit fraud. Lastly, the trust in the (quality of the) platform itself, revolving around what importance investors place on platform variables and how they view the quality of platforms. The investors trust in both the crowdfunding project and platform can differ and can be caused by different elements as listed as items in table 24.

Investor variable	definition	Sub variables	parameters
trust	Investor trust in both crowdfunding projects and crowdfunding platform	(1) project will successfully reach its target amount (2) project is of quality and is financially feasible (3) that project will not misuse investor funds or commit fraud (4) quality of platform	<b>project</b> -Quality of project -% already collected -social capital -involvement of trustworthy partners  <b>Platform</b> -people behind the platform -Reputation and visibility of crowdfunding platforms -tools -number of successfully financed projects -licenses -community -openness -jurisdiction -involvement of trustworthy partners -involvement of banks

Table 24: Investor trust variable

### 3.2.3.2. *Entrepreneurs motives to engage in crowdfunding*

For entrepreneurs the variables are cost, control, trust, crowdfunding opportunities. These variables can be composed of different constructs.

#### Cost

Cost is defined as the cost that entrepreneurs have to make in order to (successfully) crowdfund their project which is comprised of 2 constructs i.e. cost of crowdfunding and time and resource commitment. Time and resource commitment is tested by means of 4 items i.e. length of contract, length of crowdfunding period, updates and size of investor group

#### Control

Control is made of off management control and investor participation. First is how much control entrepreneurs want to retain and second is how much involvement they wish from or allow investors in terms of co creation and problem solving.

#### Trust

Trust that entrepreneurs have is trust in the jurisdiction of the platform (disclosure of information) and trust in reaching enough investors to get funds (social capital). Most trust issues identified in the literature were linked to inability to attract supporters, public failure and disclosure of information. Questionnaire is thus aimed at jurisdiction and social capital (networks) of crowdfunding

#### Crowdfunding opportunities

Crowdfunding opportunities are all elements aside from crowdfunding itself that can benefit project such as establishing relations, good market research or increase in reputation ect. (table 25).

### 3.2.3.3. *Success factors projects: quality of project*

Quality of project is defined as all guidance elements that crowdfunding platforms may provide to entrepreneurs that can enhance the perceived quality of projects for investors. Like guidance in how

to employ your social network, how to display information, how to interact with investors, giving project examples and advising how to provide a project video. These are elements which theory describes would indicate the potential quality to investors.

#### ***3.2.3.4. Success factors platform***

Crowdfunding platform success factors were openness, crowd sourcing, tools, community and jurisdiction. Crowd sourcing, jurisdiction and openness questions are embedded in control and trust. This leaves only tools and community to be further elaborated.

##### Tools

Tools are platform characteristics that provide projects with something extra aside from raising funds. Somewhat similar to crowdfunding opportunities but different in that crowdfunding opportunities apply to crowdfunding itself (the method) whilst tools is platform related (Mishra & Koren, 2011). Tools is divided in additional funding and financial flexibility which will ascertain how entrepreneurs view the chance of additional funding and the possibility of more financial control/flexibility. Financial flexibility is the perception of entrepreneurs on variables like revenue mark and max on financial return.

##### Community

Community was defined as the effort that platforms deploy in order to have a dedicated group of investors on their platform (community) i.e. investors that regularly invest on projects placed on platform. For example: the expertise of the platform in the form of risk analyses and screening could contribute towards interesting projects placed on the platform which are of high quality.

Entrepreneurs variable	definition	Sub variables	parameters
Cost	Cost that entrepreneurs have to make in order to (successfully) crowdfund their project	(1) cost of crowdfunding	-Cost of crowdfunding -Business model
		(2)Time and resource commitment	-Length of contract -Length of crowdfunding period -Investor updates and interaction -size of investor group
Control	Amount of management control that entrepreneurs have before, during and after the crowdfunding period in their company	(1)management control	Management control -Business model
		(2)investor participation	-Co creation -wisdom of the crowd
trust	Trust that entrepreneurs have that their project will succeed and trust in platform itself	(1)Disclosure of information	jurisdiction
		(2)network fatigue	Social capital
Crowdfunding opportunities	Benefits aside from raising funds that crowdfunding offers	(1)improve profile and reputation (2)form connections (3)learn new fundraising skills (4)expand awareness (5) market research/ market testing	-visibility -reputation -skills and knowledge -relations -added value of investors -market research
Quality of project	Perceived quality of projects by entrepreneurs and investors in information completeness and interactions with investors	guidance	-information display -interaction with investors -project examples -project video -usage of social media
Tools	Aside from providing projects with funds other crowdfunding options	(1)financial flexibility	-revenue mark -relation with investors -max. ROI
		(2)additional funding	-chance of additional funding
community	Platforms efforts in attracting (dedicated) investors		-risk analyses -screening -multiple business models -status and number of projects -reputation

Table 25: entrepreneur variables

### 3.2.4. Method of analyse

Different aspects of this thesis are analyzed. First of the most important variables are being described for certain variables and constructs. Thereafter responses will be analyzed based on awareness and crowdfunding area

#### 3.2.4.1. Measurements

Three measurement categories are being used in the questionnaires i.e. nominal, ordinal and ratio.

##### Nominal

Mostly questions in the beginning of the questionnaire are nominal and address issues like crowdfunding business model used, crowdfunding platforms invested on or projects placed on, pre-crowdfunding financing methods and additional funding after the crowdfunding period.

Furthermore questions at the end addressing gender and address are nominal measurement

### Ordinal

The main part of the questionnaire are questions which can be answered with statements ranging from strongly disagree to strongly agree or very unimportant to very important. With analyzing differences caused by awareness and area of crowdfunding this thesis can rank order these statement so that conclusion can be drawn that, for example, investors on crowdfunding platform A value trust less than investors on crowdfunding platforms B. This thesis can indicate that groups differ in their value perception however how much they differ is impossible to say because of the measures used (ordinal) (Allen & Seaman, 2007; De Veaux et al., 2008). The conclusion that can be drawn is that groups differ but how much "less" or "more" this represents is unknown. Ordinal measures are used in the questionnaire in typical likert items i.e. answer ranging from strongly disagree to strongly agree with a neutral answer in the middle where the sum of the answers on the questionnaires can be grouped together to form the response to one item (likert scale) (Babbie, 2007; Allen & Seaman 2007; De Veaux et al., 2008). One question represents a likert item which forms a likert scale for a concept as cost. Likert item and likert scale represent two different measurement where the former is ordinal and the latter is interval, because a mean is established by combining all the relevant likert items. Likert items will be analyzed by means of diverged stack charts and by indicating their mode and or mean because then they can be ordered according to their relevance for investors and entrepreneurs.

### Ratio

Questions in the beginning and end of the questionnaire are ratio i.e. how many times have you invested, age, target amount, number of days needed ect.

#### **3.2.4.2. Statistical tests**

The nominal and ratio questions are mainly used to describe the research sample, divide investors and entrepreneurs based on awareness and area of crowdfunding and finally can serve as control variables, or for investigating if previous literature and theory hold true for this research sample. The ordinal questions (likert items and likert scale) will be analyzed more thoroughly. Likert items will be compared (within the likert scale) based on mode and means of these items. Means of likert type items could reflect a incorrect representation of reality i.e. importance of variables. Likert type data is ordinal (very unimportant – very important) were indicating unimportant (2) is lower than important (4). However it can't be said that important is 2 times higher than unimportant, because no absolute distance has been allocated to these responses nor can these distances be calculated. And more importantly different respondents may view the distance between responses differently (Boone & Boone, 2012). Means however, although debatable, can be displayed but should be viewed (and drawn conclusions from) only in accordance with the diverged bar charts and the mode. Also non applicable as an answer will be shown because respondents can be positive, negative and neutral about variables but also indicate that these variables were not present with crowdfunding platforms (for example cost of investing) (Babbie, 2007; De Veaux, 2012).

### Chi square

For the likert type data chi square will be used, however if the counts in cells (statement of respondents in cells) is below 5 and this holds for multiple cells (>20%) than chi square is not accurate and strong enough to calculate the p value (Franke, Ho, & Christie, 2012). Therefore if this should occur than fisher exact test will be used which is a more confident method with low counts in cells to accurately reflect the p value (McDonald, 2014). Aside from the assumption that cell count

mustn't be lower than 5, and don't apply for more than 20% of the cells, the only other assumption is that chi square needs independence of observation. The perception of variables by investor and entrepreneurs mustn't interact with each other (De Veaux et al., 2008). For awareness this assumption will not be violated since investors or entrepreneurs can't be both. However for platform differences (crowdaboutnow-oneplanetcrowd) this assumption could be violated especially for investors who have invested on both crowdfunding platforms. Therefore these respondents should be omitted for this specific part. If assumption 1 (5 counts in more than 80% of the cells) is violated than fisher exact test will be used. Fisher exact test has also the assumption of independence which almost all test have and the assumption that rows and column totals are fixed (McDonald, 2014). This means that aware entrepreneurs/investors can't become unaware or vice versa and also can't change their perception on variables (very negative-very positive) during the test. For this thesis this assumption applies. And even if this assumption was violated then the test would be less powerful but still robust in that it doesn't create a type I error i.e. reject the null hypothesis whilst it is true (McDonald, 2014).

### Cronbach Alpha

<b>Construct (items) Entrepreneurs</b>	<b>items</b>	<b>Cronbach alpha</b>
Cost (4 items)	Investor updates Length of contract Length of crowdfunding Size of investor group	0.50
Control (2x2items)	Management control Business model control	0.83
	Co creation Wisdom of the crowd	0.74
Trust (jurisdiction) (2items)	Contract Platform regulations	0.83
Trust (social capital) (5 items)	Network	0.78
Crowdfunding opportunities (6 items)	Visibility Reputation Knowledge and skills Relations Added value Market research	0.72
Tools (financial control) (3 items)	Financial flexibility Revenue mark Max. ROI	0.53
Tools (Additional funding) (5 items)	Crowdfunding Platform Involvement of partners Bank involvement Bank backed up platform	0.72
Quality of project (5 items)	Guidance of platform	0.84
Community (6 items)	Risk analysis Screening Number of projects Status of projects Business models reputation	0.82

Table 26: Cronbach Alpha constructs

When the ordinal measure are grouped into constructs (interval) then Anova analysis can be conducted. Before this Cronbach's alpha will be used to test the reliability of the instrumentation in that we actually measure the construct by means of the items (Nunnally, 1978). Researchers have

argued that other methods such as item response theory will better measure internal consistency of constructs because Cronbach's alpha measures correlation and covariance between items and can be manipulated by means of adding additional items, creating high p values although the items doesn't belong to the construct (Sijtsma, 2009). Therefore even though constructs score p values of 0.7 or higher ( $\alpha$  of 0.7), this doesn't necessarily mean that the construct is acceptable in terms of reliability for research. Table 26 shows the Cronbach alpha for all constructs for entrepreneurs and investors. Level of 0.7 is argued to represent an adequate level of internal consistency (Santos, 1999).

It seems that most of the construct variables are above the alpha level of 0.7 except for cost and financial flexibility. Financial flexibility has a questionable alpha level of 0.6. Cost however is unacceptable with only 0.36 and therefore the likert scale won't be analyzed (likert items will be).

### ANOVA

If constructs have an adequate Cronbach alpha ( $>0.7$ ) than these constructs can be analyzed with ANOVA. ANOVA is a statistical model which analyses if groups differ in means. ANOVA is chosen because it is a robust statistical test where change of type I error is reduced, even if assumptions are violated or the research sample is small (De Veaux et al., 2008; Miller Jr, 1997). This thesis has a small research sample and therefore ANOVA instead of t-test will be used. ANOVA has more assumption than chi square which are.

**Assumption 1:** dependent variables should have interval or ratio measurement. This holds true for this thesis since likert items are grouped into likert scale making them interval.

**Assumption 2:** independent variable should be categorical and have two or more groups.

Independent variable in this thesis is categorical either being awareness (unaware –aware) or crowdfunding area (entrepreneurial –social). Furthermore this distinction creates two groups.

**Assumption 3:** independence of observation. This is the same as with chi square and fisher exact test and holds true.

**Assumption 4:** no significant outliers or residuals.

**Assumption 5:** Dependent variable should have a normal distribution for both categories of the independent variable.

**Assumption 6:** homogeneity of variances (De Veaux et al., 2008).

These assumptions were not all satisfied. Significant outliers were detected in the data and removed however this didn't alter the p values greatly. Furthermore not all constructs had a normal distribution. ANOVA test were still conducted because of the robustness of the statistical test even if assumptions were violated.

### **3.2.5. Validity**

First off, the question arises if this research will observe and measure what it wants to measure i.e. the 12 dependent variables for investors and entrepreneurs.

#### **3.2.5.1. Internal validity**

The greatest risk for the questionnaires is the threat of covariance explaining the relations and differences found between groups, for impact of awareness and crowdfunding area. In order to prevent this a number of control variables have been established. The crowdfunding sector is complex and diverse in terms of variables and accordingly this thesis has a number of control variables. The fact that within the crowdfunding platforms themselves (included in the research)



different business models, target amounts and type of investors (businesses, friends, fans ect.) are used further heightens the chance of falsely dismissing or allocating relationships between variables. Further difficulties arise because constructs themselves could have an indirect effect on each other and therefore results could dismiss or emphasize the positive influence of banking whereas this is not the case. For example investors could argue that the quality of project is important in order for a crowdfunding project to successfully reach its target amount. Does this however dismiss the influence of the crowdfunding platform in screening projects and guiding these. These factors of crowdfunding platforms could have a positive effect on the quality of crowdfunding project.

Instrumentation is also a threat to internal validity because at August 5 both questionnaires were altered in accordance with the request of platform in this sample, altering the last three questions. Because these questions will split investors and entrepreneurs into two groups: unaware and aware. The alteration of these questions could have had consequences for this research. The question initially asked entrepreneurs and investors if they were aware that their platform had a partnership with a bank. This question was changed to: are you aware that crowdfunding platforms have partnerships with crowdfunding platforms. Because the first question clearly states that the platform had a partnership with the bank, answering this questions positively would indicate that the investors and entrepreneurs are aware of this. However now the question has been reformulated into are you aware that crowdfunding platforms have partnerships. In this question one can't simply assume that investors and entrepreneurs know that the platforms they used are the partnership platforms.

Furthermore the likert type questions that are being used have their limitations in that they have biases. The largest bias is of course central tendency bias i.e. respondents may choose to avoid the extreme categories (very negative/very positive) and instead choose neutral in their answers. Aside from the central tendency bias there are two more biases that could arise: acquiescence and social desirability bias. Acquiescence bias is the bias in which respondents agree with the statement presented regardless of the content presented. If questions are positively phrased they might be more inclined to answer positively. This can be prevented by switching between positively and negatively phrased questions. The last bias, social desirability, is portraying yourself more favourable in questionnaires. Because most questionnaires deal with perception it could be that entrepreneurs will try to portray themselves more favourable, but because the questionnaires are anonymous this would achieve little effect (De Veaux et al., 2008; Garland, 1991). Lastly, constructs have been established using likert type data and were transformed into likert scale data, providing more reliability and strength in measuring differences. Cronbach's alpha has been used in determining if likert type data will measure the internal consistency of the construct(likert type scale) accurately. If a p value of 0.7 is obtained than we can assume that the items in the construct reflect the construct adequately. Cronbach's alpha has been argued by scholar to be falsely used as construct validity instead of the reliability of the instrument in measuring the construct. A high p value for Cronbach's alpha doesn't necessarily mean that the items reflect the construct it is composed of. It could measure different concepts within the construct (Sijtsma, 2009; Santos, 1999). Therefore high p values should be observed with this in mind.

### **3.2.5.2. External validity**

External validity can be hampered and this would lead to incorrectly generalising about the cause effect relation found in the research sample that doesn't apply (or only applies) to certain groups of

the populations on which the research sample was sampled (babbie,2007). First off conclusions about the perceptions of entrepreneurs and investors are based on a small sample (55 entrepreneurs & 80 investors) which were sampled from only 2 crowdfunding platforms. This could lead to a biased view of the preferences of investors and entrepreneurs, because only two crowdfunding platforms are analyzed and furthermore not many participants on these platforms have participated in the research. Furthermore these platforms, entrepreneurs and investors were not randomly chosen. The platforms were chosen because of the bank involvement present. The investors and entrepreneurs were selected on basis of availability (in terms of being able to find contact information) and willingness (agreeing to participate). This is especially the case for investors who can choose to invest anonymously. Only investors that were displayed using a public profile, invested and placed their e-mail address or had listed their company name were contacted. This could affect the generalization of the results because there is a higher chance in this research of having a skewed composition of investors. Only investors that have data registered that enables contacting them have been contacted, however one can argue that these investors are more professional investors i.e. people who own a business or use a public profile. This increases the chance that these investors have a business relationship with these projects. Reducing the number of investors that are friends, fans or family. The composition of this thesis could be skewed in that more investors that had a business relation with project are present in the data.

Furthermore because no “normal” crowdfunding platforms were included into this research the impact of awareness was included into this research. This was done to determine if awareness of bank involvement led to different views among entrepreneurs and investors. However there was only a small group of aware entrepreneurs and investors present (approx. 30% entrepreneurs & 15% investors), thus this further hampers generalization on this aspect of potential contribution of bank involvement. Lastly, as for analyzing the impact of the area of crowdfunding, again the small sample size and non randomization, can cause generalization problems. Only 1 crowdfunding platform of each sector (social –entrepreneurial) was present in the research sample. Conclusions drawn could therefore be biased because of the absent of other crowdfunding platforms of both sectors.

## 4.Results

This chapter will analyze the results of study 1: the motives of banks as well as study 2: contributions of banks to crowdfunding. 4.1 will describe bank backed up crowdfunding Seeds. 4.2 will analyze the questionnaires done by the entrepreneurs and investors. 4.3 & 4.4 will investigate the impact that awareness and the respective area of crowdfunding have on responses of respondents.

### 4.1. Study 1: Bank motives

4.1.1. will describe the results obtained from the interview about bank backed up crowdfunding platform Seeds.

#### 4.1.1. Bank backed up crowdfunding platform Seeds

Type	Minimum investment	Amounts	Crowdfunding period	Duration contract	Funded projects	Tarifs entrepreneurs	Tarifs investors	status
Financial (revenue sharing) + reward based	10	20,000-150,000	10 weeks voting + 10 weeks crowdfunding	Max. 10 years	7	300+5%x target amount	0.45	closed

Table 27: Characteristics of Seeds

Seed was created as a daughter company of a Dutch bank in 2013 which operated in the sustainable and social entrepreneurial crowdfunding sector (see table 27 for the characteristics of Seeds). The creation of Seeds seems to be in line with innovators solutions presented earlier in this paper. Bank has chosen to adopt the innovation by playing both games at once and Seeds constitutes the corporate venture that is established and structured outside the main company. This company imitates the disruptive technology and thereby learns it i.e. the second transformation according to Gilbert et al. (2012) or the explorative venture according to Tushman III & O'Reilly (1996) (Charitou & Markides, 2003; Gilbert et al., 2012; Burgelman, 1984; Tushman III & O'Reilly, 1996). Seeds however has done more than imitate the disruptive technology. Seeds was after all established after a pilot conducted with 300 entrepreneurs who indicated a value proposition that was attractive to them. Pilot indicated a gap between the actual performance of the disruptive technology and the desired performance by some entrepreneurs, hence indicating that a possible niche was found within crowdfunding platforms (Christensen, 1997; Christensen & Raynor, 2013; Van Otterloo, Corporate entrepreneurship: the story of bank-backed crowdfunding platform Seeds.nl, 13-5-2015). However in February 2015 Seeds was closed, ending the role of the first crowdfunding platform owned by a bank. What were the motives of the bank in creating Seeds and ultimately closing it?

#### 4.1.1.1. Crowdfunding motives

When asked why the bank had involved themselves with crowdfunding the interviewee said that this was done because of three reasons. Firstly, because some entrepreneurs, especially starters, were having difficulty in acquiring financing and " *You still want to help these parties or bind them to you*". Secondly, more people were active online and enjoyed helping others (projects) and financially gained from this. And lastly: " *We observed that the developments of the internet made it easier to connect parties, share content and also contractual issues were better to authorize which offered possibilities. And those issues together made us think that it would be interesting to offer this for SMB and starters*". The main motives for engaging in crowdfunding can thus be described as: corporate social responsibility and a unique value proposition with a hint of establishing relationships. The overall tendency of the bank is to help those entrepreneur groups that are having trouble acquiring funds by using an alternative financing form, because the bank observes that technology and human

tendencies are changing and this creates opportunities. Internet simplifies everything and more people are active online and invest by using crowdfunding. With these two main motives there is a hint of establishing relationships because the bank, of course, wants to bind these people to their company.

#### Unique value proposition: Form & Business model

First of what made Seeds unique was the fact that it was a bank backed up crowdfunding platform. Especially entrepreneurs were more aware of this aspect (investors might be less aware of this fact) and thus entrepreneurs could have a reassuring feeling. As the interviewee indicated: *“A lot of entrepreneurs had the feeling that if they had us that they would be part of a larger established financial party. My experience with entrepreneurs have been that they found this positive, because it gave them the feeling that were doing business with a party of which they have a certain image instead of parties which they didn’t know or knew less of”*. With Seeds, being part of a bank, entrepreneurs could have had a more reassuring feeling about the party on which they placed their project.

The reason for creating one’s own crowdfunding platforms instead of other options was due to the fact that at the time of creation there was a absence of potential partners in the crowdfunding sector. Most crowdfunding platforms, at that time, were young and only recently active. Furthermore the unique value proposition devised and the niche identified required one’s own crowdfunding platform in order to present this to investors and entrepreneurs. In doing so the crowdfunding platform was more actively engaged in crowdfunding: *“We thought that the proposition was optimal for both entrepreneurs and investors as well as allows the possibility of additional funding. So that were the reasons for creating our own platform because you are more active on the market”*. Aside from being a bank backed up crowdfunding platform Seeds had other unique characteristics, especially the proposition towards entrepreneurs and investors which was the a new business model.

The business model used by Seeds is unique, especially for entrepreneurs. The model employed by Seeds is a combination of financial and reward based models. The benefit of this business model is that entrepreneurs have more financial flexibility in the early stages of their business and throughout the financial contract (which could be up to 10 years). The financial flexibility is caused by the implementation of revenue marks, a maximum on the financial return and a long financial contract. Investors will get a financial return on their investment corresponding to a certain revenue mark. Each minimum investment (10) constitutes a right to have a part, which gives investors a right to have a financial payment or reward according to the terms provided by the entrepreneur. Projects will indicate their revenue marks in advance, and revenue marks will correspond to a certain financial reward (see appendix E). If company is unable to reach its revenue mark than no financial return will be given to investors. This will make sure that entrepreneurs have more financial flexibility because they can, in advance, indicate when financial returns are being made (when company is generating enough revenue) to investors. Furthermore the maximum on financial return (300%) will make sure that entrepreneurs don’t pay more than 3 times the financial investment made by investors. This will minimize the crowdfunding cost for these entrepreneurs in terms of financial payments to investors. Entrepreneurs can alter the max. on financial return (<300%) to take into account the varying degrees in which projects have a social and financial component. Lastly, the long contract of 10 years was established to protect investors, because it could take awhile before projects reach their first

revenue mark leading to a financial return to investors.” *We must make sure that the investors are protected and make the contract period as long as possible. All right, if you (as an entrepreneur) choose for this then we will want to see your annual figure for the next 10 years until the conclusion of the contract to make sure that written obligations to investors are uphold”.*

#### Corporate social responsibility: Area of crowdfunding

The sector in which Seeds operated was entrepreneurial, and more specifically social entrepreneurial. Because the platform wanted to help parties that needed financing, and the proposition they offered obligated the entrepreneur to give investors a return on their investments, the non profit and charity sector would be difficult to operate in. Why was the social entrepreneurial sector chosen? Interviewee clarified that:” *We thought it was important that the entrepreneurs were focused on a social issue. Because we thought it was important that these parties had the opportunity to get financing in order to grow and because we expect that these types of parties have more of a support base in society and hence have a higher chance of getting financing through means of crowdfunding”.* The other motive specified earlier, the unique value proposition, required a crowdfunding sector where the unique value proposition was optimal for both entrepreneurs and investors (and more importantly were entrepreneurs could give investors a financial return). Furthermore because of the business model (financial flexibility) the platform needed a sector where investors weren’t solely motivated by a financial return. The unique value proposition alone however does not explain why the social entrepreneurial sector was chosen instead of the general entrepreneurial sector. Therefore the motive to venture into this crowdfunding area was based on the notion of social corporate responsibility in that these parties should have the opportunity to get financing. Mixed in with this motion is the fact that these parties were expected to receive more funding through crowdfunding because of the social issues involved in the projects and the higher expected support in society. Lastly, the unique proposition that Seeds offered required a distinct crowdfunding area which became the social entrepreneurial sector. In doing this social entrepreneurs (corporate social responsibility) that were using a commercial business model(unique value proposition) and were likely to get enough support and financing (feasible)were funded.

#### Establishing relationships: additional funding

Aside from the two main motives identified in the interview (unique value proposition & CSR), side motives were establishing relationships and knowledge acquisition. By providing social ventures a platform to collect their funds the idea was that crowd funded projects could receive additional funding at the mother company, the bank. Ultimately, none of the companies that were crowd funded at Seeds received additional funding at the bank, but of course this was one of the purposes of the crowdfunding platform. Reason for no additional funding provided to companies could be that entrepreneurs themselves acquired additional funding elsewhere, as was the case with one of the projects, or because projects are still in their early phase (requiring no additional funding yet). The fact that two of the companies crowd funded went bankrupt leaves few projects left that could apply for additional funding.

#### Knowledge acquisition: Closing Seeds

After successfully crowdfunding 7 projects Seeds closed down in 2015, ending the appearance of the first bank backed up crowdfunding platform. Seeds, according to the interviewee, was an experiment and valuable lessons have been learned which will be analyzed and which might be used in the future. The reason for stopping Seeds was:” *After the pilot we tried it again for a year and stopped*

*because it is difficult to achieve scale. What you will see with a lot of crowdfunding platforms is that you need a lot of starting time to scale up and that you need scale to have, eventually, a profitable business''.* Because scale wasn't presumed to arise in the near future the operations of Seeds were shut down ,however valuable lessons have been learned. First off the unique proposition that lead to the funding of 7 projects was deemed to be a success because the proposition worked. Furthermore the bank, in doing this experiment, has identified the potential roles they could play in crowdfunding and has conducted one of these roles i.e. own crowdfunding platform.

The other lessons learned were: *"We have gained experience with crowdfunding cases, we learned that entrepreneurs need a lot of time and it cost them a lot of energy to get financing by means of crowdfunding. Furthermore we noticed that it is a challenge for a platform to scale up"*. The problem with scale is related to the findings that entrepreneurs need a lot of time and energy to successfully complete a crowdfunding project. Seeds was aware of the s curve described by Kuppuswamy & Bayus (2013) in that investors have a reduced diffusion of responsibility after the initial stage and only in the final stage will investors again feel responsible for the success of the crowdfunding project. Or as the interviewee described it: *"So in the beginning you have a peak in funding and halfway through this falls fast and at the end there again is a peak"* . Because of this entrepreneurs received a lot of guidance in how to successfully conduct a crowdfunding project." *We had multiple conversations with entrepreneurs before they even started at the platform. So we had multiple months in which we sat together with the entrepreneurs, what is the proposition that you are offering? How are you going to get enough funding?, how are you going to utilize social media?, which content are your going to display on your page?"* . Of course entrepreneurs were free to decide this on their own, what proposition they wanted to offer to investors but at the same time were guided in how to do this. This of course (extensive guiding) all prohibited the organization, aside from other factors needed to acquire scale, from getting the needed scale to be profitable. Although Seeds has stopped its operations important lessons were learned and the bank wants to continue its role in crowdfunding. How however is still unknown.

#### Summary: Motives

Overall the two main motives for involvement in crowdfunding were the need to give social entrepreneurs a kick-start because these groups were having trouble acquiring funds (corporate social responsibility). Seeds did this in the form of its own crowdfunding platform because of the absence of suitable partners and because in this way it could present its unique proposition to investors and entrepreneurs (unique value proposition). In pursuing these two motives the side goals were establishing relationships and knowledge acquisition. Because Seeds was more active on the market and tried to establish relationships with entrepreneurs (additional funding). The second side motive is that the bank in experimenting with Seeds and crowdfunding gained a lot of experience and learned valuable lessons even although the program was stopped

#### **4.1.2. Partnerships with crowdfunding platforms**

Crowdfunding platform seeds was an initiative of a Dutch bank which was mainly established ,because of a sense of corporate social responsibility and providing entrepreneurs with an unique value proposition. This form of venturing, one's own crowdfunding platform, was a very active form of engaging in crowdfunding. Another bank, present in this research, ventured differently into crowdfunding by means of partnering up with two crowdfunding platforms. A recent event with this bank is the partnership that it has with an initiative of Douw & Koren. This initiatives provides more

transparency towards entrepreneurs about the different crowdfunding platforms that are present in the Dutch crowdfunding sector. The partnership that the bank has with the two crowdfunding platforms seems to follow the theory of Charitou & Markides (2003) in adopting the innovation by playing both games, as was also the case with Seeds. However the banks under analysis differ in how they have implemented the innovation. Seeds was in line with corporate venture theory, but the partnerships with the crowdfunding platforms seems to follow joint venture theory. The partnerships that the bank had were started three years ago. What were the motives of the bank in venturing differently into crowdfunding by means of partnerships?

#### **4.1.2.1. Crowdfunding motives**

The different forms in which the banks engaged in crowdfunding could be due to the difference in their perception of crowdfunding (as a threat or possibility), but also due to the underlying motives that they had. The partnerships were undertaken mainly because the bank wanted to find out what crowdfunding entailed and what possibilities it offered to parties. *"We started I believe three years ago, I think, because it is an upcoming phenomena which was a way in which financing could be provided. Especially at the bottom end of the commercial market and we wanted to have a better understanding of this"*.

##### Knowledge acquisition: Partnerships

The bank thought that creating its own crowdfunding platform, just for the sake of learning about the crowdfunding sector, would be costly and would create a lot of hassle. Especially since learning was already deemed as a costly aspect. The interviewee indicated that: *"Three years ago there were already a lot of crowdfunding platforms present and these have only grown larger in numbers. If you really want to learn something that it is better to do this by means of partnering up rather than establishing your own platform in the market"*. The bank wanted to learn about the different element that make up crowdfunding which entailed crowdfunding itself as well as the demand and supply side. The bank was interested in the aspects of the demand side i.e. what starters are attracted by crowdfunding and in which segments are they situated. Furthermore how do crowdfunding gauge which projects to place on their crowdfunding platform, because: *"it was suggested that all companies would be displayed on the platform. But this isn't the case"*. So crowdfunding platforms have a screening process in place and the bank wanted to know which projects were deemed suitable for crowdfunding by the platform and how they analyze the risks involved. This is important because the margins in crowdfunding are low, according to the interviewee, thus a crowdfunding platform has to be efficient in which projects it places on its crowdfunding platform. Furthermore the bank wanted to know how crowdfunding works and what models there are. Lastly, it wanted to learn about the supply side of crowdfunding i.e. who are the investors that participate in crowdfunding. The learning process helped the bank determine how you want to position yourself towards crowdfunding, especially since the bank had additional financing options in place that were aimed at the start up phase (valley of death) of new start up ventures.

##### Corporate social responsibility: Crowdfunding platforms

Why were, of all the crowdfunding platforms available to the bank, these crowdfunding platforms chosen to partner up with. First off, the bank indicated that the bank had different relationships with the crowdfunding platform. The bank only had one "real" partnership with a crowdfunding platform. The other partnership was more a ,so called, friendly relationship. The motive for partnering up with this platform was due to its size and because it operated in the social crowdfunding area. *"It really*

*concentrates on impact ventures, a bit of corporate social and sustainable companies, and this resonates with us as a bank. Because we are social corporate bank''*. The second reason, was already described at knowledge acquisition, which was the additional financing methods in place that operated in the same area in which the platform crowd funds. The platform was also aimed at start up ventures or projects with a sustainable, green or innovate nature for which the bank also had financing options in place. The platform thus served the same goal, and companies, as the bank (business unit of the bank) which would increase the purpose and usability of learning about crowdfunding in this sector. Because the goals of the platform and bank are similar in this aspect, help new impact ventures, this thesis assumes that CSR was also a role in venturing into crowdfunding. Or at least in partnering up with this specific crowdfunding platform because they both had a shared goal in trying to help impact ventures get funded. It could however be that the above described is furthermore an aspect of knowledge acquisition.

### Summary motives

Overall the main motives were knowledge acquisition and CSR. The motive knowledge acquisition explained why the bank ventured into crowdfunding, why this was done through partnerships and why the platform(s) were chosen. The bank indicated that it was too costly to venture into crowdfunding by means of creating its own platform and furthermore there were enough platforms available with which to partner up. Another motive which explained the platform with which it teamed up was the fact that the platform was aimed at impact ventures. The bank perceives itself as a social corporate banker so this explains why this platform was chosen because both businesses can be argued to share the same identity and goal towards innovative start up ventures.

## **4.2. Study 2: Contribution to crowdfunding platform success factors: interview**

The interview held with banks didn't only indicate why banks reacted to crowdfunding but also highlighted which aspects of crowdfunding success factors were influenced by bank involvement.

### **4.2.1. Bank backed up crowdfunding platform Seeds**

The crowdfunding platform success factors in the literature review were identified as openness, jurisdiction, crowd sourcing, tools and community (Mishra & Koren, 2011). How did Seeds affect or made a contribution to these factors. As for openness no information can be provided. The other success factors were, in varying degrees, contributed to. This section will investigate if Seeds, based on interview and information provided on website, could reduce transactions cost found in crowdfunding or reduce transaction cost better than other similar platforms. It is uncertain whether Seeds contributed towards crowd sourcing, community and jurisdiction. With crowd sourcing the platform only advised entrepreneurs to use investors in order to fulfil their goals and test products but didn't have any platform characteristics to further enable this. As for community, only the interview can provide data on this since no investors were contacted. Given the fact that the relations with the investors were indirect the interviewee couldn't answer this questions thus this thesis can only assume that investors valued the contacts, processes and IT (jurisdiction) since they are believed to be solid. Interviewee furthermore couldn't tell if the jurisdiction on platform differed from that of other platforms. This thesis therefore assumes that these success factors were not greatly improved or that it is uncertain whether success factors were affected. Only aspect of success factors where Seeds had a clear role was quality of projects (guidance) & tools. In case of Seeds tools are business model, crowdfunding period and additional funding.



#### **4.2.1.1. Quality of project**

Quality of projects are maintained and uphold by platforms by means of screening, guiding entrepreneurs (and with some platforms offering risk analyses). In this way platforms can screen projects that they perceive to be of quality and furthermore guide them in how to indicate their quality to investors and conduct a successful crowdfunding project.

#### Voting mechanism

Entrepreneurs have 10 weeks to collect votes from people from their network. Voting is a form of screening that gives an indication (from the crowd) if there is a predisposition to fund this project. Voting indicates how many possible investors there are and how many the entrepreneur can contact. Furthermore it protects the entrepreneur from himself.” *It is important for the entrepreneurs to have been told and heard from people that they find their company interesting and want to invest before they actually invest. Furthermore it was an important means for us to show entrepreneurs ,and to make them prove, that they had enough support for their product”*. The benefit of this is that the entrepreneur reassures itself and the platform that it can find enough supporters for its project and furthermore it can line up potential investors once he begins collecting funds. If this stage is completed, with enough votes collected in said time, than the actual crowdfunding period of 10 weeks starts. Entrepreneurs weren’t too fond of this mechanism since they had to contact investors multiple times i.e. first to collect votes and then to collect funding. However as interviewee stated: *“We noticed that the entrepreneur asks people in their network up to 5 times before they invest”*. Voting thus didn’t create that much of a nuisance for investors or obstacle for entrepreneurs since investors need to be contacted multiple times. Transaction costs can be argued not to have increased for entrepreneurs in the form of search and bargaining costs (caused by spending time contacting investors about voting and investing) ,because these have to be contacted multiple times anyway. Voting system thus doesn’t increase the transactions cost for entrepreneurs. However transaction cost would be higher for investors since they have to invest two times i.e. vote and thereafter invest on the project. This could deter investors from beginning the project since you can’t invest immediately. Transaction costs are thus on one hand increased because frequency of transaction increases for investors. They have to vote and invest instead of only invest. Uncertainty however is reduced about projects for both platform, entrepreneur and investors. There is asymmetric information between entrepreneurs and investors and to some degree between entrepreneurs and the platform. The voting system, as a way of screening projects, will allow projects of high quality to signal their quality because they are able to collect enough votes and begin their crowdfunding project. This will indicate to investors, platform and entrepreneurs that there is enough support base for this project. Therefore adverse selection is being reduced because projects of high enough quality will collect their required votes.

Overall the screening method is beneficial because it acts as a screening method, lines up potential investors, reassures both entrepreneurs and the platform of the feasibility of the project, and cuts off a significant amount of time of the crowdfunding period.

#### Guidance

Seeds guided their entrepreneurs extensively from the moment they signed up to the end of their crowdfunding period. *“We had a whole register set-up for the entrepreneurs that stated where they should pay attention to”*. The guidance was needed because, according to the interviewee, it is difficult for entrepreneurs to collect funds through crowdfunding. If this is the case than there is

information asymmetric between entrepreneurs and investors and projects are unable to signal their quality to investors. Platforms thus in guiding entrepreneurs reduce transaction costs because projects are being told how to mobilize their network and display information, in doing this better signalling their quality and mobilizing their social capital. However in doing so the transaction costs of platforms are increasing because they spend a lot of time guiding entrepreneurs which, in the case of Seeds, prevented them (as well as other factors) from achieving scale. It seems that in terms of scalability offering intensive guidance to entrepreneurs will lower their transaction costs (reducing information asymmetric to investors) but will heighten that of the platform (bargaining costs with entrepreneurs + monitoring costs). Achieving scale is difficult in the crowdfunding sector, evident in the high amount of platform with few projects financed, and therefore it is questionable if bank involvement could reduce transaction costs in the form of bank backed up crowdfunding platform since entrepreneurs and investors will expect more of these parties. Guidance however did contribute to the fact that all projects received funding at Seeds.

#### Risk analyses

Seeds will give no guarantees towards investors about the probability of success of projects and neither does it give risk analysis to investors about projects, like geldvoorelkaar. No risk analyses were made by the platform:” *Because the actual investment and the risk of investing is solely upon the investors themselves and this was clearly communicated on our website. So even if it is part of a bank and we present these companies on our platform this doesn’t implicate that all ventures have gone through a quality check and that they all are safe and guaranteed investments so to speak. They are all investments with a high risk”.*

#### **4.2.1.2. Platform success factors: Crowd sourcing**

What did Seeds offer in terms of providing investors and entrepreneurs with the opportunity, to create products services together. Although Seeds didn’t build in crowd sourcing options into their platform they did emphasize to entrepreneurs to use the crowd in order to fulfil their goals and test their products. Interviewee mentioned that one of their projects had held a cooking session together with investors to test their new products. *“You can stimulate it but you can’t force it and you can build in all kinds of technical things on your website but the main thing is to make entrepreneurs conscience about their investors. That they don’t see them as just plain money but more as ambassadors of their company who would like to contribute and that you connect these two parties”.* With crowd sourcing the platform only advised entrepreneurs to use investors in order to fulfil their goals and test products but didn’t have any platform characteristics to further enable this.

#### **4.2.1.3. Platform success factors: Tools**

Tools were described as elements that satisfy other aspects of crowdfunding aside from providing projects with the necessary funding. The business model described provided entrepreneurs with more financial control at the start of their the project and throughout their financial contract with investors. Furthermore because Seeds was bank backed up projects could have had the possibility of receiving additional funding at the mother company. Aside from this Seeds had a less lengthy crowdfunding period than other platforms, a pre crowdfunding voting scheme, extensive guidance but no risk analyses (like geldvoorelkaar).

#### Business model

The business model provided entrepreneurs with more financial flexibility. This would reduce uncertainty among entrepreneurs, whether they will be able to meet all the financial obligations at

the start of their companies existence. Furthermore as is described in appendix E, entrepreneurs give detailed information about the companies perception on how fast they will generate revenue under different circumstances (this is important because of the revenue marks) and when they will give investors a return on their investments. This way, openness and transparency is provided towards investors and gives a clear representation of the company and their perception. This helps because frictions early on are prevented and investors get an idea how companies will spend their funds and how they themselves perceive their company in terms of future growth and revenue. This could reduce transaction costs in the form of monitoring costs for investors since information is more clearly provided. This however is necessary since crowdfunding on Seeds is different than on other crowdfunding platforms (because of the possibility of no financial return). This however increased the monitoring costs for Seeds since in some scenarios they would have to monitor annual figures of companies for 10 years in order to determine if companies uphold their end of the bargain with investors. Policing costs can be argued to have decreased by the business model (for entrepreneurs), because they were bound by a contract that they could more easily uphold to investors (since they themselves specified under which circumstances financial returns would be given). With normal business models entrepreneurs would have to pay financial returns regardless of their financial situation. However with other crowdfunding platforms entrepreneurs also specify the amount and height of the financial return, just don't have the revenue marks or maximum on financial return. In terms of transaction costs it is questionable if the business model of Seeds reduced this more than that of other crowdfunding platforms. It did however provide entrepreneurs with a lot of financial flexibility.

#### Crowdfunding period

Crowdfunding period is only 10 weeks, shorter than on most other crowdfunding platforms. The crowdfunding period at Seeds was shorter compared to other crowdfunding platforms, because: *"The entrepreneur is busy with collecting financing but also has his company. This should come first. And it is very difficult to be occupied with collecting financing for a long period of time. You can't do crowdfunding half-way. So we said lets shorten the time period so the entrepreneur has more focus on the campaign but he still has 2 months in which enough people can invest"*. The crowdfunding period is also shorter due to the voting period of 10 weeks which entrepreneurs first have to complete. If voting fails than entrepreneurs, platform and investors have wasted only 10 weeks of their time, whereas if voting succeeds entrepreneurs have 10 weeks time to collect funds which is shorter than most other crowdfunding platforms. This way they have more time to focus on their business and at the same time collect their funds.

#### Additional funding

Transaction costs in this aspect could have been reduced because uncertainty about additional funding is being reduced. Entrepreneurs can assume that after the crowdfunding period additional funding can be sought with the mother company. This didn't happen but was hoped for. This could have sped up things because the bank would already have known the track record established by crowdfunding and the business plan of the company. This way search, information and bargaining cost between parties could have been reduced later on if additional funding was sought by entrepreneurs. The question remains if this would be the case since the absence of a large sample with Seeds and the willingness of entrepreneurs to seek additional funding with the bank.

#### **4.2.1.4. Community**

Community is all about creating a dedicated investor group on your platform that will invest on projects simply because they are displayed on the platform and the supportment of these investors by the platform. Because Seeds only completed a few crowdfunding projects and the relationship with investors was indirect the interviewee can't say how investors looked at a bank backed up crowdfunding platform. *"We had less contact, of course, with them. Because the investors invest online so I find it more difficult to tell. But I believe that investors, when they saw that it was part of a bank, at least had the feeling that the processes and contracts and all that kind of stuff and the platform IT technical were all solid. And the investors have ,probably, appreciated the side issues that were well and professionally organized".*

#### **4.2.1.5. Jurisdiction**

In terms of jurisdiction, the laws and regulations on the crowdfunding platform, interviewee couldn't tell if the crowdfunding platform differed from others (in terms of jurisdiction). Interviewee however indicated that the quality of the processes and contract was very important for Seeds and in this aspect a large investment had been made, where the contracts were designed by a law firm. As for jurisdiction it is uncertain if Seeds thus contributed to the crowdfunding sector.

#### **4.2.2. Partnerships with platforms**

The partnerships between the bank and crowdfunding platform were mainly aimed at, and constructed for the sole reason of, acquiring knowledge about the crowdfunding sector. Furthermore no actual KPI were in place between the partners. Although contract were in place the partners weren't obligated to direct clients to the other party. *"Look the contracts were established legally. But it wasn't so that, which was one of your questions, that these were bounded by KPI. This isn't necessary if you want to learn so we pursued a qualitative goal rather than a quantitative goal".* This construction, were it in place, would have had its implications, which will be described in screening and additional funding. Furthermore, Rabo bank didn't emphasize the partnerships that it had with the crowdfunding platform, because *" Learning was the most important goal and labelling it would only distract from this".* Lastly, investors and entrepreneurs were not informed about the partnerships that the crowdfunding platforms had with the bank, reducing the chance of additional funding.

The partnership didn't contribute on many aspects of crowdfunding because of the aspects described i.e. learning main motive, no KPI in place and not emphasizing the partnerships. Seeds being a more active form of engaging in crowdfunding, logically, influenced more directly crowdfunding success factors (or could have provide much more to crowdfunding) than the partnerships. The partnerships did however lead to improvements (to some degrees) on crowdfunding success factors which were: openness and transparency, screening and financial products. These contributions however all had its limitations.

##### **4.2.2.1 Quality of project :Screening & Risk analyses**

The bank didn't provide any screening or risk analyses directly to the crowdfunding platform since they themselves wanted to do this. Furthermore crowdfunding mostly involves the funding of new start up ventures and the bank believed that it could provide more, on these aspects, if it involved more mature firms. Some form of screening however was provided because entrepreneurs were directed towards crowdfunding, as a way in which they could fund their company. However this was according to the interviewee: *" A sensitive matter, jurisdictionally. So you can't advise them because*

*then you would have obligation towards those entrepreneurs, duty of care. But you can of course point out to people that crowdfunding exists".* By pointing out that crowdfunding exist entrepreneurs were more helped in how to employ different funding types in order to fund their capital needs. Furthermore banks, although they don't direct to a specific crowdfunding platform, will advise entrepreneurs if they think that crowdfunding could be a suitable solution for their problem.

This learning process that the bank had with the crowdfunding platforms eventually led to the partnership that the bank had with Douw & Koren. This partnership was also beneficial for crowdfunding platforms as a screening method, although at first these actions would seem to contradict each other i.e. both partnerships with a specific platform and Douw & Koren which provides independent advise. However these partnerships were undertaken with somewhat different motives in mind and no KPI were in place. The bank thus wasn't obligated to direct clients to a specific platforms. Furthermore the entrepreneurs would be better off by a independent advise." *If you look at the needs of clients in terms of financing then they will want a more broader view than just one crowdfunding platform".* This is also in the best interest of the platform itself because: *"It acts as pre screening for crowdfunding platforms. Thus they will receive better leads".* Crowdfunding platform will, hopefully and logically, receive less applications of entrepreneurs that are not suitable for the platform. In this way uncertainty within the crowdfunding sector is reduced as well as information, search or bargaining costs. This due to the fact that crowdfunding platforms will, theoretically, waste less time with projects who turn out to be not suitable for their platform. Their own screening in place will therefore have to deal less with transaction costs made with projects who turn out to be not promising for the platform.

#### **4.2.2.1. Platform success factors: Openness and transparency**

Openness and transparency was mainly improved because the bank experimented by taking on the role of a financial advisor or manager. By partnering up with crowdfunding platforms the banks were able to learn more about crowdfunding and could thus advise entrepreneurs better in how they can fund their projects, if the bank itself was unable to provide this. By partnering up with crowdfunding platforms, banks could provide more openness and transparency about the crowdfunding sector to entrepreneurs. The interview stated that: *"It is a way in which we can direct clients. You are in need of financing which we can't supply, but we will make sure that you are helped towards a crowdfunding platform.* This activity, partnership with the crowdfunding platform, furthermore contributed to another joint initiative undertaken by the bank with Douw & Koren already previously described. This initiative provides entrepreneurs with clarity and openness about the crowdfunding sector which is diverse and complex. Douw & Koren tries to provide entrepreneurs with independent advise about which crowdfunding platform is most suitable for entrepreneurs in order to fulfil their capital needs. In this way both initiatives of the bank (partnering up with crowdfunding platform and initiative of Douw & Koren) helped reduce transaction costs within the crowdfunding sector, and specifically for entrepreneurs. Search and information costs were reduced because the crowdfunding sector was made more uncomplicated. However the advising role of the bank in directing entrepreneurs to crowdfunding platforms was indicated to sensitive, juristically speaking. With this , duty of care, it remains to be seen if partnering up could lead to more openness and transparency, because every bank could of course point out the existence of crowdfunding (without the need for partnerships)

#### **4.2.2.3. Platform success factors Tools**

Partnerships did contribute to platforms success factors tools i.e. additional funding and financial products.

##### Additional funding

Crowdfunding is a interesting way for both crowdfunding platforms and banks. Banks receive a lot of request from companies for financing which can't all be satisfied. The bank can indicate that crowdfunding exists and could be a option for these companies in acquiring their financing. This would prevent promising companies from failing, because they were unable to get financing. *"Vice versa, the same story. Suppose you've done crowdfunding, became mature and want to grow even further then you can relay this to the bank"*. Mature firms could get their additional funding at the bank after crowdfunding has been done. However the partnerships that the bank had with the platform weren't advertised (main motive learning), no KPI were in place and projects crowd funded weren't actively informed about the bank. Therefore it is questionable if additional funding has taken place because of the partnerships.

##### Financial products

Unexpected, and positive, occurrence with the partnerships was that financial products were established by combining crowdfunding and banks in financing projects. This however creates potential problems which could overshadow the benefits of these constructs. According to the interviewee: *" this is a delicate construction and it isn't a done deal yet. This because funds provided by crowdfunding, in theory, are subordinated to loans. This could create tensions if the start up goes bankrupt"*. Bank involvement by providing financial products could therefore do more harm than good if it could lead to different claims when bankruptcy occurs.

#### **4.2.3. Summary: Reducing transaction costs by bank involvement**

Can bank involvement reduce transaction costs present in the crowdfunding sector?

##### Bank backed up crowdfunding platform

Bank backed up crowdfunding platform Seeds did lower some transaction cost by means of their business model, voting system, small crowdfunding period and by means of guidance but these aspects also increased the transaction costs that the platform had to make (although entrepreneurs and investor costs were reduced). In the end Seeds was stopped because of the difficulty of achieving scale ,this would lead to assume that Seeds couldn't overcome the transaction costs that it needed to make in order to continue its operations i.e. other crowdfunding platforms that already achieved scale are more suitable for crowdfunding. Therefore it is questionable if bank involvement in the form of one's own crowdfunding platform can reduce transaction costs or do this better than other crowdfunding platforms. First of large investment (jurisdiction and contracts) have to be made, and were made by Seeds in order to operate a crowdfunding platform, so if banks want to involve themselves actively (as a crowdfunding platform) than establishing one's own crowdfunding platform is plausible given the investment needed to do this. Furthermore scalability is a issue with crowdfunding. Lastly, seeds was able to successfully crowdfund all their projects displayed (7), however 2 of these companies have gone bankrupt leading to investors not receiving their financial returns. Seeds was thus able by means of screening and guidance to get their projects successfully crowd funded, in so they successfully contributed to crowdfunding project success factors (quality of project, social capital, interaction with investors) and reduced transaction costs (adverse selection). However 2 companies went bankrupt, and even if the platform has indicated that risk of investing is

solely upon investors themselves, parties could look at the platform for compensation because it is owned by the bank. Investors might feel that the bank is still responsible, solely because the bank owned aspect is present. Furthermore the bankruptcy questions the business model used (revenue marks +long crowdfunding contract), expertise of platform (screening) and monitoring role of the bank (moral hazard of entrepreneur), because ultimately the companies went bankrupt.

#### Partnerships

Less contribution were made by the partnerships but this wasn't the main motive, there were no KPI in place and the partnerships weren't advertised. Contributions were made to the crowdfunding sector by offering more openness and transparency by partnering up with crowdfunding platforms and the initiative of Douw & Koren. Overall reducing uncertainty and information costs for many parties whether they were entrepreneurs or crowdfunding platforms. Furthermore pro financing constructs were unexpectedly created when partnering up and although they could present usefulness (by combining the best of both worlds) they could increase transaction costs. This because of the different financing forms and consequences if the company goes bankrupt.

#### **4.3. Study 2: Potential contribution to crowdfunding success factors: Questionnaires**

4.3. will analyze the questionnaire distributed to investors and entrepreneurs. This section is divided into 4.3.1. stating the response rates among investors and entrepreneurs, 4.3.2. indicating the most important variables which influenced investor and entrepreneurs to partake in crowdfunding (platforms) 4.3.3. will summarize these findings since these were the main reasons for partaking in crowdfunding. 4.3.4, 4.3.5 & 4.3.6 will analyze trust for investors & entrepreneurs, project success factors and platform success factors. Last two paragraphs (4.3.7. & 4.3.8.) will analyze the impact that awareness and the crowdfunding area had on variables used in this study. For general information pertaining crowdfunding models used, pre crowdfunding financing methods, number of projects placed, number of times invested ect. of entrepreneurs and investors see appendix F.

##### ***4.3.1. Response rate***

Of the 260 entrepreneurs contacted to fill out the questionnaire 66 replied. Response rate for this survey is 25.4% following the logic of establishing the response rate based on only the number of contacted respondents and number of responses. Of these 66 entrepreneurs that responded 52 completed the questionnaire giving a dropout rate of 21.2%, probably due to the length of the survey or the technicality of the questions.

Of the approximately 500 investors contacted to fill out the questionnaire 109 replied. Response rate for the investors was 21,8%. Of these 109 investors 74 completed the whole questionnaire whilst 35 dropped out at different questionnaire groups. Dropout rate of investors was 32.11%. The investor questionnaire was much shorter than that of entrepreneurs but a lot of investors didn't complete the questionnaire either because of the length or technicality

##### ***4.3.2. Choice of platform: Importance of variables***

Entrepreneurs and investors had to indicate what factors determined either the fact that they placed a project on a crowdfunding platform (entrepreneurs) or why they financed certain projects (investors).

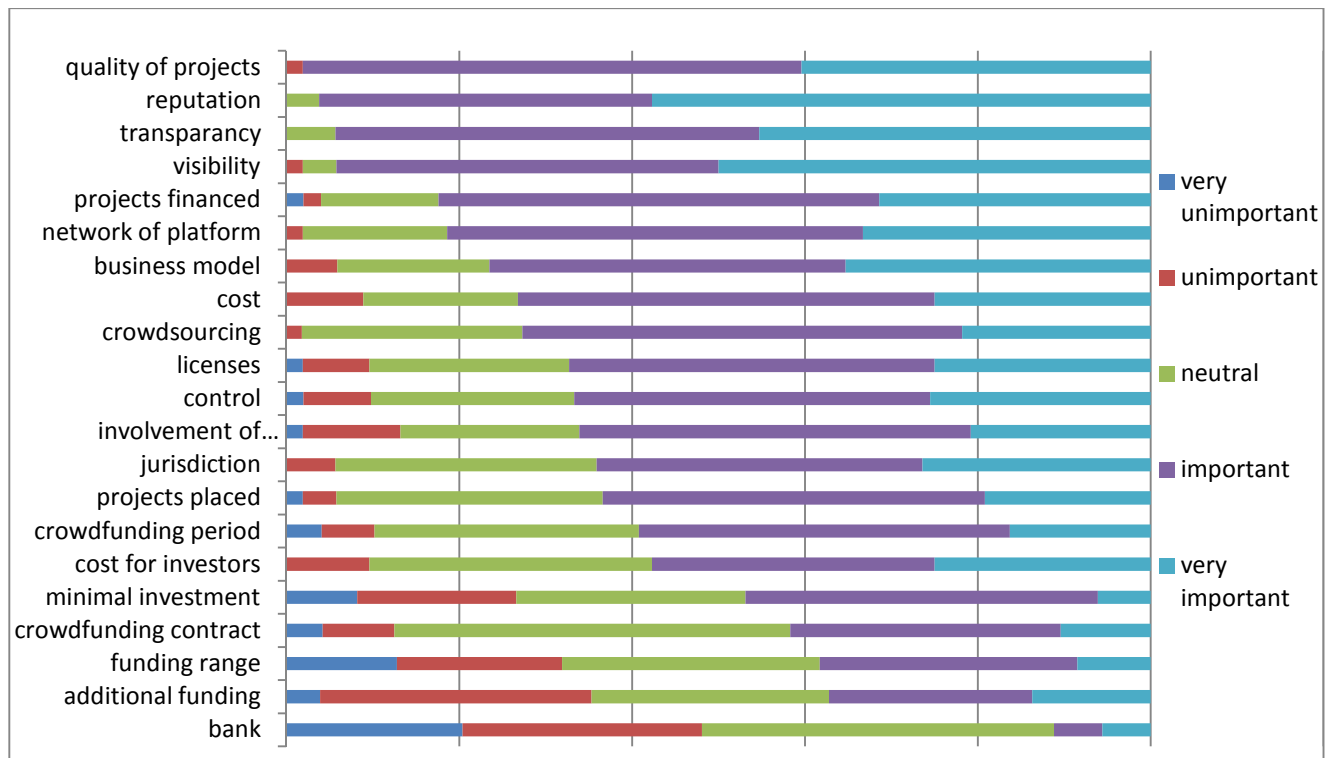


Figure 10 : entrepreneurs

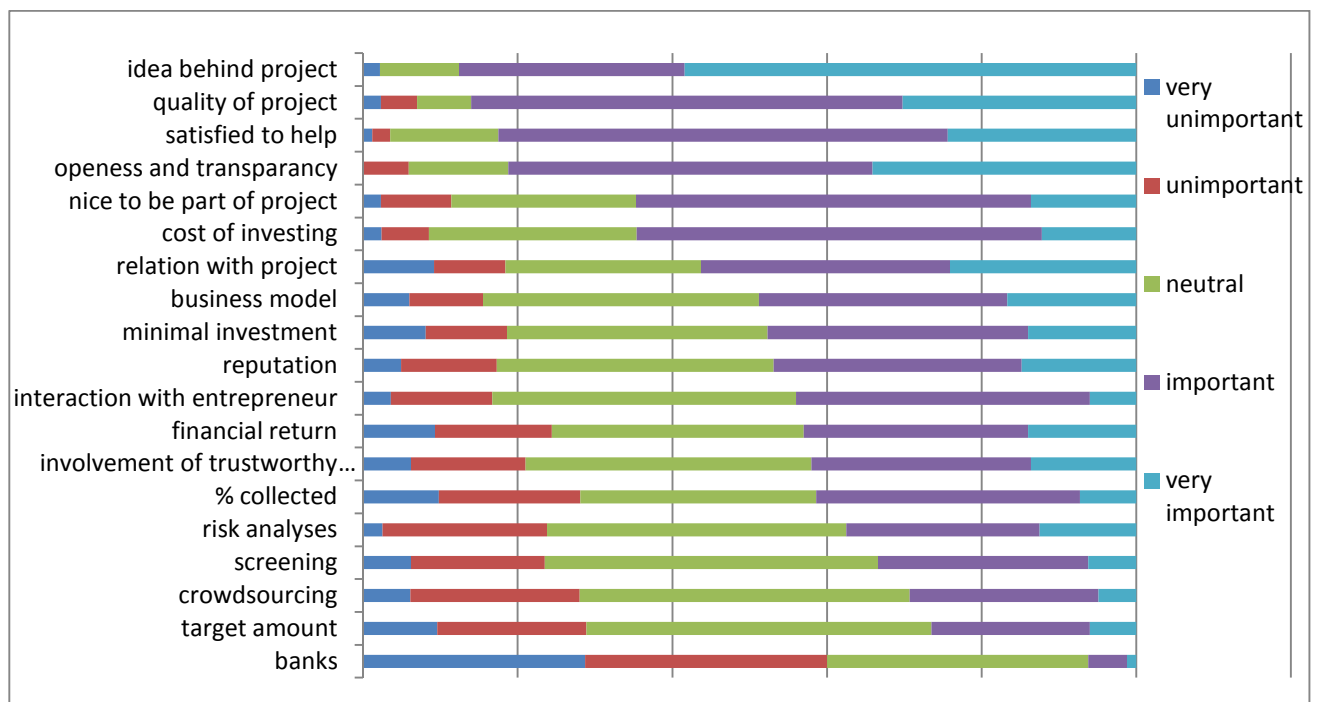


Figure 11: Investors



Entrepreneurs	Mode	Mean	n/a
Reputation of platform	5	4.54	6%
Visibility of platform	5	4.42	6%
Transparency of platform	4	4.40	4%
Quality of projects	4	4.37	6%
Network of platform	4	4.13	2%
Number of projects financed	4	4.08	8%
Business model	4	4.06	9%
Crowd sourcing/ interaction with investors	4	3.93	2%
Costs of crowdfunding	4	3.89	0%
Jurisdiction of platform	4	3.85	2%
Licenses of platform	4	3.81	6%
Amount of control	4	3.80	8%
Number of projects placed	4	3.75	6%
Costs for investors	3 <sup>1</sup>	3.73	6%
Involvement of trustworthy partners	4	3.72	4%
Duration of crowdfunding period	4	3.61	10%
Duration of crowdfunding contract	4	3.35	13%
Minimal investment for investors	3	3.18	11%
Chance of additional funding	2	3.12	7%
Funding range	3 <sup>1</sup>	3.02	15%
Involvement of banks	3	2.48	4%

Investors	mode	Mean	% n/a
Idea behind project is beneficial	5	4.42	0%
Openness and transparency	4	4.09	0%
Quality of project	4	4.07	0%
Feel satisfied to help this project	4	4.02	0%
Cost of investing	4	3.66	0%
Pleasant to be part of a project	4	3.65	0%
Relations with people	4	3.53	0%
Type of crowdfunding	3	3.44	0%
100% threshold	3	3.43	0%
Reputation of platform	3	3.40	0%
Minimal investment	3 <sup>1</sup>	3.35	0%
Interaction with entrepreneurs	3	3.30	2.7%
Involvement of trustworthy partners	3	3.28	0%
Risk analysis	3	3.24	0%
Financial return	3	3.23	0%
% already collected	4	3.11	0%
screening	3	3.10	0%
Crowd sourcing	3	3	0%
Target amount	3	2.94	0%
AFM Licenses	2 <sup>1</sup>	2.70	6.3%
banks	3	2.19	0%

Table 28: importance of variables (1 multiple modes, displayed is lowest)

#### 4.3.2.1. Entrepreneurs

Figure 10 displays a diverged stack chart with the answers of entrepreneurs to the questionnaire concerning the importance of platform variables. Variables are rank ordered according to the percentage of important (important +very important) that these variables received. Table 28 indicates the modes and means of these answers as well as the percentage of answers that were n/a (not applicable) for respondents. Entrepreneurs had to indicate which variables they found important when deciding which crowdfunding platform to use and ,as the figure and table indicate, the most important variables were: reputation, visibility of platform (when observing the mode and mean). Transparency, quality of projects, network of platform, number of projects financed (on platform) and the business model were also highly valued(mode=4; mean>4). All the other variables had means between 3- 4 (thus neutral – important ), except for bank involvement (2.48). Only bank involvement, funding range, minimal investment, cost for investors had overall mostly neutral answers (mode=3). Cost for investors and funding range had multiple modes. Additional funding had a mean of 3.02 (neutral) but a mode of 2 (unimportant). The variables that were indicated, by entrepreneurs, to be important are variables which bank involvement could (theoretically) improve, except for business model (although banks could devise a new business model like Seeds did). Bank involvement as a variable isn't valued highly by entrepreneurs when deciding which crowdfunding platform to use, evident in the low mode (3) and mean (2.48). Bank involvement with the crowdfunding platform isn't the sole and most important reason to place their project on the platform. Bank involvement could however indirectly or directly influence variables which entrepreneurs find important by either partnering up with platforms or creating their own crowdfunding platform.

Interesting to see is that entrepreneurs on the crowdfunding platforms didn't value chance of additional funding highly with a mode of 2 (unimportant) and mean of 3.12 (neutral). Additional funding could have been argued to be valued higher since theoretically the chance of additional

funding is more present with crowdfunding platforms that have ties with banks. However the low score indicate that additional funding isn't valued highly when deciding which crowdfunding platform to employ, presumably because entrepreneurs are mainly worried about the success or failure of their project on the platform and will afterwards concern themselves with additional funding (additional funding might not even be necessary). It could even be so that entrepreneurs are confident about their ability to get additional funding regardless of which crowdfunding platform is used or might use other financing methods later on. Because no other crowdfunding platform were present in this research we can't indicate if entrepreneurs are significantly different from other crowdfunding platform on this aspect.

A further interesting finding is the fact that cost for investor has a higher mean in the entrepreneurs questionnaire than that found in investors, although the difference is small. This could be due to the fact that entrepreneurs might fear that too much costs placed on investors might deter them from participating.

#### **4.3.2.2. Investors**

Figure 11 displays a diverged stack chart with the answers of investors to the questionnaire concerning the importance of platform variables. Investors, not surprisingly, were shown different variables because their motives to engage in crowdfunding are different from entrepreneurs. Overall investors indicate that intrinsic motives are most important in deciding to invest in projects. Highest mode among the variable was the idea behind the project is beneficial (supporter of ideas). Based on the means most important variables thereafter were: openness and transparency, quality of project and satisfaction to help (mode=4; mean>4). Cost of investing, pleasant to be part of project (participation in community) and relations with people had modes of 4 but means between 3-4. All other variables had modes of 3 and means between 3-4 except for % already collected (mode=4), minimal investment (multiple modes), AFM licenses (multiple modes & mean <3), target amount and involvement of bank (mean<3). Only variables to receive not applicable were interaction with entrepreneurs and AFM licenses. With investors, not surprisingly, the most important variables have to do with the project itself rather than the platform. The intrinsic motives to engage in crowdfunding (idea is beneficial, feel satisfied to help and nice to be part), quality of the project itself and relations that investor had with the project were highly valued (mode=4). The intrinsic motives that respondents have come before financial matters like cost of investing, minimal investment or financial return, although these also had modes of 4.

Douw & Koren had conducted national research in which investors had variables similar as in this questionnaire of this thesis. For analysis and comparison of this research findings, see appendix A.

Further interesting finding is the high placement of openness and transparency of the platform, which is placed second. This variable was also valued highly by entrepreneurs. Aside from the intrinsic motive to invest and the quality of the project investors thus find that the platform on which the project is based should be open to use and transparent. Other factors which platforms could influence were: reputation (3.40), involvement of trustworthy partners (3.28), risk analyses (3.24), screening (3.10) and crowd sourcing (3), although these are mostly viewed neutral by investors. Bank involvement, just as with entrepreneurs, scored again poorly (as a matter of fact the mean is even lower than that of entrepreneurs).

#### 4.3.2.3. Summary : Choice of platform

Entrepreneurs were mostly concerned with the reputation and visibility when deciding which crowdfunding platform to utilize. Aside from this transparency, quality of projects, network of the platform, number of projects financed and the business model all had means >4. These variables are most important when deciding which platform to use according to entrepreneurs. As for investors most important variables were the idea behind the project (being beneficial), openness and transparency, quality of project and satisfaction of helping project (mean>4). Interesting to see is the fact that entrepreneurs and investors both value transparency of platform and the quality of project highly in deciding to engage in crowdfunding.

Entrepreneurs	Mode	Mean	Investors	mode	Mean
Reputation of platform	5	4.54	Idea behind project is beneficial	5	4.42
Visibility of platform	5	4.42	<b>Openness and transparency</b>	<b>4</b>	<b>4.09</b>
<b>Transparency of platform</b>	<b>4</b>	<b>4.40</b>	<b>Quality of project</b>	<b>4</b>	<b>4.07</b>
<b>Quality of projects</b>	<b>4</b>	<b>4.37</b>	Feel satisfied to help this project	4	4.02
Network of platform	4	4.13			
Number of projects financed	4	4.08			
Business model	4	4.06			

Table 29: Most important variables entrepreneurs & investors

Not surprisingly the reason to engage differ on other aspects since entrepreneurs are more concerned with the success of their project on the platform. It seems that entrepreneurs find that their project success depends on the reputation of the platform, its visibility, quality of projects displayed, track record (financed projects) and social capital (network). All variables important to investors are linked to the intrinsic value that they have to crowdfund (such as the idea behind the project being beneficial) and the quality of the project itself being invested in. With both questionnaires bank involvement was valued lowly.

Based on table 29 bank involvement should mainly concentrate itself on entrepreneurs because these variables can be more influenced than those of investors. The reputation and visibility of the platform, network and quality of projects could be beneficially influenced by bank involvement.

#### 4.3.3. Motive to engage: Trust

Trust motives were defined as, in the case of entrepreneurs jurisdiction & social capital. Investors had more trust variables which included target amount, quality of project, fraud, control, trust and crowdfunding opportunities. Only trust will be examined here, for cost, control & crowdfunding opportunities see appendix G.

##### 4.3.3.1. Jurisdiction & Openness

Entrepreneurs and investors were asked how they felt about regulations, openness and contracts in crowdfunding and crowdfunding platforms.

## Entrepreneurs

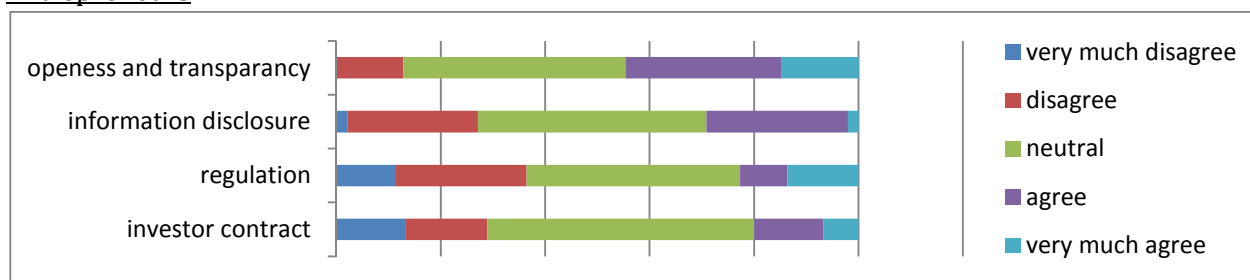


Figure 12 & table 30: jurisdiction (entrepreneurs)

	mode	mean
Platform should be more open and transparent	3	3.47
Information disclosure	3	3.02
regulation	3	2.89
Investors should have more rules in their contract	3	2.84

Entrepreneurs trust in jurisdiction was defined as fear for information disclosure or information breach. All variables in table

30 had modes of 3, but different means. Entrepreneurs seem to slightly agree with statements regarding openess and transparency of platforms and information disclosure. But disagree slightly with statements regarding regulation and rules in investor contracts. Openess and transparency was an important variable when entrepreneurs decided which crowdfunding platform to use and they slightly agree with the fact that the platforms should be more open and transparent. Side note, this is only slightly as the variable has a mode of 3 (neutral) and a mean of only 3.47.

Disincentive for entrepreneurs to engage in crowdfunding was fear for information disclosure or information breach, as identified in the theoretical framework (Gerber & Hui, 2013). Entrepreneurs have to provide information to investors in order to get their project funded. Too much information disclosure and the high amount of persons involved could lead to competitors mimicking the innovative products (Gerber & Hui, 2013). Entrepreneurs were neutral on this aspects, only 6.6% of entrepreneurs agreed that too much information disclosure might be harmful for their organization. This seems to contradict existing theory were information disclosure was identified as an important disincentive. Entrepreneurs were neutral on this aspect. Furthermore fear of information disclosure could be prevented by including more rules in the contracts of investors to prevent. Entrepreneurs thought that investors shouldn't have more rules in their contract, evident in a mean of 2.84. The fear for information disclosure seems to be absent in this research and contradicts theory about disincentive motives for entrepreneurs.

Entrepreneurs indicated that investors shouldn't be bound to more regulation and the same applies for the crowdfunding platforms. Entrepreneurs indicated that platforms shouldn't adhere to more regulations. Entrepreneurs don't expect or want more regulation or jurisdiction within crowdfunding either for the platform or the party with whom they have a contract (investors).

## Investors

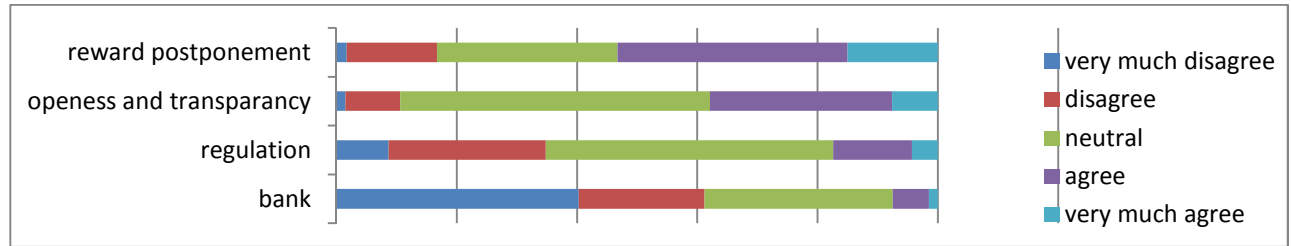


Figure 13 & table 31: Jurisdiction

	mode	mean
Platform should be stricter to projects who postpone financial returns	4	3.50
Platforms should be more opener and easier to use	3	3.33
Crowdfunding should adhere to more regulations	3	2.78
Crowdfunding needs bank involvement	1	2.07

Investor response are in line with that of entrepreneurs. First off, investors want platforms to be more open and transparent, although slightly. Entrepreneurs and investors both found openness and transparency to be important when deciding which platform to use and furthermore they indicate that this could require some more attention from platforms. Platforms could look into this in order to determine if this is necessary and in what regards both parties require openness and transparency.

As was the case with entrepreneurs, investors indicated that platforms don't have to adhere to more regulations. Furthermore bank involvement wasn't required evident in the low mode of 1 and mean of 2.07. Bank involvement from the perspective of the investor seems to very unimportant, whether it is deciding which platform to use or their opinion on the necessity of bank involvement in the crowdfunding sector itself.

Investors did agree with the statement regarding strictness towards projects that postpone financial returns. Disincentive motive for investors in engaging in crowdfunding is the substantial delay in rewards by entrepreneurs (Bakker- Rakowska, 2014; Gerber & Hui, 2013). Research of Mollick (2013) indicated that 75% of projects have postponements in rewarding their investors. Delays are very frequent and this could explain why investors strongly agree with this statement.

Bank involvement in providing jurisdiction seems unnecessary given the statements of both entrepreneurs and investors. There is no need for more regulation in crowdfunding according to both parties, there is an absence of disincentive motives (fear information disclosure) in entrepreneurs and the investors disagree that crowdfunding requires bank involvement. The only aspect present requiring attention is upholding the contract between investors and entrepreneurs (postponement of financial returns). This aspect requires more monitoring from platforms. It seems wasteful for banks to embark in crowdfunding solely based on this aspect since no regulation or jurisdiction is needed.

#### 4.3.3.2 Social capital

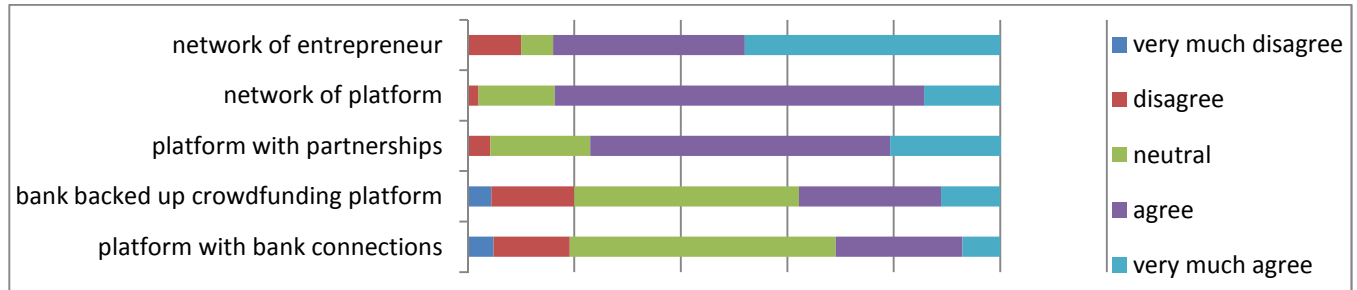


Figure 14 & table 32: social capital

	mode	mean
Network of entrepreneur	5	4.22
Network of platform	4	3.96
Platform with partnerships	4	3.94
Bank backed up crowdfunding platform	3	3.24
Platform with bank connections	3	3.14

Disincentive motive for entrepreneurs was fear of failure, inability to attract supports and fear for network fatigue (Gerber & Hui, 2013; Rossi, 2014). Entrepreneurs were asked which of the following variables they believed would

attract investors. The network of the entrepreneur was believed to attract the most investors, mode of 5. This was followed by the network of the platform and the possibility that this platform had partnerships (mode=4). Lastly bank backed up crowdfunding platforms and platforms with bank connections (mode=3) were expected to attract investors. Entrepreneurs agreed with all statements, meaning that they thought that all variables would attract investors. The degree in which they agreed or disagreed however varied. The network of the entrepreneur and the platform on which the project is placed are most important. This in line with the questionnaire concerning the importance of variables when deciding which platform to use in which network of the platform was valued highly by entrepreneurs. Bank involvement is valued positively in attracting additional investors, however their importance is valued lower than the other social capitals and most answers were neutral (mode=3). Furthermore a bank backed up crowdfunding platform was believed to attract more investors that a platform with bank connections. Banks could contribute on this aspect i.e. providing platforms with an extra network which would benefit entrepreneurs. However their perceived influence is lower than that of any of the other variables.

#### 4.3.3.3 Reaching Target amount

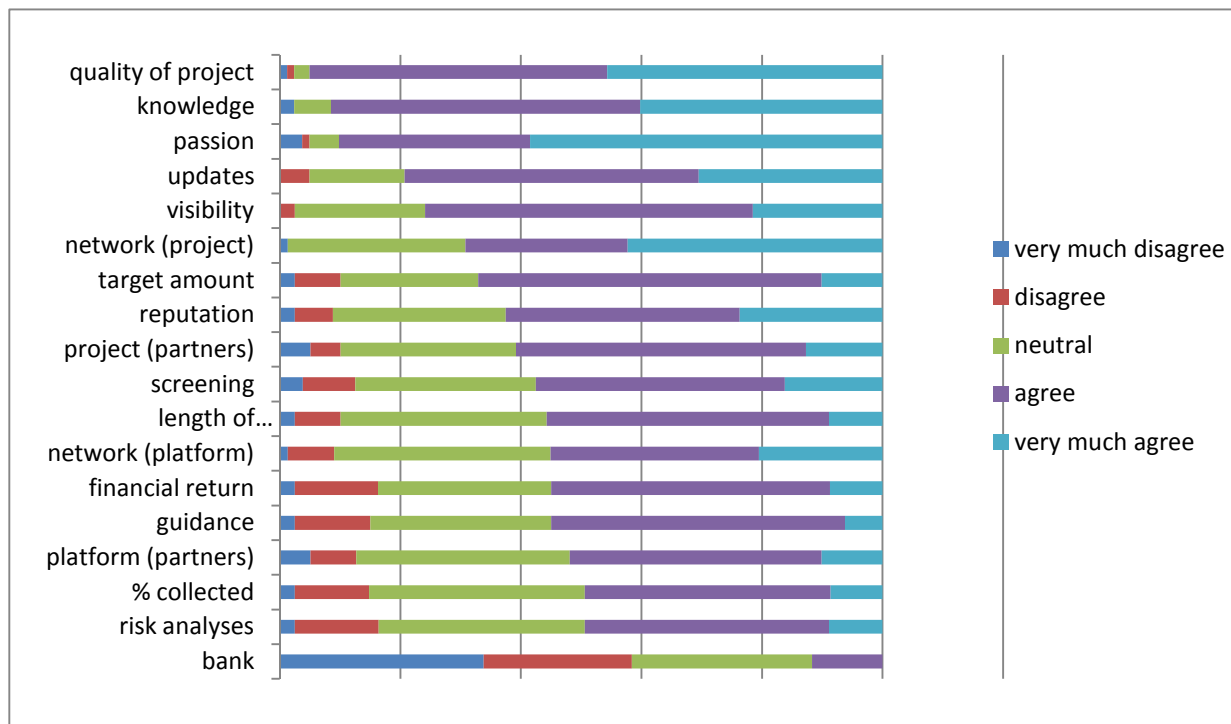


Figure 15 & table 33: reaching the target amount

Reaching target amount	mode	mean
Passion	5	4.40
Quality of project	4	4.37
Knowledge and skills	4	4.27
Network (project)	5	4.09
Updates and information	4	4.05
Visibility of platform	4	3.95
Reputation of platform	4	3.75
Target amount	4	3.65
Network of platform	3	3.65
Involvement partners (project)	4	3.58
screening	4	3.58
Length of crowdfunding period	4	3.52
Financial return	4	3.45
Involvement of partners (platform)	4	3.44
guidance	4	3.44
% collected	4	3.41
Risk analyses	4	3.39
bank	1	2.19

This trust variable was solely aimed at investors and their perception how variables are responsible for the amount of success that projects have in reaching their target amount. If the diverged stack charts are analyzed than quality of project would be the most important variable, however mode and mean would indicate the passion of the entrepreneurs and their network (mode=5;mean>4). As for the other variables almost all variables received modes of 4, except network of platform (mode=3) and bank involvement (mode=1). Judging the importance of variables based on their modes and means>4, the passion of entrepreneurs, quality of projects, knowledge and skills of entrepreneurs, network of project and (interestingly) updates and information

are perceived to influence the amount of success that entrepreneurs have in reaching the target amount. Investors thus perceive that the quality of the project itself (passion, knowledge, network and updates) will affect the probability of reaching the target amount the most. This is in line with theory where successful crowdfunding are of quality and indicate their quality towards investors (Mollick, 2014; Ahlers et al., 2013). Furthermore the degree of success in reaching the target amount was believed to be depended upon the network of the project and the visibility of the platform. These findings are again in line with theory described in this thesis were entrepreneurs with a large network are able to reach more investors (Mollick, 2014; Mishra & Koren, 2011; Fiddelaar et al., 2014). Visible projects on visible platforms were more successful because they were able to

attract enough investors (Fiddelaar et al., 2014; Guidici et al., 2013). Updates and information were also perceived important. Successful crowdfunding projects receive more support in the final stage if they maintain close contact with investors by means of providing information and updates (Kuppuswamy & Bayus, 2013). Furthermore entrepreneurs who lacked early updates in the beginning of their project decrease their success of funding by 13% (Mollick, 2014). Investors seem to agree with this or acknowledge that updates and information are important factors.

Interesting results were the low ranking of % collected and network of platforms. Investors don't seem to think that the percentage collected is an indication of the probability that projects reach their target amount (ranking wise). Although it has a mode of 4 (agree) and mean of 3.41, it is ranked low on the list. Network of platforms had a mode of 3 (neutral) and mean of 3.65. The network of project was perceived to be very important in reaching the target amount. Compared to the network of project, the network of platform is perceived to be of lesser importance. Social capital of the entrepreneur is believed to be more important than that of the platform. This is in line with the results obtained with entrepreneurs who share this view.

Bank involvement again received mostly negative statements. Approx. 30% very much disagree, mode of 1 and mean of 2.19.

#### 4.3.3.4 Quality of projects

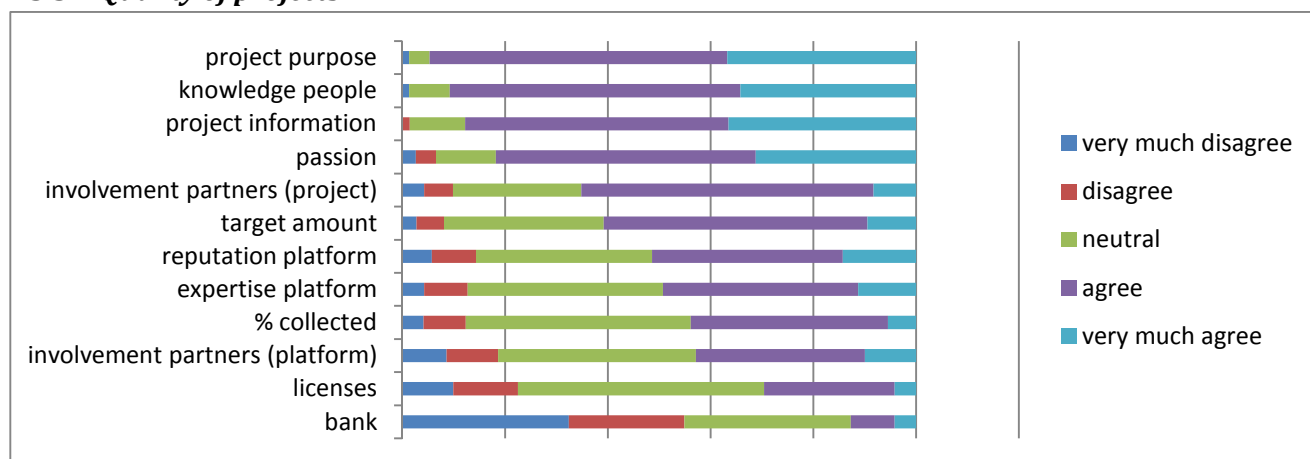


Figure 16 & table 34: quality of projects

	mode	mean
Purpose of project	4	4.29
Information on project	4	4.23
Knowledge of people	4	4.22
Passion of people	4	4.04
Involvement of partners (project)	4	3.60
Target amount	4	3.59
Reputation platform	4	3.46
Expertise platform	3	3.44
% collected	3	3.33
Involvement partners (platform)	3	3.26
AFM licenses	3	3.01
Involvement banks	1 <sup>1</sup>	2.30

Investors indicated, as can be viewed in the diverged stack charts and table, that the purpose of the project, project information, knowledge of people and passion of people are most important (mode=4; Mean>4) when evaluating the quality of the project. Knowledge and passion of entrepreneurs were also highly valued when determining the possibility of reaching the target amount. Overall the results are similar to those obtained with the variable "reaching the target amount" as well as previous

research done by Akker et al. (2013), Fiddelaar et al. (2014) and Ahlers et al. (2013). With research of Akker et al. (2013) the most important variables that determined if investors would invest on projects were: quality of project, passion of the persons involved, information about the project (and



their goals), reason for founding the project, explanations concerning the spending of money, knowledge and skills of person and information about people behind project. These variables are also present in this research and are also valued highly. Other research had similar findings which indicated that successful crowdfunding projects, that were able to indicate their quality, had members which were identifiable by investors and had knowledge. Furthermore the projects provided the investors with sound(financial) information (Fiddelaar et al., 2014; Ahlers et al., 2013). Overall project variables were perceived to be more important in determining the quality of the project, rather than the platforms on which they were placed. Only reputation of the platform had a mode of 4. Bank involvement was valued unimportant when deciding if projects had quality, low mode and mean.

#### 4.3.3.5 Fraud and misuse of funds

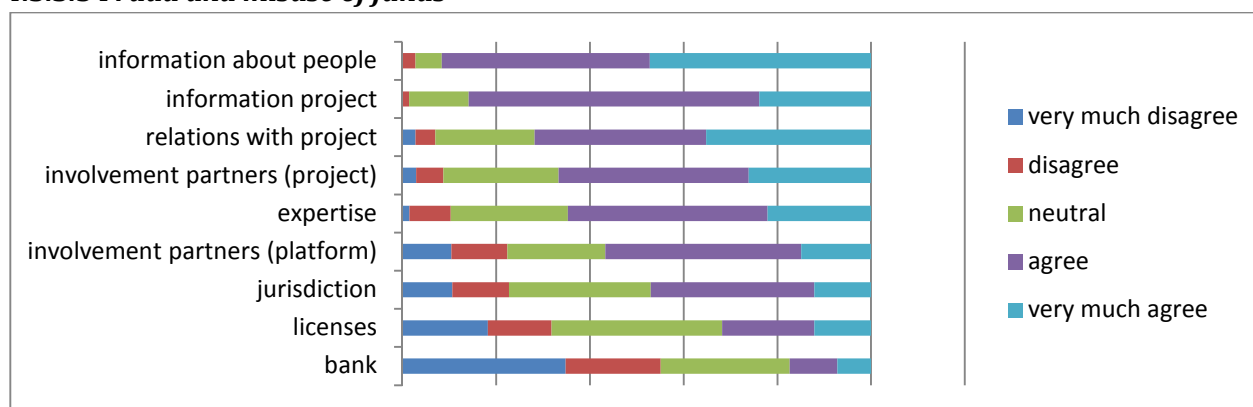


Figure 17 & table 35: diverged stack charts fraud and misuse of funds

	mode	mean
Information about people	5	4.36
Information project	4	4.08
Relations with project	4	3.97
Involvement partners (project)	4	3.81
Expertise platform	4	3.75
Involvement partners (platform)	4	3.39
Jurisdiction platform	4	3.26
licenses	3	2.94
bank	1	2.35

Information about people and the projects are valued highly in determining the probability of fraud and misuse of funds. Information about people has the highest mode of 5. All other variables had modes of 4 except for licenses (3) and bank involvement (1). Project variables are valued higher than platform variables, as was the case with the quality of project, and again information is very important. Difference

between perception on quality of project and fraud is the fact that purpose of the project was most important in determining the quality of projects, whereas with fraud this is based on the information available about people. The relationships that investors had with the project as well as the relationships that projects themselves have (partnerships) with other parties were also important. The information asymmetric that could lead to moral hazard (fraud and misuse of funds) is thus ,logically, reduced by information about people and projects as well as the fact that investors have a personal relationship with the people behind the project. Involvement of banks and licenses that crowdfunding platform have is yet again valued lowly. Jurisdiction is also valued low (rank wise). This could be caused by the fact that jurisdiction is more aimed at upholding contracts by monitoring, and if necessary take actions when rules or contracts are broken. These are ex ante transaction cost made after the contract has been made. It is not surprising that investors want to prevent this from happening by analyzing the projects based on their own judgement of the information provided and

the people in place. Furthermore jurisdiction might be placed low because of the absence of fraud in the crowdfunding sector (Belleflamme & Lambert, 2014).

#### 4.3.3.6 Quality of platform

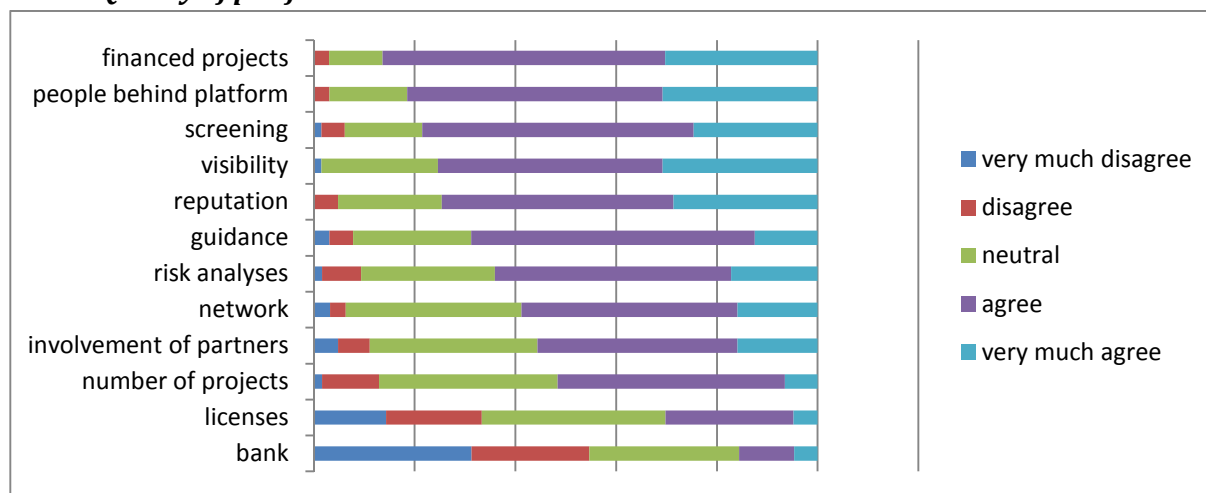


Figure 18 & table 36: diverged stack chart quality of platform

	mode	mean
Financed projects	4	4.14
People behind platform	4	4.09
Visibility of platform	4	4.03
Reputation	4	3.98
Screening	4	3.95
guidance	4	3.70
Risk analyses	4	3.70
Network of platform	4	3.65
Involvement of partners	4	3.56
Number of projects	4	3.44
licenses	3	2.87
bank	1	2.34

Financed projects, people behind the platform and visibility of the platform all had modes of 4 and means >4. All other variables had modes of 4 and means between 3-4, except for licenses (mode=3; mean< 3) and bank involvement (mode=1;mean < 3). The financed projects on the platform, track record, is viewed to be the most important variable in regards to the quality of the platform. Theory indicates that successful crowdfunding platforms are able to attract a steady stream of investors and entrepreneurs, because they are able to display projects on their platform. This way, small

crowdfunding platforms will remain small and large crowdfunding platforms will become larger (Belleflamme & Lambert, 2014). Investors seem to care less for the amount of projects displayed on the platform but do believe that the financed projects, as a track record, are the best indication of the quality of platforms. Investors indicated that knowledge and skill, passion and information about the persons behind the projects are important variables in reaching the target amount, quality of project and fraud. The same applies for the quality of platform were people behind the platform were viewed as an indication of the quality of the platform. Lastly, visibility of the platform is indicated in literature as an success factor in funding crowdfunding projects and was perceived by investors to be an indication of the quality of the platform (Guidici et al.,2013). Interestingly, the network of platforms was valued way lower (means) than visibility. Network of platform would logically also increase the visibility of the platform since a large network holds more parties which are aware of the platform and furthermore can make other parties aware. Other interesting result is the high placement of risk analyses although none of the platforms in this research were using this. Respondents could have misunderstood this question or alternatively they valued this highly even although the platform used, didn't have this. Another explanation is that investors have invested on other crowdfunding platforms which used risk analyses. 8% of the investors had invested upon a crowdfunding platform which used risk analyses. No significant p value was obtained when observing

the perception of investors between different platforms on this variable. Again licenses and bank involvement were valued lowly in this likert scale.

#### 4.3.4 Project success factors: Quality of project

This section involves questions asked to entrepreneurs how they viewed they were guided in order to signal quality to their investors. Investors are asked how they view that entrepreneurs should be guided

##### Entrepreneurs

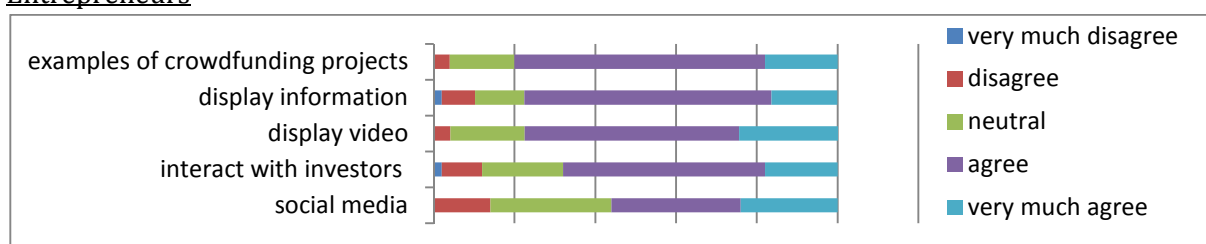


Figure 19 & table 37: diverged stack chart quality of project

Guidance	mode	mean
Examples of good projects	4	3.94
Project video	4	3.98
Project information	4	3.82
Interaction with investors	4	3.72
Social media	4	3.66

Entrepreneurs agreed on the likert items that composed guidance i.e. interaction with investors, project information, examples of good projects, project video and social media. All variables had modes of 4 indicating that “agreed” was the most mentioned answer for all variables.

Therefore it is interesting to highlight the negative statements among the respondents, because these could prove helpful in identifying improvement areas. Both variables, crowdfunding project examples and displaying your video, had low amount of statements disagreeing, only 4%. The other three guidance variables received more negative statements. 14% of entrepreneurs statements indicated that platforms didn’t advise them how to mobilize their social media, 12% were disagreeing with the fact that platform advised them how to interact with investors and 10% disagreed on how to display information. The social capital of the project is indicated by literature to be very important, which was confirmed by this questionnaire, and entrepreneurs display negative statements regarding guidance on this aspect. Therefore it would be wise for platforms to contemplate if this aspects needs improvement. Interaction with investors and project information also had negative statements and these variables were also valued by investors in this questionnaire and were identified in the literature. Project information was used by investors in determining the quality of projects and the possibility of fraud. Interaction with investors was perceived by investors to be an important variable in regards to the success of the project in reaching their target amount. Platforms should consider if firstly these negative statements are warranted, did platforms not guide their entrepreneurs on these aspects in the crowdfunding process. Secondly, are there enough negative statements in order to implement improvements. Negative statements were 14% or lower. Does this warrant implementing improvements? And lastly is it wise to guide entrepreneurs more extensively on these aspects since this could increase operating costs.

## Investors

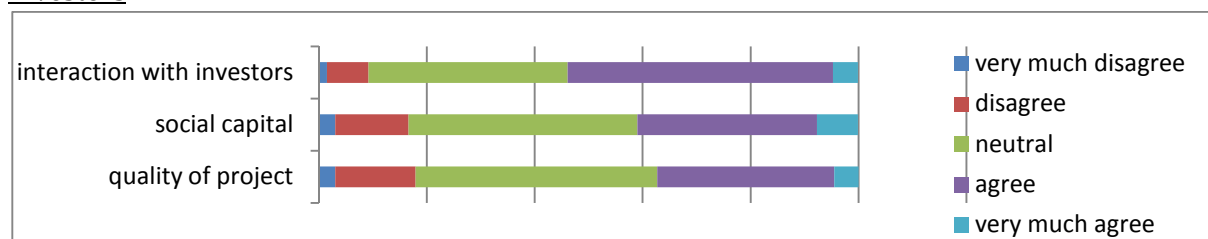


Figure 20 & table 38

Guidance	Mode	Mean
Interaction with investors	4	3.48
Social capital	3	3.29
Project information	3	3.21

Investors were neutral on statements regarding whether platforms should guide project in how to display information of their project and utilize their social network.

These variables received mostly neutral answers but the mean is higher than 3, meaning that they agree (as can be seen in the diverged stack charts). However when asked whether entrepreneurs should be guided in terms of how to interact with their investors (providing updates ect.) a mode of 4 was obtained (mean=3.48). Investors agreed more on this variable than on other variables related to the quality of projects. 12% of entrepreneurs indicated that they were not guided on this variable i.e. how to interact with investors. This is thus interesting for platforms, because some entrepreneurs felt that they were not guided on this aspect whereas investors think that platforms should guide projects more in how to interact with investors.

### 4.3.5 Platform success factors

Platform success factors were described in the literature as openness, crowd sourcing, community, jurisdiction and tools. This section will view tools & community since openness and crowd sourcing were included in trust and control of entrepreneurs motives.

#### 4.3.5.1 Additional funding

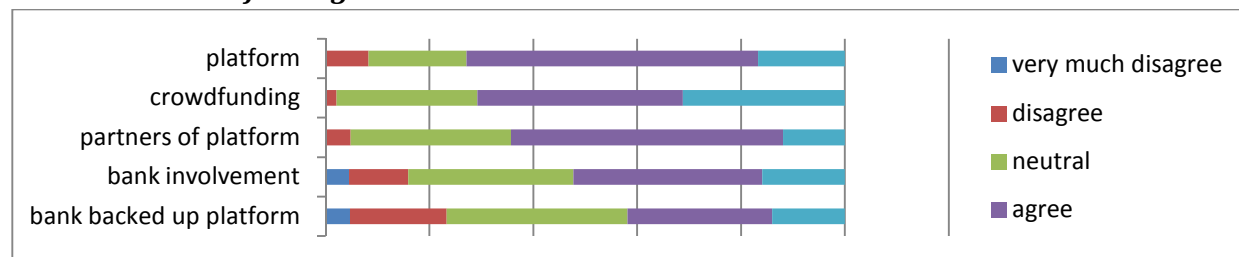


Figure 21 & table 39: additional funding

Increase the chance of additional funding	mode	mean
Crowdfunding, instead of other financing methods	4	4
platform chosen	4	3.81
Platforms with partnerships	4	3.71
Platform with bank involvement	4	3.48
Bank backed up crowdfunding platform	3	3.28
Decrease the chance of additional funding		
Failed crowdfunding project	4	3.57

Entrepreneurs agree with all the statements regarding the chance of additional funding. For crowdfunding (failure) the coding should be reversed. All the other statements deal with the chance of additional funding which

means that likely-very likely will mean that they view that these variables will increase the chance. Disincentive motive for entrepreneurs in engaging in crowdfunding is the fact that if crowdfunding fails than other financing methods could be more reluctant to fund their project (Gerber & Hui, 2013;

Rossi, 2014). Entrepreneurs agree with the statement that a failed crowdfunding project will decrease the chance of additional funding.

Entrepreneurs were asked which of the following aspects, regarding crowdfunding and the crowdfunding platform, would increase the chance of additional funding. Entrepreneurs indicated that crowdfunding as a funding method is most likely to increase the chance of additional funding (mode=4; mean=4). Other interesting fact in this thesis was the high percentage of entrepreneurs who indicated that no pre crowdfunding financing methods were used, 43.9%. These respondents indicated that crowdfunding was their first choice. The findings that crowdfunding, as a financing method, is believed to increase the chance of additional funding could be linked to the fact that a large degree of entrepreneurs indicated that crowdfunding was their first choice. All other variables received modes of 4, except for bank backed up crowdfunding platforms (mode=3), and means between 3-4. Aside from crowdfunding as a financing method, the platform used, involvement of partners with the platform, bank involvement with platform and bank backed up crowdfunding platforms were argued to increase the chance of additional funding. Bank involvement (including bank backed up crowdfunding platform) are valued lowest, even below other partnerships that crowdfunding platform might have. Another interesting note concerning bank involvement is the fact that a bank backed up crowdfunding platform has a lower mean than bank involvement. One would assume that a bank backed up crowdfunding platform, a platform owned by a bank, would lead to the highest chance of additional funding because it is bank owned. Or at least between these two statement, bank involvement and bank backed up, the latter would logically lead to a more likely chance of additional funding. Entrepreneurs disagreed with this, but do perceive these variables to increase the likelihood of additional funding. Bank involvement could thus contribute on this aspect (additional funding)

#### 4.3.5.2 Community

Research indicated that platforms should actively try to establish a dedicated group of investors on their platform since this would increase the chance of successfully crowdfunding projects displayed (Fiddelaar et al.,2014; Gerber & Hui, 2013 Mishra & Koren, 2011).

#### Entrepreneurs

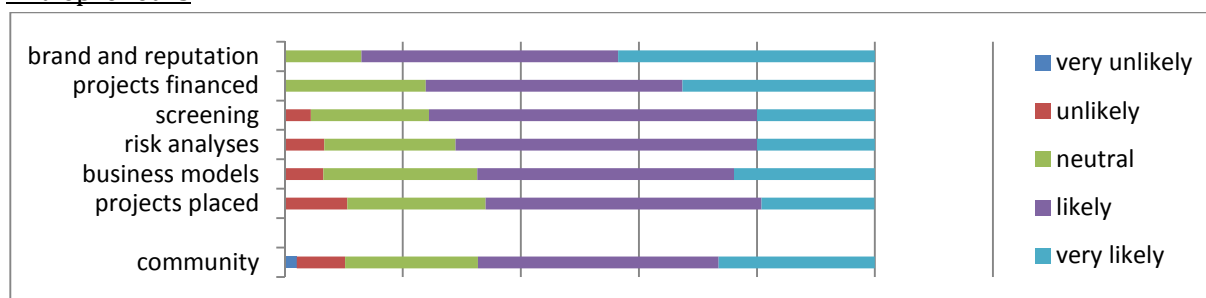


Figure 22 & table 40: community

	mode	mean
Brand & reputation platform	4 <sup>1</sup>	4.30
Number of financed projects	4	4.09
Strict screening	4	3.91
Business model	4	3.85
Risk analyses	4	3.84
Number of projects	4	3.74
Preference for platform trying to establish an active community	4	3.82

Entrepreneurs agreed with the statement that platforms should be actively preoccupied with establishing an active community (mode:4; mean:3.82). Which variables do entrepreneurs perceive to attract investors? Overall entrepreneurs thought that all the variables in the likert scale would attract investors. Most important variables were reputation of platform and number of financed projects (mode=4; mean>4). These variables had no (very) unlikely responses from entrepreneurs. Entrepreneurs already indicated that the reputation of the platform was an important aspect when deciding which platform to use. It seems logical that this was important because platform reputation would attract investors, probably also other reasons. Number of financed projects would furthermore indicate a quality signal towards investors that the platform is of quality. This is in line with answers received on the likert scale: quality of platform. The ranking of the variables for this scale: community are similar to the ranking obtained in the likert scale: quality of platform (p.90), although entrepreneurs perceive reputation to be more important compared to investors.

As for the expertise of the platform (screening & risk analyses) with regards to attracting investors, entrepreneurs indicated that strict screening and risk analyses would attract investors. Strict screening however had a higher mean than risk analyses, but the same mode.

### Investors

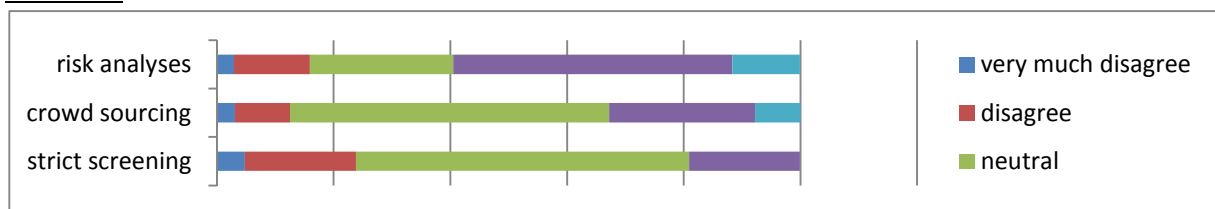


Figure 23 & table 41

	Mode	mean
Risk analyses	4	3.52
Crowd sourcing	3	3.25
Stricter screening	3	2.90

Investors were also asked how important they found the following statements i.e. strict screening, risk analyses and crowd sourcing.

Entrepreneurs agreed with the fact that strict screening would attract more investors (mode=4; mean:3.91). Investors however believe that platform don't have to screen projects stricter (mode=3; mean:2.90). Screening was an important platform variable for investors, as an indication of the quality of the platform, but they don't view that this should be done stricter by the platform. They do agree with the fact that risk analyses should always be provided (mode=4; mean: 3.52). Platforms should thus always provide risk analyses along with the projects they are displaying. This could be in line with responses provided earlier on "quality of projects" and "fraud". These variables were namely determined by means of information about the people and project. Risk analyses could provide more (financial) information for investors which would help them in deciding whether to invest in the project. The need for risk analyses could also be in line with the importance of openness and transparency for investors and their view that platforms should improve this aspect. Lastly, crowd sourcing was answered more neutral (mode=3: mean:3.25), although investors slightly agree on this statement.

#### 4.3.6. Summary: importance of variables in crowdfunding success factors

Decision which platform to use (entrepreneur)	Social capital	Increased chance of additional funding	community		Decision to invest (investor)	Reaching target amount	Quality of projects	fraud	Quality of platform	Jurisdiction	Community (investors)
Reputation of platform	Network of entrepreneur	Crowdfunding	reputation		Idea behind project is beneficial	Passion	Purpose of project	Information about people	Financed projects	Open ++	Risk analyses +
Visibility of platform			Number of financed projects		Openness and transparency	Quality of project	Information on project	Information on project	People behind platform	Stricter financial returns +	Crowd sourcing +
Transparency of platform					Quality of project	Knowledge and skills	Knowledge of people		Visibility of platform	More Regulation --	Stricter screening -
Quality of projects					Feel satisfied to help	Network of project	Passion of people			More rules Investor contract -	
Network of platform						Updates and information					
Number of projects financed											
Business model											

Table 42: important variables based on modes and means >4. +/-: agreeing/disagreeing

#### **4.3.7. Impact of awareness**

This section will describe the possible differences found between entrepreneurs and investors based on their awareness of the partnerships that crowdfunding platforms had with a bank. Investors and entrepreneurs might differ in the importance that they allocate to bank involvement, because of their awareness or unawareness of the involvement of banks.

##### **4.3.7.1. Awareness of entrepreneurs & investors**

Overall Awareness	Entrepreneurs	percentage	Investors	percentage
yes	17	32.1%	10	14.9%
No	34	64.2%	52	77.6%
No idea	2	3.8%	5	7.5%

Table 43: awareness of entrepreneurs

The fact that crowdfunding platforms have partnerships with banks were known by 32.1% of entrepreneurs. 64.2% indicated that they didn't know and 3.8% indicated no idea. Approx. 70% of all entrepreneurs were thus oblivious to the fact that crowdfunding platforms can have partnerships with banks. Investors were more unaware (in percentages), only 14.9% was aware whereas 77.6% was unaware and 7.5% didn't know. The awareness of entrepreneurs didn't differ between the crowdfunding platforms, where both parties had an even distribution of aware and unaware participants. Investors seemed to differ based on their percentages of aware and unaware participants on the social and entrepreneurial crowdfunding platforms. However fisher exact test didn't produce a significant p value thus indicating that investors didn't differ. Some statistical test were employed to find out if awareness was caused by variables like gender, age or relation with the project. Gender seems to influence the awareness of entrepreneurs as a significant p value is obtained. This indicated that female entrepreneurs were more unaware, than male entrepreneurs, of the partnerships. This difference could be caused due to the professional expertise of males, their position in the company or overall more interest in crowdfunding or financial issues. Without further information it can't be determined if this difference is caused by a control variable, or simply is caused by chance. As for investors, awareness seems to be related to the relation that the investor had with the platform. A significant p value was obtained for investors who regularly invest on the crowdfunding platform. Investors who regularly invest on the crowdfunding platforms are more aware of the partnerships than investors with another relation towards the project. This seems logic since the chance of being made aware of the partnerships increases when investors invest often.

##### **4.3.7.2 Differences in perception of bank involvement**

Awareness doesn't lead to any differences found between entrepreneurs and investors on bank involvement as a variable. All bank variables included in the questionnaire were answered negatively or placed below all other variables. Only with additional funding and social capital (network) did bank generate more positive answers than negative (but still below other variables). Only additional funding had an almost significant p value for bank involvement i.e. platform that has ties with a bank. (see appendix H).



#### 4.3.7.3. Difference in perception of platform variables

Significant p value	All data	Excluding n/a	No missing data
<b>Entrepreneurs</b>			
Projects placed and financed	0.27	0.41	0.05
Quality of project	0.01	0.50	0.51
reputation	0.02	0.57	1
visibility	0.01	0.32	0.50
transparency	0.01	0.16	0.31
Involvement of trustworthy partners	0.003	0.003	0.03
Cost for investors	0.09	0.11	0.05
Funding range	0.10	0.14	0.004
<b>Investors</b>			
Target amount	0,08	-	0.04
Reputation of platform	0,05	-	0.06

Table 44: differences (platform variables)

As for why investors and entrepreneurs decided to invest on platform, awareness resulted in a few significant p values. This however was mostly due to the inclusion of non applicable in the questionnaire. Once this group was removed most significant p values became insignificant. Significant p values (excluding n/a) were found for involvement of trustworthy partners (entrepreneurs). If all missing data was eliminated from the research sample than projects financed, involvement of trustworthy partners, cost for investors, funding range and target amount (investors) had significant p values (see table 44).

If likert items are re-categorized as unimportant, neutral and important than cost for investors, involvement of trustworthy partners and successfully financed projects will have an insignificant p value. Differences in these variables are thus caused by the difference in the amount of importance/unimportance that entrepreneur place on these variables. As for the variables funding range and cost for investors there is no logical explanation why awareness of bank involvement would lead to differences in these variables.

Awareness however could influence the perception on involvement of trustworthy partners and successfully financed projects. As table 45 indicates, aware entrepreneurs thought that the involvement of trustworthy partners was more important, whilst unaware entrepreneurs thought that the successfully financed projects were more important when deciding which crowdfunding platform to use. Aware entrepreneurs might think that involvement of trustworthy partners are important because they are aware of the partnerships that the crowdfunding platform has. However the low score on bank involvement, and the insignificant p value on bank involvement, would indicate that banks are not viewed as the trustworthy partners in question. Same logic would apply to the absence of importance that aware entrepreneurs place on successfully financed projects because of the involvement of banks. Bank involvement is the signal of quality rather than the presence of successfully financed projects (track record). Again the insignificant p value on bank involvement would state that all significant p values obtained are caused by other factors, covariance, low sample size or chance.

<b>Involvement of trustworthy partners</b>	aware	unaware	total	<b>Successfully financed projects</b>	aware	Unaware	Total
Very unimportant	0%	3.0%	2.2%	Very unimportant	8.3%	0%	2.3%
unimportant	23.1%	6.1%	10.9%	unimportant	8.3%	0%	2.3%
neutral	15.4%	24.4%	21.7%	Neutral	0%	19.4%	14%
important	15.4%	57.6%	45.7%	important	75%	48.4%	55.8%
Very important	46.2%	9.1%	19.6%	Very important	8.3%	32.3%	25.6%

Table 45: involvement of trustworthy partners & successfully financed projects

#### 4.3.7.4. Motive to engage in crowdfunding: Trust

Investor and entrepreneurs motives to engage (trust) were analyzed in order to discover if awareness of bank involvement with the platform would lead to differences.

##### Entrepreneurs

Awareness doesn't generate any differences between entrepreneurs that were aware and unaware of the involvement of banks. High p value were obtained for the constructs jurisdiction and social capital.

	P value
Jurisdiction	0.95
Social capital	0.64

Table 46: p value trust

##### Investors

Investors had more constructs pertaining to trust. However none of these constructs had a significant p value when conducting ANOVA analyse (see table 47 and appendix H). When analysing the different likert items only one item had a significant p value, whereas the others had an almost significant p value. Since none of the bank related likert items had any significant p values it is likely that awareness wasn't the cause of the difference in perception on these two variables. Furthermore no other variable has a significant p value which could explain the observed difference.

	P value	
	Project	platform
Target amount	0.44	-
Quality of project	0.88	0.24
fraud	0.91	0.28
<i>Project information</i>	0.057	
Quality of platform: expertise	-	0.47
Quality of platform: reputation		0.50
<i>visibility</i>		0.05

Table 47: p value

With fraud, unaware investors found project information to be more important than aware investors, evident in 0% important and very important for aware investors. This is strange since this variable along with purpose of project received the highest modes and mean in determining how investors view the possibility of fraud and misuse of funds. Theoretically this could be due to bank involvement, however this variable received a non significant p value. Covariance will probably cause the difference between investors. Since the p value was still >0.05 we assume that it is not significant but the percentages displayed are still interesting. As for quality of platform (reputation) the likert item visibility had a significant p value. Aware investors found visibility to be more of an indication

regarding the quality of a platform than unaware investors. As said before this could be due to bank involvement however there was no difference between investors on this variable. The significant p value is thus likely caused by co variance.

<b>Project information</b>	Aware	Unaware	<b>visibility</b>	Aware	Unaware
Very unimportant	0%	0%	Very unimportant	0%	2%
Unimportant	12.5%	0%	Unimportant	0%	0%
Neutral	87.5%	63%	Neutral	12.5%	26.5%
important	0%	25.9%	important	12.5%	46.9%
Very important	0%	11.1%	Very important	75%	24.5%

Table 48: percentages project information & visibility

#### **4.3.7.5. Difference in perception of Quality of project**

Awareness didn't generate any differences in the perception how platforms guided entrepreneurs in and how to signal the quality of their project, evident in the non significant p value of 0.15 for the construct. The same applies to investors.

#### **4.3.7.6. Difference in perception of additional funding**

Entrepreneurs almost had significant p values for the bank related variables in additional funding

	P value	Excluding n/a	No missing data
Partners of platform	0.10	0.06	0,06
Bank involvement	0.09	0.08	0.08

Table 49: additional funding

Because a strict p value of <0.05 was established for this thesis these p values are insignificant. However percentages displayed in table 50 indicate that aware entrepreneurs did find, in percentages, that bank involvement with crowdfunding platform & partners of platform does increase the chance of additional funding, at least more than the perception of unaware entrepreneurs. Because of the non significant p value this thesis concludes that entrepreneurs don't differ, although the percentages would suggest otherwise.

<b>Bank involvement</b>	<b>Aware</b>	<b>Unaware</b>	<b>total</b>	<b>partners</b>	<b>Aware</b>	<b>Unaware</b>	<b>total</b>
Very much disagree	7,1%	3,4%	4.6%	Very much disagree	7.7%	3.7%	11.6%
disagree	0%	17.2%	11.6%	disagree	7.7%	3.7%	11.6%
Neutral	28.6%	31%	30.2%	Neutral	15.4%	37%	30.2%
agree	28.6%	41.4%	37.2%	agree	46.2%	55.6%	37.2%
Very much agree	35.7%	6.9%	16.3%	Very much agree	30.8%	3.7%	16.3%

Table 50: percentages bank involvement & partners of platform.

#### **4.3.8. Impact of crowdfunding area**

This section will describe the influence of the crowdfunding area (social –entrepreneurial) on respondents answers.

<b>Entrepreneurs</b>	Entrepreneurial	Social	total
N	37	17	55
%	67.3%	30.9%	100%
<b>Investors</b>			
N	36	29	65
%	55.4%	44.6%	100%

Table 51: distribution entrepreneurs and investors on crowdfunding platforms

Table 51 indicates that crowdfunding platforms had an uneven distribution of entrepreneurs (70%:30%). Investors on the crowdfunding platforms however were more evenly present in the research sample.

#### **4.3.8.1. Difference in perception of bank involvement**

The crowdfunding area of the crowdfunding platform doesn't generate any significant p values for the perception of bank involvement. None of bank involvement variables has a p value below 0.10. Whether investors or entrepreneurs have crowd funded in the entrepreneurial or social sector doesn't have an impact on their perception on bank involvement.

#### **4.3.8.2. Difference in perception of platform variables**

<b>Financial return</b>	<b>Entrepreneurial</b>	<b>Social</b>
Very unimportant	13.8%	10.7%
Unimportant	20.7%	7.1%
Neutral	13.8%	53.6%
important	37.9%	21.4%
Very important	13.8%	7.1%

The area in which crowdfunding takes place will also affect investors and entrepreneurs motives to participate and their perception on platform characteristics. Social crowdfunding has a larger social component whereas entrepreneurial is more commercial. This is somewhat mitigated by the fact that entrepreneurial ventures also

Table 52: financial return

have donations as a business model. Financial return had a significant p value which is in line with logic about crowdfunding . Financial return was a more important motive, when deciding which crowdfunding project to invest upon, for investors in the entrepreneurial crowdfunding area (see table 52). No other significant p values were obtained for investors.

Entrepreneurs had two significant p values when deciding which crowdfunding platform to use. In both cases entrepreneurial entrepreneurs found the platform variables to be more importance than entrepreneurs on social platforms. Entrepreneurial entrepreneurs found the cost that investors have to make in order to invest more important than social entrepreneurs. This could again be due to the fact, like financial return, that the entrepreneurial sector has more emphasis on financial return and other monetary values (like cost of investing). Social crowdfunding sector will attract more investors that have intrinsic values like supporter of ideas or participation in community and will be less concerned with the financial return. This research indicates that financial return differ between investors caused by the crowdfunding area.

The other significant p value was obtained regarding the amount of control when deciding to crowdfunding. Entrepreneurial entrepreneurs find the amount of control that they have during the crowdfunding project to be more important than social entrepreneurs. This could be due to the fact that social projects will need more of a supporters base, because it resolves around a social idea. Co creation and investor participation in the form of wisdom of the crowd could therefore be perceived by entrepreneurs to be more desirable than with entrepreneurial entrepreneurs.

<b>Cost for investors</b>	<b>Entrepreneurial</b>	<b>Social</b>	<b>Amount of Control</b>	<b>entrepreneurial</b>	<b>social</b>
Very unimportant	0%	0%	Very unimportant	0%	0%
unimportant	6.9%	11.8%	unimportant	3.2%	14.3%
Neutral	41.4%	11.8%	Neutral	22.6%	14.3%
Important	17.2%	58.8%	Important	35.5%	71.4%
Very important	34.5%	17.6%	Very important	38.7%	0%

Table 53: cost for investors & amount of control (%)

#### **4.3.8.3. Difference in perception of trust motives**

Did the crowdfunding area lead to any differences in entrepreneurs and investors perception of trust in variables? Only investors seemed to be affected by the crowdfunding area.

##### **Target amount**

The only significant p values were obtained within the likert scale about reaching the target amount. These items had to do with the project itself i.e. knowledge of the people behind the project and the network of the project. Entrepreneurial investors were more agreeing on both aspects in regards to the likelihood of increasing the success in reaching the target amount. Entrepreneurial investors thought that the persons knowledge would increase the chance of reaching the target more compared to social investors.

It is unclear how the crowdfunding area influences the perception on the project network. It would be logical to assume that social investors would view the network to be of equal importance. Social projects will also need a large supporter base especially since they probably lack a (or have a lower) financial return

Network (project)	entrepreneurial	social	People' knowledge	entrepreneurial	social
Very much disagree	0%	0%	disagree	0%	0
disagree	0%	0%	Very much disagree	3.6%	0%
Neutral	11.5%	46.2%	Neutral	7.1%	3.8%
Agree	26.9%	26.9%	Agree	35.7%	73.1%
Very much agree	61.5%	26.9%	Very much agree	53.6%	23.1%

Table 54: project network & people' knowledge (%)

#### **4.3.8.4. Difference in crowdfunding project success factors: quality of project**

The crowdfunding area didn't generate any differences between social or entrepreneurial investors but did generate two significant p values for entrepreneurs i.e. social media & video. Entrepreneurial entrepreneurs agreed more with the statements regarding how they were guided by the platform in how to conduct their crowdfunding project. Entrepreneurial entrepreneurs indicated that the crowdfunding platform had guided them more in how to employ their social media and advised them more that they should place a video with their project. If entrepreneurs really differ on this notion ,and this is caused by the crowdfunding area, than this should be considered by social platforms since these aspects are important for the crowdfunding success of projects (Mollick, 2013).

Social media	entrepreneurial	social	video	entrepreneurial	social
Very much disagree	0%	0%	Very much disagree	0%	0%
Disagree	6.9%	26.7%	disagree	0%	13.3%
Neutral	20.7%	53.3%	Neutral	14.3%	26.7%
Agree	41.4%	13.3%	Agree	50%	53.3%
Very much agree	31%	6.7%	Very much agree	35.7%	6.7%

Table 55: social media & video (%)

#### **4.3.8.5. Difference in crowdfunding platform success factors**

No significant p values were obtained for variables corresponding to the crowdfunding platform success factors. Two nearly significant p values were obtained for additional funding in that entrepreneurial entrepreneurs were more agreeing with the fact that the platform on which crowdfunding occur will increase the chance of additional funding. This could be due to the fact that entrepreneurial entrepreneurs perceive the platform (entrepreneurial) to be of more reputation/ or quality which would lead to a better track record. Another conclusion could be that social

entrepreneurs are more confident about obtained additional funding regardless of the platform used. Either way the p value was not significant. Almost significant p values was furthermore obtained for strict screening. Investors were asked if platforms should more strictly screen their crowdfunding projects. Entrepreneurial investors agreed more with this statement that platform should more strictly screen crowdfunding projects before placing them on their crowdfunding platform. This could be due to the fact that the entrepreneurial sector has less of a social component and the intrinsic motives of entrepreneurial investors are more aimed at the financial return. This thesis revealed that entrepreneurial investors placed more importance on financial return than social investors. Entrepreneurial investors might think that stricter screening would lead to more high quality projects being displayed on the platform. Projects of high quality could reduce the risk of bankruptcy and with this the risk of not receiving a financial return. This p value was not significant making assumptions irrelevant, although percentages would deem otherwise.

## 5. Conclusions

This paper set out to investigate why and how banks have ventured into crowdfunding and how bank involvement can positively affect the different mechanism that make up crowdfunding i.e. motives of investors and entrepreneurs to partake in crowdfunding, project success factors and platform success factors. This next section will use the results analyzed in chapter 4 in order to answer these research question which were: Is crowdfunding a disruptive technology?, how do banks react to crowdfunding?, what explains the different reactions of Dutch banks to crowdfunding? and what can banks contribute to the crowdfunding sectors?

### 5.1. Study 1: Dutch banks' reaction to crowdfunding

Study 1 was aimed at exploring the different reactions of Dutch banks and their motives for doing this. This thesis assumed that crowdfunding could constitute a disruptive technology for more traditional financing methods. The reactions of Dutch banks could be due to the disruptiveness of the financing method.

#### 5.1. 1. RQ: Is crowdfunding a disruptive technology?

It is too early to indicate if crowdfunding is a disruptive technology for traditional financing methods ,like banks. Using the theory devised by Christensen (1997) this thesis identified that crowdfunding does have attributes that are in line with disruptive technology theory (US economic outlook, 2013). This thesis argues that crowdfunding complies to 4 of the 6 characteristics of a disruptive technology: underperforms dominant technology, attractive to customers in niche, rapidly growing and reluctance of large incumbents to address new technology. However it remains unclear if crowdfunding is a disruptive technology or can become a disruptive technology for banks, because first off disruptive technology is argued by scholar to be ambiguous in the definitions applied and holds little predictive value in determining if technologies can become disruptive (Tellis, 2006; Danneels, 2004). Statements about disruptiveness can only be made after the disruptive technology has replaced the main technology. Furthermore crowdfunding doesn't seem disruptive to banking, at the moment, because it is small compared to bank loans in the Netherlands (<0.01% of bank loans) and furthermore crowd funds a market that isn't the main market of banks i.e. new start up ventures & SMB. Furthermore in funding these sectors they generate new customers for other financiers ,including banks, once projects have completed their start up phase. The fact that research indicates that there are only a few examples known of successful later stage financing of start up ventures or SMB by crowdfunding further proves this (Hemer, 2011). Crowdfunding will likely benefit banks because it creates potential customers that will use their services once the start up phase has been completed. It is furthermore questionable if crowdfunding will venture into the main markets of banks and provide large firms with funds since this involves larger sums of money, would probably lead to more regulation being placed on crowdfunding and they would have to directly compete with other traditional financing methods (De Buysere et al., 2012; Us economic outlook, 2013).

Crowdfunding at the moment is thus more a complement to the ways in which ventures can fund their project and doesn't constitute a disruptive technology (yet).

#### 5.1.2. RQ: How did banks react?

Most banks have, as of now, undertaken little action with regard to crowdfunding, aside from partaking in national research or making clients aware of the fact that they could finance their projects by means of crowdfunding. Bank, that ventured into crowdfunding, has been analyzed. Bank

ventured into crowdfunding by creating its own crowdfunding platform. Using Markides & Charitou (2003) it can be argued that the bank reacted towards the (disruptive) technology by means of “adopting the innovation by playing both games”.

The bank backed up crowdfunding platform is in line with corporate venture theories like dual transformation or ambidextrous organizations. Dual transformation and ambidextrous organizations were theories indicating that a separate unit was positioned outside the structure and culture of the organization that was tasked with exploring innovation (Gilbert et al., 2012; Tushman & O'Reilly, 1996). Seeds was a daughter company that was positioned outside the bank and didn't share any resources (although they were aware of their existence and could direct potential clients to each other). This platform ventured into crowdfunding and adopted the technology. This seems to be in line with theories on dual transformation or ambidextrous organizations. It however remains unclear if banks actually used these theories or that other theories were applied.

The partnerships with the crowdfunding platforms seems to be in line with joint venture theory in which partnerships are made with other parties that share a similar goal. Since the bank wanted to learn about the crowdfunding sector this seems to follow theory presented in this theory.

#### ***5.1.3. RQ: What explains the different reactions of Dutch banks to crowdfunding?***

Using the literature a theoretical framework was devised which entailed 5 motives that would explain the behaviour of banks in venturing in crowdfunding i.e. counter strategy, establishing relationships, knowledge acquisition, corporate social responsibility and unique value proposition.

Bank had ventured into crowdfunding because of three reasons: First off because start up ventures were having trouble in acquiring financing and banks felt that they were obligated to help these parties in some way. Secondly, people were more active online investing in projects that they found interesting to invest on. Lastly, crowdfunding and the internet offered opportunities in making (easier) contact with parties, sharing content and standardize contracts. These motives are in line with corporate social responsibility (helping start up ventures) and unique value proposition (opportunities). Seeds was a very active form of engagement, by the bank, in venturing into crowdfunding. This was due to multiple reasons. First off, at the time of inception there weren't many active crowdfunding platforms available with which the bank could partner up. Furthermore it had identified a niche within crowdfunding after a pilot conducted with 300 entrepreneurs. To offer their value proposition they had to establish their own crowdfunding platform in order to offer this. The crowdfunding area chosen was also due to the unique value proposition devised. The business model employed by Seeds offered entrepreneurs more financial control in the beginning of their company because of revenue marks, max on financial return (<300%) and a long crowdfunding period. In order for this proposition to work out, a crowdfunding area must be chosen where investors aren't solely motivated by the financial return and where entrepreneurs have a commercial business model. The bank furthermore believed that the social entrepreneurial crowdfunding sector would facilitate their platform the best. Overall the main motives were the unique value proposition that the bank offered and corporate social responsibility (kick start new social start ups). Aside from these two motives, establishing relationships and knowledge acquisition were present although not the main motives for engaging in crowdfunding. The bank hoped that by crowdfunding these projects they would later on apply for additional funding with the mother company. Lastly, by engaging in



crowdfunding the bank has learned value lessons about the crowdfunding sector. These lessons can later on be used to formulate a new experiment regarding crowdfunding.

The partnerships can be explained according to one motive, namely knowledge acquisition which explains venturing into crowdfunding, the chosen form and crowdfunding platforms. The bank wanted to learn about the crowdfunding sector and deemed establishing crowdfunding platforms to be costly (also due to the presence of platforms). The platforms were chosen due to their size and the area in which the platform was operating, impact ventures. The bank viewed itself as a corporate social bank and had financing methods in place aimed at the same area in which the platform operated. Knowledge learned could thus be more useful since the bank already financed this area (innovative start up ventures) and would partner up with a platform with the same social corporate responsibility. So mixed in with the motive of knowledge acquisition is the notion of CSR.

## **5.2. Study 2: Dutch banks contribution to the crowdfunding sector**

What did Dutch bank involvement contribute to crowdfunding success factors present in crowdfunding.

### ***5.2.1. RQ: What did banks contribute to the crowdfunding sector***

The aspects of crowdfunding factors which were affected by Seeds were quality of project (voting system & guidance) and crowdfunding platform tools (business model & additional funding). Rabo bank reduced transaction costs by offering more openness and transparency. In this way transaction cost were reduced by both bank ventures.

#### ***5.2.1.1. Seeds***

No conclusions can be made about crowd sourcing, jurisdiction and community because no specific elements were in place (crowd sourcing), it can't be determined if they differ from other platforms (jurisdiction) and the contact with investors was indirect (community).

#### Quality of projects

Quality of projects were enhanced by the platform because of the voting system and the extensive guidance provided. Because of this entrepreneurs were more able to indicate their quality to investors but also to the platform. In so transaction costs are reduced, because uncertainty about whether the project will reach its target amount by attracting investors is reduced and adverse selection (lemon problem) is minimized. Uncertainty is thus reduced for entrepreneurs and investors ,however other transaction cost could have increased. The voting system namely increased the frequency of transactions i.e. entrepreneurs had to contact investors multiple times and investors had to invest two times (vote & invest). Guidance of entrepreneurs furthermore increased the transaction costs for the platform, because they provided extensive guidance how to successful crowdfund your project.

#### Business model

The tools that Seeds had on its crowdfunding platform were the unique business model which it employed. The business model gave entrepreneur more financial flexibility because of revenue marks, max on financial return and the long crowdfunding contract. This reduced uncertainty for entrepreneurs whether they could uphold their financial liabilities to investors and could have reduced policing costs since they were bound by a contract that they could more easily uphold to investors (since they themselves specified under which circumstances financial returns would be

given). This however could have led to an increase in other transaction costs. Entrepreneurs needed to disclose more information about their projects, and their prognoses, leading to more information costs for entrepreneurs. Furthermore the long crowdfunding period increased the monitoring costs for Seeds since in some scenarios they would have to monitor annual figures of companies for 10 years in order to determine if companies uphold their end of the bargain with investors.

#### Additional funding

Transaction costs in this aspect could have been reduced, because uncertainty about additional funding is being reduced. Entrepreneurs can assume that after the crowdfunding period additional funding can be sought with the bank. This didn't happen but was hoped for. This could have sped up things because the bank would already have known the track record established by crowdfunding, and the business plan of the company. This way search, information and bargaining cost between parties could have been reduced later on if additional funding was sought by entrepreneurs. It remains the question if this would be the case since the absence of a large sample with Seeds and the willingness of entrepreneurs to seek additional funding with the bank is absent.

#### Summary

In the end Seeds was stopped because of the difficulty of achieving scale, this would lead to assume that Seeds couldn't overcome the transaction costs that it needed to make in order to continue its operations i.e. other crowdfunding platforms that already achieved scale are more suitable for crowdfunding. This thesis concludes that bank backed up crowdfunding in the form of Seeds does reduce transaction costs (quality of project, business model, additional funding) which led to successfully crowdfunding their project but at the same time faces transaction costs that it couldn't overcome, also due to the way it operated (guidance). It therefore is questionable if bank involvement in the form of one's own crowdfunding platform can reduce transaction costs or do this better than other crowdfunding platforms. Furthermore the bankruptcy of 2 of the 7 companies crowd funded by Seeds raises questions about the business model used (revenue marks + long crowdfunding contract), expertise of platform (screening) and monitoring role of the bank (moral hazard of entrepreneur), because ultimately although all these aspects were in place the projects went bankrupt.

#### **5.2.1.2. Partnerships**

By partnering up with crowdfunding platforms the bank mainly contributed to more openness and transparency in the crowdfunding for entrepreneurs and crowdfunding platforms. Reducing search and information costs for both. Financial products were, unintentionally, created but it is questionable if these will be implemented more often since it could lead to problem in case of bankruptcy.

### **5.3. Study 2: Potential Dutch bank contributions to crowdfunding sector**

This thesis assumed that bank involvement, in the form of partnerships or bank backed up, could be beneficial for the many factors that compose crowdfunding i.e. motives of entrepreneurs in pursuing financing by means of crowdfunding, the success factors of project and the success factors of platforms. Bank involvement, for example, could legitimize the crowdfunding sector, give platform more reputation and visibility or add their own network to the crowdfunding process. Questionnaires were sent to investors and entrepreneurs on crowdfunding platforms that had partnerships with banks pertaining questions about their motive to participate (trust) and perception on quality of project & platform success factors. Of these entrepreneurs and investors 28.6% of entrepreneurs and

14.9% of investors were aware of the partnerships that the platforms had with a bank. This however didn't lead to any significant p values for bank involvement as a variable. The same applies for the area of crowdfunding (entrepreneurial – social) in which the platform were operating. Investors and entrepreneurs didn't differ on their perception of bank involvement based on their awareness of the partnerships. Furthermore the crowdfunding area didn't result in different views on bank involvement.

#### ***5.3.1. RQ: Could bank involvement enhance investor and entrepreneur motives to engage in crowdfunding?***

The motive to engage in crowdfunding, to place a project on platform or invest in project, isn't influenced by the fact that the platform has a partnership with a bank. Other factors were more important for entrepreneurs (reputation of platform & visibility) and investors (idea behind the project). Bank involvement will not affect the decision to place projects on platforms or invest on projects. Bank involvement was believed to enhance the motive to engage in crowdfunding by improving the trust of investors and entrepreneurs in jurisdiction, social capital, reaching the target amount, quality of, fraud or quality of platform. Bank involvement however in this aspect was again not perceived to be important. Bank involvement was mostly valued unimportant and placed below other variables. Only aspect on which crowdfunding platforms could contribute was social capital. This variable had positive statements regarding the importance of bank involvement. Bank involvement would attract additional investors and thus serve as a part of the social capital of projects. Bank backed up crowdfunding platforms were perceived to be more important in attracting investors than the situation in which platforms only had connections with banks.

#### ***5.3.2. RQ: Could bank involvement positively affect project success factors?***

Bank backed up crowdfunding platform Seeds guided their entrepreneurs extensively and had a voting scheme which helped entrepreneurs to "line up" their potential investors. Questionnaire identified that 10-14% of entrepreneurs found that they were not enough guided on aspects like interaction with investors, social media or project information. These aspects are indicated by literature to be important as project success factors. Furthermore questionnaire indicates that project information and people behind the project are often viewed as important in determining the quality of projects and possibility of fraud by investors. Investors thus need project information to determine if they want to invest on crowdfunding projects. Lastly, investors indicated that platforms should guide entrepreneurs more on how to interact with investors. Platforms should determine if the negative statement regarding guidance are warranted (reflect reality), if negative statements are large enough to undertake action and if platforms want to guide entrepreneurs more on these aspects. More guidance could mean more transaction costs for platforms and furthermore the entrepreneur is also responsible for carrying out a successful crowdfunding project. Extensive guidance proved successful for Seeds but heightened transaction costs. This thesis therefore advises that normal platforms are more suited to guide projects.

Platforms could furthermore screen projects based on the results obtained in this research (and variables already described in the literature). It is uncertain if platforms are already doing this do. Investors valued information greatly when determining the quality of project and possibility of fraud. Screening process of Seeds made sure that entrepreneurs had enough support base before actually investing, indicating quality. Stricter screening could thus increase the amount of successful crowd funded projects. Entrepreneurs agreed that strict screening would lead to more investors however

investors thought that stricter screening wasn't necessarily. Investors agreed with the statement that risk analyses should always be provided. Ironically risk analyses was valued below other variables when investors determined the quality of the platform and the possibility that the project would reach the target amount. But information was always used by investors to determine the possibility of fraud and quality of projects. Risk analyses could therefore provide additional (financial) information about projects. Further research could shed a light on the possibilities of providing risk analyses.

#### ***5.3.3.RQ: Could bank involvement positively affect platform success factors***

Openness and transparency was greatly valued by both entrepreneurs and investors and they indicated that this should be further improved. Bank involvement in crowdfunding could make the crowdfunding sector more open and transparent, however it is unclear in what regards, and to what extent, platforms should be more open and transparent. Further research could indicate what investors and entrepreneurs want and expect from platforms on this aspect. As for crowd sourcing and community this research is inconclusive if bank involvement could contribute and if it needs to contribute on this aspect. Crowd sourcing was perceived neutral by investors when deciding to invest on project, but entrepreneurs valued this aspect of crowdfunding more. No processes were in place at Seeds to boost this aspect of crowdfunding although the platform indicated that entrepreneurs should use their investors as ambassadors. Entrepreneurs also valued platform who undertake initiatives to create a dedicated group of investors on their platform. As was indicated with trust (network fatigue) the social capital of banks (network) could help crowdfunding projects reach their target amount. Because information about Seeds was only obtained through interviews, and relation with investors was indirect, this thesis can't decide whether banks would be better in creating a dedicated group of investors on their platform. Lastly, jurisdiction was valued low by entrepreneurs and investors and they furthermore indicated that the crowdfunding sector doesn't need more regulations. Seeds had made an investment in their legal framework but couldn't indicate if this differed from other platforms. Thus jurisdiction doesn't seem an area of crowdfunding platform success factors which banks can contribute on.

Benefits of bank involvement in platform mainly lie in the prospect of new tools (potential business model or financial product) being offered which satisfy a specific demand not yet offered by other platforms. Seeds for example offered an interesting value proposition to entrepreneurs which gave them more financial flexibility. A new business model or other tool however might force the bank to pursue more active forms of engaging in crowdfunding, like one's own crowdfunding platform. This however brings with it the risk of not achieving scalability because of the transaction costs. Another aspect which bank involvement could satisfy is additional funding. Entrepreneurs were positive regarding bank involvement and the chance of additional funding, although this was valued below other variables. Interestingly entrepreneurs perceived that platform with ties to banks were more likely to increase the chance of additional funding than a bank backed up crowdfunding platform. It is important to state that this variable was deemed unimportant when deciding which platform to use which further weakens the possible contribution of bank involvement.

#### ***5.4. RQ: What can bank involvement contribute to the crowdfunding sector?***

This thesis has analyzed the crowdfunding success factors that banks could enhance by involving themselves with crowdfunding. Based on the interviews with the banks and questionnaires with investors and entrepreneurs on crowdfunding platform, this thesis concludes that bank involvement

can contribute to the crowdfunding sector on the following aspects: social capital, guidance, screening, tools and additional funding.

Literature on disruptive technology revealed that although crowdfunding poses disruptive attributes it is questionable if it is disruptive given the market it operates in (start up ventures & SMB), their size compared to bank loans ( $<0.01\%$ ) and their lack of success in funding later stage funding (Hemer, 2011; Golić, 2014). Furthermore it remains to be seen if it will become disruptive. If crowdfunding were to venture into the main customer base of banks and other financiers then regulations would increase and counter actions of traditional financiers would probably occur.

Banks have ventured into crowdfunding however don't view it as a threat, but more as a supplement to the ways in which projects can be financed. Interview with the crowdfunding platform Seeds indicated that the business model, guidance and screening (voting) were aspects of the platform which positively influenced crowdfunding. The business model reduced uncertainty for entrepreneurs and furthermore gave them more financial flexibility. The voting system and guidance provided made sure that crowdfunding projects on Seeds were able to indicate their potential and quality to investors (and platform), and get funded. The active form in which the bank ventured caused transaction costs which it couldn't overcome and was therefore closed. The partnerships that the other bank in this study had resulted in less contributions mainly due to the motive for venturing into crowdfunding. Openness and transparency were improved by the partnerships that the bank had with platform and Douw & Koren. Investors and entrepreneurs on crowdfunding platform with a partnerships furthermore indicated that bank involvement was valued on some aspects, although always placed below other variables and they didn't differ in their perception based on awareness. The only variables which were valued positively were the social capital of banks in attracting investors and the chance of additional funding. These aspects don't require active involvement (own crowdfunding platform) since these could also be presented by partnering up with the crowdfunding platform.

Given the results it is in the best interest of banks to focus on their traditional business (Charitou & Markides, 2003) since crowdfunding doesn't require counter actions, given their low threat to banks, and the low amount of contributions that bank involvement can provide. If banks however want to venture into crowdfunding then they should view it as an additional asset in their operations. Furthermore they should take into account the form in which they venture into crowdfunding, because of the transaction costs present which prohibit scalability. A active engagement in crowdfunding (platform), in the form of crowdfunding platforms, should only be undertaken if the bank believes it can: (1) enhance platform variables which were valued by entrepreneurs and investors when they decide to engage in crowdfunding directly, (2) enhance the crowdfunding sector by screening and guiding projects on basis of what investors valued (information, passion ect.) whilst keeping transaction costs low, (3) employ their social capital as part of crowdfunding or provide additional funding after the crowdfunding period, (4) contribute by offering a different business model or other tool related aspect that isn't offered at the moment. A more passive involvement however seems to be more suitable for banks because this way they won't have to face the transaction costs present in the crowdfunding sector, whilst still providing aspects which investors and entrepreneurs value (social capital & additional funding) and thereby reduce transaction costs. Alternatively banks could devise new tools, without establishing one's own crowdfunding platform, that combine the old ways of banking with the innovativeness of crowdfunding, creating a hybrid

form. Examples could be 50% loan – 50% crowdfunding with crowdfunding platforms or a business model incorporating crowdfunding or peer to peer lending. However given the different claims in case of bankruptcy this could be more harmful than beneficial.

This thesis concludes that banks can be a contribution to the crowdfunding sector, but this is limited.

## **6. Discussion**

This section will discuss the limitations of this research, recommendations and suggestions for future research

### **6.1. limitations**

This research, as is the case with all research, has its limitations. First off bank involvement in crowdfunding is limited and therefore was also limited in this research. Only the bank backed up crowdfunding platform Seeds and the partnerships with crowdfunding platform were analyzed. This thesis has tried to shed more light on the how and why of bank involvement in crowdfunding. Study 1 indicated the reaction and motives of banks and had less limitations, validity and reliability issues than study 2 which analyzed the contribution of bank involvement.

#### ***6.1.1. Study 1: Analysing bank motives***

Limitations of study 1 are first off the low amount of banks that have ventured into crowdfunding. Reactions, motives and ultimately recommendations are made based on only two venturing forms into crowdfunding: partnerships and bank backed up crowdfunding platform. Furthermore by restricting the scope to only the Netherlands other actions of banks across the world have not been taken into account. This could have yielded interesting findings. This thesis furthermore didn't exhaust all possibilities present in the Dutch market. Another crowdfunding platform is still active within the Dutch crowdfunding sector that is bank backed up (or part of an insurance company).

#### ***6.1.2. Study 2: Contribution of crowdfunding platform***

First off, the bank backed up crowdfunding platform seeds only had a few crowdfunding projects on their site (N=7). The sample in this research of bank backed up crowdfunding projects was extremely low and therefore no conclusion can be drawn about entrepreneurs on bank backed up crowdfunding platforms. Furthermore no investors were contacted that invested on crowdfunding projects placed on Seeds because these had already partaken in another research and Seeds advised not to contact them so shortly after a research. This thesis can't make adequate conclusions about contributions to investors and entrepreneurs on bank backed up crowdfunding platforms. Only the interview gives possible attributes that entrepreneurs and investors could have valued, but no confirmation from the side of entrepreneurs and investors can be obtained to verify this. All conclusions drawn about the potential contribution of banks are based on entrepreneurs and investors on crowdfunding platforms who had a partnership with a bank. Because the research design was constructed around the notion that entrepreneurs on Seeds could be examined with entrepreneurs on other crowdfunding platforms, constructs like control, cost and financial flexibility were construct. However because of the low amount of respondents from Seeds, this option was cancelled but results were still displayed for the constructs although no theoretical explanation was assumed if differences would arise. These construct were assumed to offer interesting information about possible distinct contributions in the form (bank backed up and partnerships) however when only analyzing partnerships these constructs theoretically speaking shouldn't have any differences. These constructs offer thus only insightful descriptive information about entrepreneurs, but no actual contribution towards bank involvement.

Questionnaire furthermore had limitation because it relied solely on questionnaires obtained from entrepreneurs and investors on two crowdfunding platforms. Only two crowdfunding platforms were involved that furthermore had different characteristics, posing a number of covariance problems

when drawing conclusions. Crowdfunding platforms furthermore operated in different crowdfunding areas. Aside from the small sample size of platforms, the sample size of entrepreneurs and investors was also small, approx. 60 entrepreneurs and 100 investors. Results obtained could be caused by the low sample size or have little generalizability.

Furthermore because of the extensive amount of control variables present in crowdfunding (area of crowdfunding, business models, funding range ect.) covariance is hard to completely eliminate. This has been tried to be reduced by including a lot of control variables. This however probably increased the risk of having a lengthy questionnaire, increasing the dropout rate. Aside from the low sample size randomization didn't occur, investors were contacted based on the availability of contact information and willingness to partake. It could be possible that conclusions drawn in this thesis come from a batch of investors that had a specific relation with the project i.e. only public profile and company names were contacted resulting in a higher chance of contacting certain group of investors and excluding others. The groups of investors and entrepreneurs were then divided into two groups, aware and unaware investors/entrepreneurs. This based on the question if they were aware of the partnership that crowdfunding platform have. If this question was falsely answered or misunderstood than the two groups aren't a adequate representation of the population. This thesis assumes that the respondents grasped the concept of this question. Lastly, the research sample didn't include so called "normal" crowdfunding platforms which could have provided valuable information or could highlight differences not detected in this thesis.

The last limitation is inherent in the crowdfunding sector itself and the novelty of this research in that the crowdfunding sector is rather new and so are the involvement of banks in it. This thesis was completed in a time span of 1 year and many changes occurred in the crowdfunding sector. New platforms were founded and established one's were closed down, like for example seeds and share2start. Therefore it is hard to analyze a sector which is still growing and changing. Conclusion drawn today could hold less value tomorrow.

## **6.2. Recommendations**

Is it wise for banks to involve themselves with crowdfunding at this stage? First off recommendations will be made to the platforms since they can also make contributions to the crowdfunding sector without the involvement of banks

### Platforms

Investors and entrepreneurs indicated that openness and transparency were very important in deciding which crowdfunding platform to use and furthermore indicated that platforms should be more open and transparent. Platforms must first off determine if this holds true, are platforms not open and transparent enough for investors and entrepreneurs to use. Secondly they should investigate (if they deem this action necessary) what entrepreneurs and investors want from platforms in terms of openness and transparency. After these two steps platforms can wonder if actions are necessary to improve the openness and transparency of the platform.

Furthermore this research indicated that entrepreneurs felt that they were not guided enough by the platform in how to conduct their crowdfunding platform. There were negative reactions (10%-14%) regarding the guidance provided by platforms on how to display information, mobilize entrepreneurs social capital and interact with investors. Platforms must again analyze if these negative statements are true, did platforms not guide entrepreneurs enough on these crowdfunding success factors.



Furthermore the platform must determine if these negative statements require attention i.e. should platforms guide entrepreneurs more actively or is the amount of negative feedback not large enough (only 10%). Lastly, platforms must determine if they should guide entrepreneurs more actively, regardless of the negative statements, because these aspects are important in making sure that the crowdfunding platform is successfully crowd funded. On the other hand, increasing the guidance might increase the amount of transaction costs that platforms have to make (as was the case with Seeds). Furthermore is it the responsibility of platforms to guide their entrepreneurs in how to conduct their crowdfunding project successfully since this is also the responsibility of entrepreneurs themselves. Crowdfunding after all is the process in which entrepreneurs seek funding from investors and have to indicate their value and quality. They are placed on crowdfunding platform, but this doesn't mean that crowdfunding platforms should hold their hands at every step of the crowdfunding process. Last recommendation, concerning guidance, concerns the social crowdfunding platform. The crowdfunding area, as a independent variable, produced significant p values for the variables social media and displaying your video, in which entrepreneurial entrepreneurs were more positive compared to social entrepreneurs about their guidance received.

### Bank

The recommendation to banks are to, if the banks aren't already doing this, further research crowdfunding and positively engage in this. Crowdfunding is still growing and changing and could offer all sorts of possibilities in combining different financial products. Furthermore in positively engaging in crowdfunding (partake in research and informing clients about crowdfunding) people will be made more aware of crowdfunding, it will grow even more in size and this will result in the funding of a lot of new start up ventures and risky small and medium businesses which would otherwise have probably failed. These companies could become the customers of the future in that they could apply for additional funding at a bank, once they need more capital. In positively engaging in crowdfunding, banks could spread their name amongst potential customers. Banks furthermore don't have to worry that they will make a potential competitor since, according to this research, it will probably take some time and effort (or never happen) that crowdfunding ventures into other markets and becomes disruptive. Furthermore the Dutch crowdfunding market per se is lagging behind other countries which are much bigger and have a higher chance of becoming disruptive(Deloitte monitor, 2015). For now crowdfunding is not a threat, but instead could be a potential asset in the operations of banks or otherwise an additional financing method in the financing world.

If banks want to venture into crowdfunding then they should first take into account that the above mentioned actions (partaking in research and informing clients about crowdfunding) are initiatives that will not likely be viewed negative by persons. Involving yourself more actively in crowdfunding whether it is to increase social image, learn about crowdfunding or contribute to crowdfunding, is a double edged sword in terms of social image. Crowdfunding is popular and growing due to the reluctance of traditional financing methods to fund projects. The traditional funding methods left a gap which crowdfunding filled and any attempt to involve yourself now in crowdfunding could be viewed cynically. The fact that crowdfunding mitigates the risk of failure to the crowd further strengthens this. Banks are unwilling to take on higher risks, but by venturing into crowdfunding receive all the benefits (potential new customers or even financial gains in case of a platform) without the cons (risk of investment failure).

Another example of potential damage to social image was the fact that Seeds was able to successfully crowdfund 7 projects of which 2 went bankrupt. Although the platform isn't responsible for the success or failure after the crowdfunding period, since this is the risk of the investor himself (and this is indicated by the platform), investors who see their investments disappear due to bankruptcy might feel that the platform is responsible. This due to the fact that the platform is part of a bank. So involving yourself actively in crowdfunding solely to increase your social image could do more harm than good.

#### Recommendation 1: Do not venture into crowdfunding

Because this thesis assumes that crowdfunding isn't a disruptive technology it seems unnecessary for banks to venture into this market. According to research of Markides & Charitou (2003) (and resource based view) theory firms shouldn't pursue innovations that don't threaten their main customers base. By venturing into crowdfunding banks would waste time and resources on a technology which is unprofitable and entails far more risk than their usual customers (medium – large firms). Furthermore there can be resistance within the banks themselves to venture into crowdfunding because the motivation to involve themselves with crowdfunding isn't present. This could be due to the fact that it isn't perceived to be a threat (Charitou & Markides, 2003). Banks could "outsource" this sector (new start up ventures and SMB) to crowdfunding, because eventually the projects which are able to indicate their quality will reach their target amount and get funded. Because crowdfunding isn't able yet to fund larger capital amounts and later stages of businesses, these projects will have to use other financing methods to fund their capital needs after the crowdfunding period. Crowdfunding will thus help banks and other financing methods by supplying them with new customers. The bank can thus just concentrate itself on its traditional business, because customers that crowdfund aren't lost but are potential customers of the future. Lastly, the questionnaire in this thesis revealed that investors and entrepreneurs don't value bank involvement, although they had participated on a crowdfunding platform with partnerships to bank. Furthermore the questionnaire indicated only a few aspects in which bank involvement could contribute, but these aspects were always valued lower than other variables. Based on these aspects: lack of threat to business, a few aspects which bank involvement might influence, possible negative social image and transaction costs present in crowdfunding, it wouldn't be wise to venture into crowdfunding.

#### Recommendation 2: venture into crowdfunding (passively)

Questionnaires to investors and entrepreneurs revealed that these parties didn't value bank involvement, although they had participated in a crowdfunding platform that had partnerships. Only a few aspect were valued which can be contributed by just partnering up with the crowdfunding platform. Social capital of the bank and additional funding were perceived positively by investors and entrepreneurs. The positive impact of these variables is however reduced by the fact that these variables, although positive, were always valued lowly and furthermore that additional funding was a unimportant variable when deciding which crowdfunding platform to use. Venturing into crowdfunding (passively) however has its benefits because transaction costs of having your own crowdfunding platform are avoided. The partnership furthermore doesn't need to actively venture into crowdfunding in order to contribute on the aspects identified by the questionnaire (social capital and additional funding). The bank however does need to actively indicate their partnership to the crowdfunding platform and vice versa because otherwise the aspects will not be beneficial to crowdfunding and banks. Results from this thesis didn't seem to indicate that the bank benefited or positively affected crowdfunding, evident in the low amount of aware investors (social capital) and

low amount of additional funding sought with the bank. Furthermore interview indicated that there were no KPI in place in the contract and the partnership wasn't actively advertised to entrepreneurs and investors. This would reduce the benefits of social capital and additional funding.

By partnering up with crowdfunding platform however knowledge could be obtained about the crowdfunding sector (which could be more beneficial than just partaking in research) and relations can be established with key players in the market. Lastly, a business model can be devised which creates a hybrid form combining the best of two worlds. One's own crowdfunding platform has the benefit that this is created solely by the bank whereas with partnerships the opinion and preference of the partner have to be taken into account. But partnering up with platforms could create innovative business models.

### Recommendation 3: Venture into crowdfunding (actively)

This would only be logical if banks can contribute on crowdfunding success factors by reducing transaction costs in the crowdfunding sector (or having lower transaction costs than other crowdfunding platforms). Venturing actively into crowdfunding has its downside of which one was already described i.e. possibility of a negative social image. Furthermore interview with Seeds revealed that the crowdfunding platforms was eventually closed because it wasn't able to achieve scale due to the transaction costs in the crowdfunding sector. Most important transaction costs in the crowdfunding sector are adverse selection and moral hazard. The unique business model, voting system and extensive guidance of Seeds reduced certain transaction costs present in the crowdfunding sector, but at the same time increased the transaction costs for the platform. Seeds however demonstrated that active bank engagement in crowdfunding can contribute to crowdfunding success factors as all of the projects on Seeds were crowd funded. This is mainly caused by the unique way in which Seeds screened (voting) project and the extensive guidance that it gave to entrepreneurs. These aspects including the business model (or other tools) are presumed to be aspects which bank involvement could improve. The questionnaire furthermore indicated that entrepreneurs on crowdfunding platforms felt that they weren't guided enough on project success factors (10%-14%) and the fact that investors indicated that entrepreneurs should be guided more on how to interact with them. There are thus possibilities for bank involvement in positively affecting the crowdfunding sector, however extensive guidance led to an increase in transaction costs and 2 out of 7 companies that received crowdfunding at Seeds went bankrupt. This raises questions about the business model and screening method. Furthermore in order Another crowdfunding platform is still active on the Dutch market that is bank backed up, doorgaan.nl. It is interesting to see that this initiative was started in 2014 and as of now has successfully crowd funded 37 projects. Of which none, to my knowledge, have gone bankrupt. It can be assumed that it is possible for a bank backed up crowdfunding platform to reduce transaction costs that prevent scalability.

### Conclusion

It is important to view these recommendations in light of the limitations of this research and the youthfulness of crowdfunding. This thesis concludes that banks can follow three courses when faced with crowdfunding

1. Focus on traditional business. Crowdfunding isn't suited for bank involvement

2. Passively venture into crowdfunding by partnering up and contribute to the crowdfunding sector by employing your social capital, provide additional funding or even devise a hybrid form of financing.
3. Actively engage into crowdfunding by creating your own crowdfunding platform and should only be done if the bank feels that it can provide something new in terms of business model, additional funding, social capital, guidance or screening whilst keeping transaction cost low.

### **6.3. Theoretical contributions**

First off this thesis has provided to construct an overview of the Dutch crowdfunding market indicating the funding range of platform, minimal investments, licenses it had, tariffs employed on both entrepreneurs and investors, length of crowdfunding period, length of contract, funded projects and business models used for the entrepreneurial sector of crowdfunding (general & social). This was necessary because of the complexity of crowdfunding in which platforms are basically are located in a niche within a niche within a niche. Crowdfunding platform in the Dutch market can differ on numerous aspects and providing clarity will greatly help entrepreneurs and investors in deciding which crowdfunding platforms to use. Crucial in this, as it also was for this research, is the research of Douw & Koren which tries to make the crowdfunding sector understandable. Newest development in this aspect is the founding of Fundipal, a initiative of Douw & Koren, which advises entrepreneurs which crowdfunding platform is suitable for them according to their preferences. Because crowdfunding is still growing and changing this research has its limitations, because some results have aged. New crowdfunding platforms were established and old one's were closed which makes table 8 outdated.

This thesis furthermore tried to examine the disruptiveness of crowdfunding based on theory and observations, and created a theoretical framework involving all relevant crowdfunding factors which can be improved by banks, but also platforms and other financiers.

The results in this thesis have enriched the existing literature on crowdfunding by viewing this phenomena from the perspective of banks. Furthermore results identified were overall in line with results obtained in previous research, thereby further validating these findings. This thesis however also had some interesting results of its own. For example openness and transparency was valued important by entrepreneurs and investors when deciding which crowdfunding platform to use. Furthermore some results seemed to contradict existing theory like the preference of entrepreneurs for a large investors group, no fear for information disclosure with entrepreneur and the low importance placed on % collected by investors (this finding contradicts and at the same time validates previous research) . More results were obtained that were in line with existing theory on the motives to engage in crowdfunding, project success factors and platform success factors. Investors were more concerned with project variables like project information, purpose of project or passion which was also observed by research of Akker et al.( 2013), Fiddelaar et al. (2014) and others. The crowdfunding area in which the investor invested caused a significant p value for financial return. Entrepreneurial investors indicated that the financial return was more important when deciding to invest on crowdfunding projects compared to social entrepreneurs. This is in line with among others research of Van Wingerden & Ryan (2011) which specified that there are two types of investors based on their motive to invest i.e. intrinsic motives or financial return.

#### **6.4. future research**

In retrospect, case analysis would have provided more data about bank involvement and what entrepreneurs valued about Seeds. Since Seeds has been closed there is only one other bank backed up crowdfunding platform operational (Doorgaan.nl). The projects displayed on this platform could offer interesting case analyses or might partake in questionnaires similar as the one in this research. This research hadn't included doorgaan.nl, because of the extra control variables this would create and because it was wrongfully perceived not to be a bank backed up crowdfunding platform. This thesis had assumed that doorgaan.nl was an initiative of an insurance company. Lastly it also had only a few projects displayed and financed when this thesis began (N=18). Now doorgaan.nl has much more project financed (approx. 80), is the only bank backed up crowdfunding platform still active and none of the projects crowd funded on the platform have gone bankrupt (with Seeds 2 companies went bankrupt). Research on doorgaan.nl could provide interesting data on successful bank involvement in crowdfunding.

This research is one of its kind (at least as far as I know) in which banks' motives for venturing into crowdfunding have been analyzed, differences between entrepreneurs and investors on a crowdfunding platform (with partnership to a bank) were investigated and potential areas in which bank involvement could contribute were identified. Because crowdfunding is a recent development, and most banks are still reluctant to venture into crowdfunding, this thesis should be viewed mostly as exploratory rather than explanatory. If crowdfunding continues to grow then banks will eventually decide to venture into crowdfunding, because of different motives and with different benefits in mind to investors and entrepreneurs. This could warrant further research into the aspect of bank involvement in crowdfunding and the aspects it can enhance. A bank, for example, is at the moment contemplating a new business model incorporating crowdfunding. Research can be done in order to see what aspects of banks and crowdfunding entrepreneurs and investors want to see combined. Crowdfunding and banking would be the ideal way to combine the benefits of both worlds. A larger sample of bank initiatives would furthermore allow for more explanatory research which this research was unable to do.

The future will tell if crowdfunding becomes disruptive for traditional funders, if regulation will increase and whether banks will involve themselves with crowdfunding. These what ifs could create further research if they arise. Fraud is relatively absent in the crowdfunding sector, however how will investors, entrepreneurs, platforms, regulatory institutions, general public and the financial world react if a big scandal occurs. The findings of this thesis could be quickly dismissed if big events take place in crowdfunding. Furthermore bank

Lastly this thesis had only distributed questionnaires to investors and entrepreneurs who had partaken in crowdfunding and only on two crowdfunding platforms. This research could be increased in scale by contacting "normal" crowdfunding platforms and people who have never crowd funded before. This would further highlight potential differences between investors and entrepreneurs on bank initiatives and indicate potential areas of crowdfunding which people find important and bank involvement

## 7. Reflective report

This concludes my master thesis of 1 year which investigated bank involvement in crowdfunding. During that time some problems occurred which were eventually dealt with. Noteworthy incident however occurred on 8-4-2015. I was called in the morning by the University telling me that the director of one of the crowdfunding platforms was trying to contact me. The platform felt that I hadn't informed and contacted them properly about my research intent and furthermore that I was misleading in my mail to entrepreneurs and investors. In order to understand the situation it is necessary to know that platforms display projects, including their contact information (mostly). Furthermore investors invest on these projects and are listed as funders of these projects. These investors can invest anonymously, but in most cases use a public profile or company name. Investors and entrepreneurs information is to some extent publically displayed. With the help of the internet, and the information on the platform site, it isn't hard to determine which companies or people invested on certain crowdfunding projects. I had mailed several crowdfunding platforms informing them that I would be conducting a research involving crowdfunding and that I would contact investors and entrepreneurs that had participated on their platform. I also indicated that if these platforms had any objections that I wouldn't go through with my plan of contacting investors and entrepreneurs. I received several mails from platforms indicating that they couldn't help me with my request. They furthermore indicated that they rather not have me contact investors and entrepreneurs. I didn't receive any objections from the two crowdfunding platforms in my research and therefore assumed that I could continue with my research. After all I didn't ask for investor or entrepreneur contact information, neither did I obtain these from the platform. I merely used the publically displayed information on the crowdfunding platform. In retrospect it would have been wise to contact the platforms by phone or be more persistent in obtaining the approval or objection from the crowdfunding platform. I mailed investors and entrepreneurs, indicating that I conducted a research and this was done by the University Twente. Furthermore I indicated that they were contacted because they were listed on the crowdfunding platform as either funder of entrepreneur of a project and that they had used a public profile, company name ect. with which I was able to get their contact information. I indicated that the crowdfunding project hadn't given me their contact information and neither had the crowdfunding platform. I ended the mail by stating that the crowdfunding platform was informed about my research. The crowdfunding platform believed that I was misleading in my phrasing of "informed". It could have given investors and entrepreneurs the idea that this research was conducted by the platform and/or was approved by the platform. After the phone call with the director of the platform we came to an agreement. I admitted that my conduct was naïf and bit unethical by using their data base without approval and that I more actively should have sought the approval of the platform. A mail was sent to entrepreneurs and investors explaining what had happened, including my apologies. I immediately called the other crowdfunding platform explaining the situation. They were pleased that I brought this matter under their attention and indicated that they wouldn't undertake any actions. I would like to thank the crowdfunding platforms for their understanding and sympathetic attitude which helped form an agreement and correct the mistakes made by me. The crowdfunding platform even sent a link in their mail, when explaining my actions, kindly asking investors and entrepreneurs to fill in the questionnaire if they hadn't done this yet. I again want to apologize to investors, entrepreneurs and the crowdfunding platforms for the inconvenience and misunderstanding that occurred because of my naïf actions. My intentions weren't bad.

## Appendix A: Framework of investors and entrepreneurs motives

Author	Title	Investors Motives (+)	Investor motives (-)	Entrepreneurs Motives (+)	Entrepreneurs Motives (-)
Mart Evers (2012)	Main drivers of crowdfunding success a conceptual framework and empirical analysis	Egoistic motives Altruistic motives			
Gerber & Hui (2013)	Crowdfunding: Motivations and deterrents for participation	-Collect reward -Help others -Be part of community -Support a cause	-Distrust of creators use of funds	-Raise funds -Expand awareness of work -Form connections -Gain approval -Maintain control -Learn new fundraising skills	-Inability to attract supporters -Fear of public failure and exposure -Time and resource commitment
Bakker – Rakowska (2014)	Crowdfunding for innovation: A qualitative research on resources, capabilities and stakes	-Access to investment opportunities -Access to new products -Community participation -Support for an idea -discouraged ex ante risk taking through Formalization of contracts	-Substantial delays in reward delivery -Possibility of fraud	-Lower cost of capital -More information	-Disclosure of information -No added value from investors -Challenge of satisfying more funders
Rossi (2014)	The new ways to raise capital: An exploratory study of crowdfunding	- Enjoy participation in building new firm -Extending network and building relationships -Feel important	Scam or risk of abuse of funds	-Raise producers profile and improve reputation -test for potential market -participate with audiences -good market testing feedback	-public failure -reluctant to publicly announce details -network fatigue
Golić (2014)	Advantages of crowdfunding as an alternative source of financing of small and medium – sized enterprises			-The wisdom of the crowd (solving corporate problems) -retain management control -removing geographic barriers -market research -marketing purposes -cost reduction	
Van Wingerden & Ryan (2011)	Fighting for funds: an exploratory study into the field of crowdfunding	Extrinsic motivation Intrinsic motivation			

Table 56: Drives and motives of investors and entrepreneurs (Mart Evers, 2012; Gerber & Hui, 2013; Bakker- Rakowska, 2014; Rossi, 2014; Golić, 2014; Van Wingerden & Ryan, 2011).

Investor motives	Entrepreneur motives
(Financial) reward	Costs
Participation in community	Control
Supporter of ideas	Trust
Trust	crowdfunding opportunities

Table 57: thesis drives and motives

## Appendix B: Research on Dutch investors

Research of Akker, Kleverlaan, Koren & Vliet (2013) set out to investigate the motives of investors in the Netherlands. This research had a population of 1277 respondents of which 85% had completed the questionnaire completely, 94% was aware of what crowdfunding entailed and 38% had actually crowd funded before. Table x entails some of the findings found that are especially interesting for this research.

<b>Roles of factors in deciding to invest</b>	Douw & Koren	Thesis research
Quality of the project	4.38	4.07
Passion of the persons involved	4.38	
Information about the project	4.30	
Information about the goals of the project	4.29	
Reasons for founding the project (existence)	4.22	
Explanations concerning the spending of the invested money	4.03	
Knowledge and skills of persons	4.00	
Information about the persons behind the project	3.99	
Involvement of trustworthy partners with the project	3.81	
Involvement of trustworthy partners with the platform	3.68	3.28
Information about the financial planning of the project	3.46	
Information about earlier completed projects	3.40	
100% threshold rule on platforms	3.39	3.43
Rewards involved with the projects	3.30	3.23
Target amount	3.05	2.94
Relations with the persons behind the project	2.99	3.53
Percentage that has already being invested	2.91	3.11
<b>Primary reason for not participating – although considered</b>		
I don't have the financial space	41%	
I didn't find any projects that were interesting	31%	
I didn't find any projects that had interesting rewards	14%	
The crowdfunding project was already completed	13%	
It was too much of hassle to invest	13%	
Information provided was not enough	7%	
I don't trust this kind of financing	7%	
<b>Primary reason for not participating – not even considered</b>		
I don't have the financial space	40%	
I was never asked to make a financial investment	38%	
I never looked at different websites	29%	
I didn't find any interesting projects	25%	
The risks are too high	5%	
I don't trust this type of financing	4%	

Table 58: motives to participate or not participate (National research on crowdfunding, 2013).

Most noteworthy are the disincentives found among respondents that didn't participate in the crowdfunding process. Although most of the respondents in the research sample had high confidence in the trustworthiness of the financing method, there still were respondents that didn't trust this type of financing. 7% within the category of respondents that did consider investing but ultimately did not and 4% within the category that didn't even consider investing. This would indicate a possibility for bank involvement since some potential investors aren't reassured about the financing method. Bank involvement could give crowdfunding more legitimacy and trustworthiness.



Furthermore although respondents indicate a high degree of trust in crowdfunding itself this doesn't mean that respondents might differ in their views on platforms. Crowdfunding is seen as legitimate but this doesn't mean that all crowdfunding platforms are equal in terms of solving adverse selection and moral hazard.

#### Thesis findings

Findings of these thesis are in line with the findings found of research of Akker et al. (2013), although this research had a smaller sample, didn't include non investors and had a different layout of questions. Research of Akker et al. (2013) only indicated project variables whereas this thesis also specified platform variables like reputation or visibility of platform. Nevertheless the important variables identified in the thesis are in line with the importance of variables in Akker et al. (2013).

## Appendix C: Interview Questions

The first and second main questions will determine why banks participate in crowdfunding and why this was done in their respective way (partnership or crowdfunding platform). Third question will determine why respective area (sustainable and social, Seeds) is being crowd funded or why platforms were picked as partners.

Literature has indicated possible reasons for participating in crowdfunding. 4 main categories have been established: counter strategy, knowledge, relationship, corporate social responsibility with inclusion of fifth in this thesis, unique value proposition. Unique value proposition constitute different propositions or characteristics of crowdfunding platform, like amount of loan obtainable or length of crowdfunding period. Each category has its own questions. Because both strategies of said banks differ this will result in different questions asked. Questions will however share common characteristics.

**Counter strategy:** Questions will deal with the possibility of future participation of other banks, future actions of respective banks asked, view on crowdfunding and the possible roles of banks and if banks have obtained an advantage from crowdfunding.

**Knowledge:** What knowledge the banks want to obtain from crowdfunding and how they will implement this in their operations. *Seeds:* Additional question about usefulness of knowledge because of different crowdfunding proposition compared to other crowdfunding platform.

**Relationships:** has crowdfunding led to new clients or were clients redirected towards crowdfunding partners or platform. *Seeds:* Additional questions about relationship with mother concern and focus of Seeds on specific group of investors (fans)

**Corporate social responsibility:** what is the overall sentiment of investors, entrepreneurs or bankers towards crowdfunding. *Partnership* additional questions about awareness of investors and entrepreneurs about partnership with bank and a higher or lower participation that this generates.

**Unique value proposition:** combined benefits of partnerships or characteristics of crowdfunding platform. Because more is known about Seeds than the partnership with platforms more questions are directed towards Seeds. Extra questions will probably be directed at partnership if additional information is presented during the interview.

*Seeds:* questions about benefits for entrepreneurs, length of crowdfunding period, changing minimum investment and return after the pilot and the risk selection of Seeds.

*Partnership:* Services that both parties provide each other.

### Interview Questions Seeds (25) English version

1. What was the primary reason for participating in crowdfunding ?
2. Why was chosen for a crowdfunding platform instead of, for example, partnership
3. Why does Seeds offer crowdfunding for sustainable and social ventures instead of entrepreneurial ventures?

#### Counter strategy

4. Do you view crowdfunding as a threat to the banking industry
5. Are you planning on including entrepreneurship (aside from sustainable) into your crowdfunding offering?
6. Are you planning on further adjusting your platform offering towards entrepreneurs and investors i.e. minimum amount, length of crowdfunding ect.

7. Are you observing indications or expecting other banks to operate a crowdfunding platform or partnerships ect.?
8. What will the future, in your opinion, be like for crowdfunding and what roles will banks play in it?
9. Does bank have a lead on other banks with Seeds?
10. Does Seeds have an advantage compared to other crowdfunding platforms?

#### Knowledge

11. What knowledge does Seeds want to acquire from crowdfunding?
12. How useful is this knowledge when crowdfunding offering of Seeds differs from other crowdfunding platforms (in terms of reward mark, duration contract, funding range, area of crowdfunding ect.)?
13. How are you planning on utilizing this knowledge?

#### relationships

14. Has crowdfunding led to new clients with in saving accounts or led to additional financing of funded entrepreneurs on Seeds?
15. Are there any cases known were clients of bank were successfully redirected to Seeds?
16. Seeds aims ,aside from family and friends, to reach fans of ventures for crowdfunding. How do you help entrepreneurs to reach them?
17. What is the relationship between Seeds and the mother company and which services and assets does the mother company provide?

#### Corporate social responsibility

18. What are the sentiments of entrepreneurs and investors concerning crowdfunding platform of a bank?
19. What is the overall sentiment of bankers towards crowdfunding?
20. Do you feel that bankers have an obligation to venture into crowdfunding?

#### Unique value proposition

21. Pilot of 2012 indicated that 300 entrepreneurs were interested in Seeds. What makes/made Seeds interesting?
22. What additional benefits do investors and entrepreneurs get from participating in Seeds?
23. Why does Seeds use a crowdfunding period of 10 weeks?
24. What was the main reason for changing the minimum amount of investing from 50 to 10 euro's and the return from 150% to 3 times the investment?
25. Why doesn't Seeds make a selection of ventures according to their risk, as is the case with Crowdboutnow?
26. What does Seeds offer in terms of crowd sourcing?
27. Are legal matters (jurisdiction) different on Seeds because it is part of a bank?
28. Do you believe that Seeds attracts more dedicated investors (community)
29. Do you guide entrepreneurs in how to conduct crowdfunding projects? How in terms of quality, network and interaction with investors?

#### **Interview questions partnerships (20) English version**

1. What were the primary reasons for participating in crowdfunding ?
2. Why was participation in crowdfunding done in the form of partnerships instead of one's own crowdfunding platform?
3. Why were these platforms chosen as partners?
4. Are entrepreneurs and investors aware of the partnership that platforms have with bank?

#### Counter strategy

5. Do you view crowdfunding as a threat to the banking industry?
6. Are you planning on creating a backed up crowdfunding platform?
7. Are you observing indications or expecting other banks to operate a crowdfunding platform or partnerships?

8. What will the future (in your opinion) be like for crowdfunding and what roles will banks play in it?
9. Does the bank have an advantage over other banks because of the partnership with crowdfunding platforms?

#### knowledge

10. What knowledge does the bank want to acquire from crowdfunding?
11. How are you planning on utilizing this knowledge?

#### Relationships

12. Has partnership with led to new clients?
13. Were there any cases were clients were redirected to the platform

#### Corporate social responsibility

14. What is the sentiment of people towards a bank that has partnerships with crowdfunding platforms?
15. What is the overall sentiment amongst bankers towards crowdfunding?
16. Do you feel that bankers have an obligation to participate in crowdfunding?

#### Unique value proposition

17. What services did you offer platforms?
18. What services do the crowdfunding platforms offer you?
19. Which factors of crowdfunding platforms do you find important and have contributed towards partnership?
20. Are investors and entrepreneurs more willing to participate in a crowdfunding platform that has a partnership with a bank? Why? What additional benefits does the partnership present them with?

## Appendix D: Questionnaires

### Entrepreneur Questionnaire

Hello,

I'm conducting a research involving crowdfunding for my master thesis. It would very much help my research if you could fill out the following questionnaire. I thank in advance for your participation. This questionnaire is anonymous.

#### Warm up questions

1. My project/ venture is currently in the following category:

- ☐ voting period (Seeds only)
- ☐ crowdfunding period
- ☐ has been funded

2. My target amount was :\$. .....

3. Days needed to collect funding: ..... days

4. Type of crowdfunding used was:

- ☐ pre sales
- ☐ reward based
- ☐ loan based
- ☐ Convertable obligations
- ☐ shares
- ☐ donation
- ☐ profit sharing
- ☐ Combination
- ☐ other, namely.....

5. Before crowdfunding my company I have tried the following financing methods

- ☐ friends & family
- ☐ angel investors
- ☐ venture capitalist
- ☐ banks
- ☐ other namely.....

6. In case of banks, which banks did you apply for:

- ☐ ING ☐ SNS
- ☐ Rabo Bank ☐ Royal bank of Scotland
- ☐ ABN AMRO ☐ Saxobank
- ☐ AEGON ☐ Interbank
- ☐ other namely, .....

7. Indicate which of the crowdfunding platforms you are aware/ have heard of

- ☐ Geldvoorelkaar ☐ WeKomenErWel ☐ Fundyd ☐ Viviad ☐ Share2start
- ☐ CrowdAboutNow ☐ Leapfunder ☐ Thedutchdeal ☐ FundMe ☐ Lendahand
- ☐ Symbid ☐ Kapitaalopmaat ☐ Doorgaan.nl ☐ Onderlingkrediet ☐ Seeds
- ☐ Geldoverenweert.nl ☐ Massafinanciering ☐ Collin crowdfund ☐ oneplanetcrowd
- ☐ other,.....
- ☐ I'm unfamiliar with crowdfunding platforms

8. Which of the following crowdfunding platforms have you considered before placing your project?

- ☐ Geldvoorelkaar ☐ WeKomenErWel ☐ Fundyd ☐ Viviad ☐ Share2start
- ☐ CrowdAboutNow ☐ Leapfunder ☐ Thedutchdeal ☐ FundMe ☐ Lendahand
- ☐ Symbid ☐ Kapitaalopmaat ☐ Doorgaan.nl ☐ Onderlingkrediet ☐ Seeds
- ☐ Geldoverenweert.nl ☐ Massafinanciering ☐ Collin crowdfund ☐ oneplanetcrowd
- ☐ other,.....
- ☐ I haven't considered any other crowdfunding platforms

9. Has additional funding taken place to cover financial needs after the crowdfunding period? If yes how was this done?

- ☐ friends & family
- ☐ angel investors
- ☐ venture capitalist
- ☐ banks

- ☐ crowdfunding
- ☐ other namely.....
- ☐ no, additional funding hasn't taken place

### Main questions

1. Which of the following factors were important in deciding which crowdfunding platform to utilize

Type of question		Very unimportant	Unimportant	Neutral	Important	Very important
Control variable/ control	Business model (loan, shares ect.)					
Control variable	Minimum investment for investors					
Control variable/range of funding	Amount/ range of funding that crowdfunding platforms offer					
Costs/ control variable	Length of crowdfunding period					
Control variable	Duration of crowdfunding contract					
Trust	Amount of successful projects displayed on crowdfunding platforms					
Costs	Tariffs/ costs of using crowdfunding platform					
Control variable	Costs for investors investing					
Control	Control over business during and after crowdfunding period					
trust	Reputation of crowdfunding platform					
platform	Visibility of crowdfunding platform					
openness	Transparency of crowdfunding platform					
Quality of projects	Quality of projects displayed					
trust	Licenses of crowdfunding platform					
jurisdiction	Legal framework/ jurisdiction of crowdfunding platform					
crowd sourcing	Amount of interaction with investors possible/ crowd sourcing opportunities					
Network	Network of crowdfunding platform					
Additional funding	Opportunity of additional funding after crowdfunding period					
Bank	Involvement of trustworthy partners					
Bank	Involvement of bank(s)					

2. To what extend do you agree with the following statements

	costs	Strongly disagree	Disagree	Neutral	agree	Strongly agree
Financial costs	Most important in choosing between crowdfunding platforms is the cost involved (tariffs)					
Control	Which type of crowdfunding					

variable	model (loan, reward ect.) is used is irrelevant except for the cost involved					
Time	I prefer crowdfunding platforms with long crowdfunding periods					
Time	Crowdfunding platforms should be more lenient in providing extra time to collect the target amount					
Time & resources	I prefer a short financial contract with investors					
Resources	I prefer to have a small group of investors instead of a larger group					
Time & resources	Providing investors with information and updates is time consuming					

### 3.To what extend do you agree with the following statements

Control		Strongly disagree	Disagree	Neutral	agree	Strongly agree
Management Control	In financing my company I like to retain control and management over my company					
Control variable	When faced with different crowdfunding models(loans, shares ect.) the amount of control that I retain in my company is an important factor					
Management Control	Investor participation and decision making in my company is beneficial to my company					
Financial control/tools	I t would be beneficial if crowdfunding platforms let entrepreneurs reward investors based on the revenue they made					
Financial control/tools	It would be beneficial if entrepreneurs could indicate a maximum return on investment for investors (a ceiling)					
Financial control/tools	It would be beneficial if crowdfunding platforms allowed entrepreneurs more financial flexibility towards investors (how, when and how much to pay)					

### 4. To what extend do you agree with the following statements

Additional funding		Strongly disagree	Disagree	Neutral	agree	Strongly agree
(crowdfunding)	crowdfunding your project instead of other financing methods will improve your chance of additional funding					
trust	If crowdfunding fails than other financing methods (angel investors, banks ect.) will be less willing to finance your project					
(crowdfunding platform)	The crowdfunding platform selected can improve the chance of additional funding					

(partners of platform)	The partners of the crowdfunding platform will improve my chances of additional funding					
(banks' involvement)	Involvement of banks in crowdfunding will improve the chance of additional funding					
(bank backed up crowdfunding)	A bank backed up crowdfunding platform will improve the chance of additional funding					

5.To what extend do you agree with the following statements:

Social capital		Strongly disagree	Disagree	Neutral	agree	Strongly agree
Control variable	Network of the entrepreneur himself is most important in attracting investors					
(crowdfunding platform)	The network of the crowdfunding platform will lead to more investors					
(partnerships)	Crowdfunding platforms that have partnerships will attract more investors					
(ties with banks)	Crowdfunding platforms that have ties with banks will attract more investors					
(bank backed up)	Bank backed up crowdfunding platforms will attract more investors					
community	I prefer crowdfunding platforms that try to create dedicated investor involvement on their platform					

6. to what extend do you think that the following statements correspond to the crowdfunding platform used (in comparison to other crowdfunding platform)

Crowdfunding opportunities		Strongly disagree	Disagree	Neutral	agree	Strongly agree
a. personal (awareness)	My work has achieved more awareness					
a. personal (reputation)	My reputation has increased					
a. Personal (skills)	I have acquired more skills and knowledge					
b. Relations	Better relationships with investors have be established					
b. Relations Value adding/ wisdom of crowd	Investors on crowdfunding platform will add more value to my company					
c. Market research	A better market research was conducted (in case of market research)					
d. Platform guidance	Guidance to conduct a crowdfunding project was better					



7.To what extend do you agree with the following statement: crowdfunding platform helped me by

project		Strongly disagree	Disagree	Neutral	agree	Strongly agree
Interaction with investors/ guidance	Advising me how to interact with my investors (information, updates)					
Quality/guidance	Advising me how to display information about my project					
Quality/guidance	Showing examples of good crowdfunding projects or had examples of successful crowdfunding projects on their site					
Quality/guidance	Advised me to provide a video explaining your project					
Social capital/guidance	Advised me which social media to use					

8. To what extend do you agree with the following statements

platform		Strongly disagree	Disagree	Neutral	agree	Strongly agree
Openness	Crowdfunding platforms should be more open and transparent					
Openness/trust	I fear that too much disclosure of project information on crowdfunding platforms could be bad for my company					
crowd sourcing	I value crowdfunding platforms that have crowd sourcing (investor interaction, mutual innovation) options on their crowdfunding platform					
Interaction with investors	Amount of interaction with investors should be minimal. Providing a financial transaction is the sole purpose of crowdfunding					
tools	Crowdfunding platforms that provide risk analyses of projects will attract more investors					
Tools	Crowdfunding platforms that use a pre screen of projects will lead to more investors					
Jurisdiction/ trust	Crowdfunding platforms should comply to more regulations because this will lead to more investors					
Jurisdiction/ trust	Investors should receive more regulation in terms of disclosure of information about projects					
Trust	Amount of displayed projects on crowdfunding platform will lead to more investors					

Trust	Amount of funded projects on crowdfunding platforms will attract more investors					
Trust/guidance	I value crowdfunding platforms that extensively guide entrepreneurs because this will increase the quality of crowdfunding projects					
Platform financial services	Having more financial services or business models on crowdfunding platform will attract more investors					
Platform brand name	Brand name and reputation of crowdfunding platforms will attract more investors					

9. Platforms have partnerships with a bank. Were you aware of this before and during your project ?

☐yes ☐no

10. Can bank involvement be positive for crowdfunding?

☐yes ☐no

11. Should the crowdfunding platforms actively indicate that they have partnerships with banks towards investors and entrepreneurs

☐yes ☐no

Sex: M/F

Age:....

Number of employees.....

Thank you for filling out the questionnaire. If you like to receive a copy of my findings please indicate this below and fill in your e-mail address.

I would like to receive copy

☐no ☐yes, e-mail.....

### Investor Questionnaire

*Hello,*

*I'm conducting a research on crowdfunding for my master thesis. It would very much help my research if you could fill out the following questionnaire. I thank you for your cooperation in advance. This questionnaire is anonymous.*

#### **Warm up questions**

1 Which of the following crowdfunding platforms have you invested on?

☐Geldvoorelkaar ☐WeKomenErWel ☐Fundyd ☐Viviad ☐Share2start  
☐CrowdAboutNow ☐Leapfunder ☐Thedutchdeal ☐FundMe ☐Lendahand  
☐Symbid ☐Kapitaalopmaat ☐Doorgaan.nl ☐Onderlingkrediet ☐Seeds  
☐Geldoverenweert.nl ☐Massafinanciering ☐Collin crowdfund ☐oneplanetcrowd  
☐other,.....

2. What was your relationship with the entrepreneur(s)/ project initiator(s)

☐Family ☐I'm a friend of a friend  
☐I'm a friend ☐I'm a customer  
☐I'm a relative ☐I'm a fan  
☐I'm a visitor ☐No relation, I simply invested on this project

☐ No relation, I regularly invest on this crowdfunding platform

4. Which communication channel was used to raise your awareness of this project?

☐ Social media

☐ television

☐ news article or magazine

☐ conversation

☐ website of project or company

☐ I can't remember

☐ e-mail

☐ website of crowdfunding platform

☐ other namely.....

3. How many times have you invested?

☐ this was my first time

☐ between 1-10

☐ between 10-30

☐ between 30-50

☐ more than 50

4. On how many crowdfunding platforms have you invested

☐ 1

☐ 2

☐ 3

☐ 4

☐ >5

### Main questions

1. What factors influenced your decision to invest in the projects placed on a crowdfunding platform

		Very unimportant	Unimportant	Neutral	Important	Very important
Financial	(financial) reward					
Supporter of ideas	Idea(s) behind the project is/are beneficial to society					
Participation in community	Feel satisfied to help this project					
Participation in community	Being part of this project					
Quality of project	Quality of project					
Control	Relationship with people behind the project					
Control	Business model used (loans, shares ect.)					
Control	Minimum amount of investment					
Control	Target amount					
Trust/guidance	Risk analyses of crowdfunding platform					
Trust/guidance	Screening by crowdfunding platform					
Trust/jurisdiction	Licenses of crowdfunding platform					
Control	Cost of crowdfunding i.e. fee for investors					
Openness	Openness and transparency of crowdfunding platform					
interaction	Amount of interaction with entrepreneurs					
Crowd sourcing	Crowd sourcing (mutual development/innovation, share in decision making) on crowdfunding platform					
Trust	Reputation of crowdfunding platform					
Control/trust	Threshold 100% arrangement					

trust	% that has already being collected					
bank	Involvement of trustworthy partners with the platform					
bank	Involvement of banks in crowdfunding platform					

2. To what extent do you agree with the following statements: the success of project in reaching their target amount is determined by

		Very much disagree	disagree	Neutral	agree	Very much agree
Financial reward/control	Expected financial return for investors					
Control	The passion of the entrepreneurs					
Control	The knowledge and skills of the entrepreneurs					
Interaction with investors	Project regularly providing updates to investors					
Quality of project	Quality of project					
Social capital	Network of entrepreneurs					
Control	Total amount needed					
Control	Crowdfunding period					
Control	Percentage already collected					
Trust	Involvement of trustworthy partners in the project					
Trust	Visibility of crowdfunding platform used					
Trust /	Expertise of crowdfunding platform in screening					
trust	Expertise of platforms in risk analyses					
Trust /guidance	Expertise of platforms in guiding projects					
Trust /community	Network of crowdfunding platform					
Trust	Reputation of crowdfunding platform					
Trust	Involvement of trustworthy partners in crowdfunding platform					
Trust	Involvement of banks in crowdfunding platform					

3. To what extend do you agree with the following statement: I determine the quality of projects based on:

		Very much disagree	disagree	Neutral	agree	Very much agree
Control	The passion of the entrepreneurs					
Control	The knowledge and skills of the entrepreneurs					
quality of	Information about the					

project	project (completeness, no spelling errors)					
Control	Information about the purpose of the company					
Control	Total amount needed					
Control	Percentage already collected					
Trust	Involvement of trustworthy partners in the project					
Trust /guidance	Expertise of the crowdfunding platform (screening/risk analyse/ guidance)					
Trust /jurisdiction	Licenses of the crowdfunding platform					
Trust	Reputation of the crowdfunding platform					
Trust	Involvement of trustworthy partners in crowdfunding platforms					
Trust	Involvement of banks in crowdfunding platform					

4. To what extend do you agree with the following statement: I trust that the project will not misuse my funds or commit fraud based on

		Very much disagree	disagree	Neutral	agree	Very much agree
Control	Information about the project					
Control	Information about the persons involved					
Control	Relation(s) with the persons involved					
Trust	Involvement of trustworthy partners in the project					
Trust	Expertise of crowdfunding platform (screening/risk analyses/ guidance)					
Trust	Licenses of crowdfunding platform					
Trust	Reputation of crowdfunding platform					
Trust	Involvement of trustworthy partners of the crowdfunding platform					
Trust	Involvement of banks in crowdfunding platform					

5. To what extend do you agree with the following statement: The quality of crowdfunding platform is determined by:

		Very much disagree	disagree	Neutral	agree	Very much agree
Control	Knowledge, expertise and reputation of persons behind the platform					
Control	Amount of displayed					

	projects on crowdfunding platform					
Control	Amount of successfully funded projects on crowdfunding platform					
Trust	screening of crowdfunding projects					
trust	Risk analyses of projects					
Trust/guidance	Guidance of projects by people of platform					
Trust /jurisdiction	Licenses of crowdfunding platform					
Trust /community	Network of investors of the platform					
Trust	Reputation of crowdfunding platform					
Control	Visibility of crowdfunding platform					
Trust	Involvement of trustworthy partners of platform					
Trust	Involvement of banks in crowdfunding platform					

6.To what extend do you agree with the following statements

		Very much disagree	disagree	Neutral	agree	Very much agree
jurisdiction	Crowdfunding platforms should adhere to more regulation					
trust	Crowdfunding platforms should always provide risk analyses of projects					
trust	Crowdfunding platforms should be more strict when dealing with entrepreneurs that delay rewards to investors					
Quality of project	Crowdfunding platforms should guide entrepreneurs more in how to display their project					
Social capital	Crowdfunding platforms should guide entrepreneurs more in how to employ their social network					
Interaction with investors	Crowdfunding platforms should guide entrepreneurs more in how to interact with investors (information, updates)					
openness	Crowdfunding platforms should be more open and easy to use					
Crowd sourcing	Crowdfunding platforms should implement more crowd sourcing options					
Trust	Crowdfunding platforms					

	should screen projects more strictly					
banks	Crowdfunding requires bank involvement					

7.Crowdfunding platforms have partnerships with banks. Were you aware of this?

☐yes ☐no ☐I don't know

8.Do you think that bank involvement can be positive for crowdfunding?

☐yes ☐no ☐I don't know

9.Should the crowdfunding platforms actively indicate that they have partnerships with banks towards investors and entrepreneurs

☐yes ☐no ☐no opinion

1.Sex: M/F

2.Age: .....

3.place of residency.....

Thank you for filling out the questionnaire. If you like to receive a copy of my findings please indicate this below and fill in your e-mail address.

I would like to receive a copy

☐no ☐yes, e-mail.....

## Appendix E: Case study Seeds

This appendix serves to further highlight the procedures on Seeds, their business model (chosen minimum investment, length of period, clarification revenue marks ect.) and relationship with the mother company.

### procedure

The procedures at Seeds are shown in figure 24. To display your project on Seeds entrepreneurs have to propose their business proposition to Seeds. Seeds will make no guarantees towards investors about the probability of success of projects and neither does it select projects on basis of risk as is the case with other crowdfunding platform like geldvoorelkaar. No risk analyses were made by the platform: *“Because the actual investment and the risk of investing is solely upon the investors themselves and this was clearly communicated on our website. So even if it is part of a bank and we present these companies on our platform this doesn’t implicate that all ventures have gone through a quality check and that they all are safe and guaranteed investments so to speak. It are all investments with a high risk”*. If the business plan is sound, the entrepreneurs has 10 weeks to collect votes from people from their network. A fee of 50 euro is required in order to start voting. Voting is a form of screening in that it gives an indication from the crowd if there is a predisposition to fund this project. Voting indicates how many possible investors there are and how many the entrepreneur can contact. Furthermore it protects the entrepreneur from himself: *“It is important for the entrepreneurs to have been told and heard from people that they find their company interesting and want to invest before they actually invest. Furthermore it was an important means for us to show entrepreneurs ,and to make them prove, that they had enough support for their product”*. If this stage is completed, with enough votes collected in said time, than the actual crowdfunding period of 10 weeks starts in which entrepreneurs must find investors (after payment of a fee of 250). If the project doesn’t get enough votes the project will be terminated. The crowdfunding period in the pilot of 2013 had cases which were longer than 10 weeks. This was however changed. The interviewee stated that: *The entrepreneur is busy with collecting financing but also has his company. This should come first. And it is very difficult to be occupied with collecting financing for a long period of time. You can’t do crowdfunding half-way. So we said lets shorten the time period so the entrepreneur has more focus on the campaign but he still has 2 months in which enough people can invest”*.

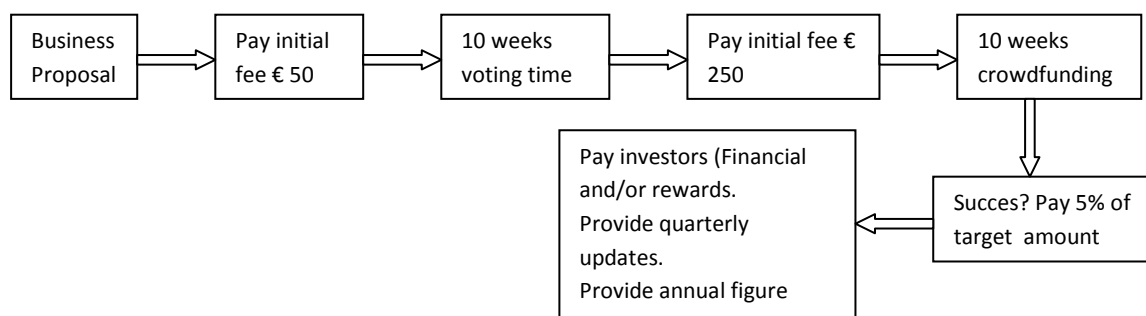


Figure 24: Crowdfunding process Seeds

Summarizing, the process of crowdfunding with Seeds has 5 steps (see figure 9)

1. **Contact Seeds** with information: personal, business summary, reasons for crowdfunding and target amount (ranging between 20,000 -150,000). Entrepreneurs can get funds between 20,000-150,000 on Seeds. Research indicated that entrepreneurs have difficulty obtaining funds ranging between 35,000 – 150,000 (Tomczak & Brem, 2013; Voorbraak, 2011). Presumably this is the reason



why Seeds allows a funding range between 20,000-150,000 although no questions were asked addressing this matter.

2.

**Collect votes** within 10 weeks, if enough votes are collected then extra information about rewards and financial payments to investors should be made available for investors to see. This is necessary for the next round.

3. **Find investors**, an bank account must be opened and the contract investment propositions must be signed. Then investors must be contacted in the 10 weeks period. Interviewee had this to say about the 10 weeks crowdfunding period: *“Every week you should collect at least 10%. A clear orientation point for the entrepreneur if he is on schedule or not and still a somewhat survey able period.”*

4. **The target amount has been reached**: A collecting agreement will be signed and, after a fee of 5%, the target amount will be available for the entrepreneur

5. **Rewards and financial payments**: will be made available to the investors as agreed upon.

Furthermore contact with investors will take place quarterly (provide an update) and yearly (provide annual figures).

#### Business model

The model employed by Seeds is a combination of financial and reward based models. Investors will get a financial return on their investment corresponding to a certain revenue mark i.e. form of profit sharing. Furthermore, if the entrepreneur has specified any rewards, investors will receive rewards (extra's) also dependent upon the revenue marks set. *“The investor got something if no financial return was possible in case the venture didn't perform like expected. At least then the investor got a product or service from the entrepreneur”*.

Investors can participate in crowdfunding by investing a minimum amount of 10 euro and the maximum per project is set at 5000. The minimum amount in the pilot was 50 but this was lowered: *“We said the payment is 50 because we wanted a boundary and it was a good amount, but eventually we got the feeling that because of this we had missed investments especially from people on social media who had a larger reach”*. Seeds felt that the lower boundary of 50 was set too high and that especially groups who were more present on social media were left out of the crowdfunding process. By lowering the minimum investments these groups would become more active in the crowdfunding process. Thereby increasing the reach of the crowdfunding process because more people would partake and they themselves would indicate or make other people aware of the project.

Each minimum investment (10) constituted a right to have a part which gave investors a right to have a financial payment or reward according to the terms provided by the entrepreneur. Investors could have 1 to 500 parts with a project and entrepreneurs provided at least 2000 parts (20,000 minimum target amount). Before finding investors, entrepreneurs decided how large the financial payment is per part, when financial payments and rewards are distributed towards investors and what the maximum amount of financial return on investments were. Parts of investors were linked to the revenue marks of the company funded. Each revenue mark constitutes a different financial return or reward for investors.

**Example:** Company A has set its revenue marks and maximum return on investment 200% with investor A having made an investment of 1000 (100 parts)

Revenue mark	Financial payment	payment	Cumulated payment	Maximum return on investment
250,000	3 per part	300	300	2000
400,000	5 per part	500	800	2000
550,000	6 per part	600	1400	2000
750,000	10 per part	1000	2000	2000

Table 59: Reward marks Seeds

The maximum amount that investor A can get on this investment is 2000. Because the entrepreneur has indicated that 200% (2 times the investment) is the maximum return on investment. Maximum return on investment can never exceed 300%, policy of Seeds. The reason for capping the financial return on investment was because: *“We said we don’t want to attract investors that are too much focused on the return especially because it involves high risk investments and we would have disgruntled investors”*. Seeds changed the initial maximum return on investment from 150% (pilot) to 300% which became the official maximum return on investment to better allocate financial return to individual projects because projects differ in the degree of social components. This way entrepreneurs could vary their financial return based on how social their projects were or if they wanted to attract more investors by means of giving a higher financial return (if their social component was low). Both means would lead to investors because in the first situation investors would invest because of the social factor in these projects and not so much the return. In the latter investors will be attracted less by the social factor but more by the prospect of a higher financial return.

In the situation of company A the lowest revenue mark is 250,000. If a company is unable to reach its revenue mark, example 250,000, than the investor will not receive an financial payment or reward specified. This situation can last up to 5 consecutive years in which case the contract will be lifted because entrepreneurs were unable to fulfil their promises made, reach their lowest revenue mark. A contract with Seeds has a maximum of 10 years except when:

- company is unable to reach lowest revenue mark for 5 years
- company has paid the maximum return on investment towards investors
- company has distributed all extra and has no other financial obligations towards investors.

The long contract of 10 years was established to protect investors. *“We must make sure that the investors are protected and make the contract period as long as possible. All right, if you (as an entrepreneur) choose for this then we want to see your annual figure for the next 10 years until the conclusion of the contract to make sure that written obligations to investors are uphold”*.

Figure 10 below illustrates a revenue schedule made by a company crowd funded at Seeds which was shown to potential investors. This figure also indicates the possible scenario’s i.e. low, middle and high levels of revenue in obtaining certain levels of revenue. This company indicates only achieving the first revenue mark in their second year and only according to the middle scenario. Revenue marks in combination with the possible scenarios (and the amount of revenue that this implicates) give investors a representation of the companies perception on how fast they will generate revenue and when they will give investors a return on their investments. This helps because frictions early on

are prevented and investors get an idea how companies will spend their funds and how they themselves perceive their company in terms of future growth and revenue.

Revenue marks, a maximum percentage placed on the financial return on investment (300%) and contracts of 10 years gave entrepreneurs more control in the ways in which they have liabilities when they start their company. They don't have to repay investors immediately after they crowd funded the amount, but instead when they made enough revenue and furthermore can place a maximum amount of return on this. This in essence is a special tool of Seeds because aside from providing the entrepreneur with the needed financing they provided them with more financial control or flexibility.

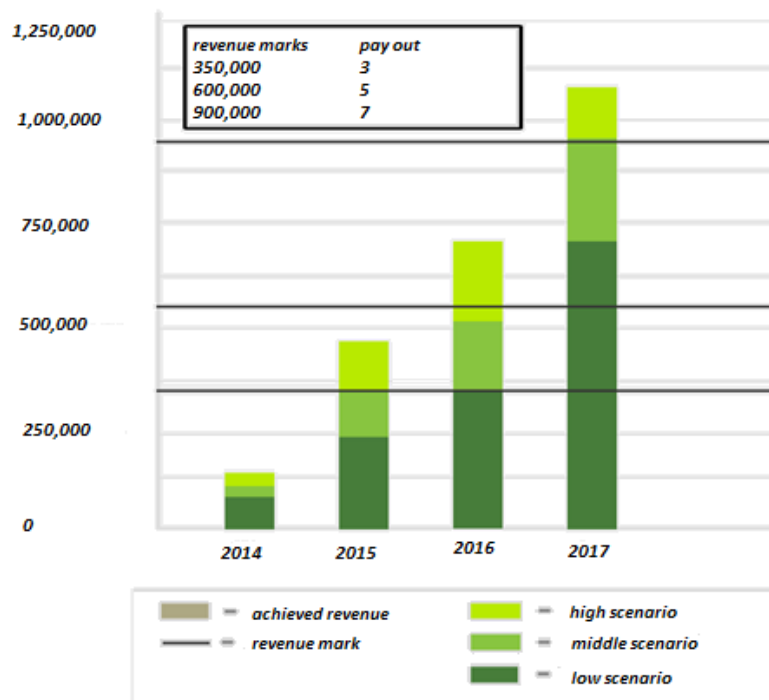


Figure 25: revenue marks and scenario's.

### Relationships between Seeds and Bank

Theory indicated that Seeds is much in line with the theories presented by Gilbert, Eyring & Foster(2012) dual transformation or ambidextrous organization by O' Reilly III & Tushman (2013). What was the relationship between Seeds and their mother company: did they share resources, expertise and knowledge? Interviewee indicated that none of the companies that were crowd funded at Seeds received additional funding at the bank, but of course this was one of the goals of the crowdfunding platform. Reason for the lack of additional funding provided to companies could be that entrepreneurs themselves acquired additional funding elsewhere, as was the case with one of the projects, or because projects are still in their start up phase (requiring no additional funding yet). The fact that two of the companies went bankrupt leaves few projects left that could apply for additional funding. As for the relationship between the two parties (daughter – mother company) this must be viewed as being aware of each other's existence. They can refer entrepreneurs and investors to the services of the other party, but don't share any resources. *"We found it important that the office network was aware of our existence. So if they had a proposition, that they could indicate our services to their customers but aside from that we were completely separate organizations"*. Still the relationship that these two organizations had, although more formal in nature, could have had positive implications for both investors and entrepreneurs." *A lot of entrepreneurs had the feeling that if they had us that they would be part of a larger established financial party. My experience with entrepreneurs have been that they found this positive, because it*

*gave them the feeling that were doing business with a party of which they have a certain image instead of parties which they didn't know or knew less of''.* As for the investors, the fact that Seeds had ties with a bank could enhance the feeling that all the contracts, jurisdiction and IT are solid. With investors though the risk arises that they think that the projects have gone through extensive quality and risk checks which is not the case. Although business proposals have been checked by Seeds no guarantees can be made that projects will succeed.

## Appendix F: General information entrepreneurs & investors

This appendix will list all results obtained from the questionnaire distributed to entrepreneurs and investors such as general information.

### Entrepreneurs

	Numbers	percentage
<b>Number of projects placed on crowdfunding platforms N=64</b>		
1	60	93.8%
2	2	3.1%
>3	2	3.1%
<b>Status of last project N=64</b>		
Active	6	9.4%
Successfully financed	53	82.8%
Unsuccessful	5	7.8%
<b>Business models N=66</b>		
Loans	27	40.9%
Pre sales	22	33.3%
Reward based	19	28.8%
Donation	12	18.2%
Convertible bond loan	4	6.1%
Convertible obligations	1	1.5%
Revenue sharing	1	1.5%
Shares	-	-
Profit sharing	-	-
Other namely	1	1.5%

Table 60: entrepreneurs

<b>Pre crowdfunding (banks)</b>	Numbers	percentage
Rabo bank	12	19.4%
ING	6	9.7%
ABN AMRO	5	8.1%
Triodos	3	4.8%
SNS	1	1.6%
AEGON	-	-
Royal bank of Scotland	-	-
Saxobank	-	-
Interbank	-	-
<b>Platforms used</b>		
entrepreneurial	39	66.1%
social	20	33.9%
<b>Pre crowdfunding financial methods N=66</b>		
crowdfunding was my first choice	29	43.9%
Friends and family	21	31.8%
Banks	18	27.3%
Angel investors	9	13.6%
Venture capitalist	6	9.1%
Other namely	7	10.6%
<b>Additional funding N=60</b>		
No	25	41.7%
Yes	35	58.3%
<b>Additional funding</b>		
Friends and family	9	13.63%
Angel investors	8	12.1%
Venture capitalist	6	9.1%
banks	5	7.6%
Crowdfunding	2	3%
other	12	18.2%

### Number of projects placed on platform

As is indicated in the tables, most of the entrepreneurs or project initiators only once placed a project on a crowdfunding platform, evident by the extremely high percentage of 93.8%. With only 2 having placed 2 times and 2 having placed projects more than 3 times. The high degree of first timers could have implications. Because most entrepreneurs only once placed a crowdfunding project on a crowdfunding platform they are presumably unaware of the crowdfunding processes at other crowdfunding platforms. This doesn't mean that entrepreneurs are unaware of the existence of other crowdfunding platform, but more that they are unaware of the possible distinctive differences between crowdfunding platforms. When entrepreneurs compare crowdfunding platforms they can only judge based on their experience of 1 crowdfunding platform, so comparing is done based on perception and not so much experience. For 93.8% of the entrepreneurs which only once placed a crowdfunding project on a crowdfunding platform the importance of certain variables have probably not changed i.e. the variables they indicate most important in placing the project on the platform will be unaltered. Instead the small group of 4 entrepreneurs that placed multiple projects, could have done this on different crowdfunding platforms and thus will have a more broader experience and perception on the crowdfunding process, crowdfunding platforms and their perception on the variables in this research. Furthermore the importance they give to certain variables could have

changed and the change can be caused by varying issues. Entrepreneurs can place a crowdfunding project on a different crowdfunding platform because of dissatisfaction with the previous platform, the project is more suited to another crowdfunding platform or other reasons. Because this research doesn't know the distribution of the population (entrepreneurs on crowdfunding platform) we can't be sure if this research sample is in line with the distribution of the population in that entrepreneurs mostly have only once placed a project on a crowdfunding platform.

#### Status of project

Success ratio of this research sample is extremely high. 6 projects were active, 5 unsuccessful and 53 projects were successfully financed. If the active projects are discarded, because they are still ongoing, then 82.8% of the projects were successful. Extremely high, given the fact that kick starter for example had a annual success ratio of approx. 50%, the crowdfunding platforms under analysis however are not comparable with kick starter since it involves different nations and business models (Mollick, 2014). Nevertheless 82.8% is high and there is no data on the population of projects to determine if this research sample is representation of the population. The high success ration could also have implications for this research since successful crowdfunding projects could have a different view on important variables in this research, than still active or unsuccessful ones. The fact that the research sample has a small amount of active and unsuccessful project is probably caused by the fact that active projects have a limited time (90 days) before they are successful or unsuccessful. Successfully crowd funded projects therefore are more present on crowdfunding platforms because, as time passes by, more crowdfunding projects will receive funding and will be displayed as successful on the crowdfunding platform whereas active projects are only labelled as active for a short period of time, before they are either successful or unsuccessfully crowd funded. Furthermore active and especially unsuccessful crowdfunding projects could be more hesitant to participate in the survey because active projects are busy with the crowdfunding process aside from their company. Unsuccessful projects might be reluctant to participate because they were unsuccessful.

#### Business model

As for the business models employed the top three were respectively loans (40.9%), pre sales (33.3%) and reward based (28.8%). Donations were used 18.2% of the time. Shares and profit sharing weren't used at all and the other categories were convertible bond loan (6.1%), convertible obligation (1.5%) and revenue sharing (1.5%). Both crowdfunding platforms have the option of using shares as a business model. Since this business model is absent in the research one can assume that either these business models are rarely used or this research sample is not entirely representative of entrepreneurs placed on crowdfunding platforms, because this group of entrepreneurs is not present in the sample. No entrepreneurs used shares as a business model in this research sample. This is unfortunate since this could have given interesting info. More control is given to investors if shares are used and questions concerning control in this thesis could have highlighted differences between entrepreneurs. Furthermore it could have served as a control variable. Small group of 3% (N=2) indicated that V credits and wall of fame were used, supposedly as a business model. Wall of fame would probably mean a reward i.e. name is being placed on wall indicating you financed the project. Thus only leaving V credits of which the meaning remains unclear.

#### Pre – crowdfunding financing methods

Surprisingly when asked which pre crowdfunding financing methods were used 43.9% of respondents indicated that crowdfunding was their first choice. This is surprising because according to literature

one would assume that friends & family or banks would be more frequently mentioned because these are more regular means of funding start up ventures (Bygrave et al., 2003) This could be attributed once again to the small batch of entrepreneurs composed or could be attributed to the platform i.e. entrepreneurs on crowdfunding platforms have a different view on crowdfunding and perceive this to be first choice. Because this research doesn't include other crowdfunding platform this assumption can't be tested. Nevertheless the observation doesn't follow the common logic i.e. first regular sources of funding: 4F or banks and then alternative (angel investors, business angels or crowdfunding). This finding is even more unique given the fact that the highest category of business models used were loans. Only for reward based and pre-sale business models, where products or services are presumably being tested (as could also be the case with loans), there is a wisdom of the crowd and marketing purpose clearly present i.e. aside from crowdfunding also testing your product and determining your customer base (Hemer, 2011; Schwienbacher & Larralde, 2010). Second and third largest mentioning of pre crowdfunding methods were friends & family (31.8%) and banks (27.3%). Lastly, 13.6% of entrepreneurs had used angel investors and 9.1% had used venture capitalist. A Large group of others was mainly composed of own equity (N=3), partners and funds (N=1), investment company (N=1), collecting donations among interested, customers and fans (N=1) and lastly again V credits (N=1). Chi square test was used to compare the pre crowdfunding financing methods with the later on used business model of crowdfunding. This was done to determine if entrepreneurs who had contacted banks would later on use loans or if entrepreneurs who indicated "crowdfunding was my first choice" would use pre-sales or reward based business models. The p value of the chi square was 0.45, indicating that we can't conclude if there is a relationship between pre crowdfunding financing methods and crowdfunding business model. If pre crowdfunding finances are grouped into reward (pre-sales & reward), donations, loans (loans, obligations & convertible loans) and reward than a p value arises of 0.44. Still no indication of a relationship.

#### Pre – crowdfunding financing methods: Banks

If respondents indicated that they had contacted banks, before crowdfunding was used which 16 respondents indicated, than the follow up question was to indicate which of the banks. Most contacted bank before crowdfunding was the Rabo bank with 19.4% followed by ING (9.7%) and ABN AMRO (8.1%). None of the respondents had contacted AEGON, RBS, Saxobank or Interbank. Instead Triodos was indicated by respondents in the box other namely to be one of the contacted banks that wasn't included in the questionnaire.

#### Additional funding

Additional funding had taken place 35 times for projects (N=60). Of interest are the 2 and 5 times this was done by means of crowdfunding and banks. Of the 5 instances where additional financing was obtained by means of banks, 2 times Rabo bank was sought and one time ABN AMRO was. Qredits was listed as a bank by one of the participants (although it is uncertain if this is indeed a bank). The fourth mentioning of additional funding by means of a bank did state that a bank was used however not which, because it still (contract) wasn't completed. Lastly, Qredits was listed as a bank by one of the participants (although it is uncertain if this is indeed a bank) As for the crowdfunding platforms these were: geldvoorelkaar and crowdaboutnow. The other additional funding methods were: friends and family (9), angel investors (8), venture capitalist (6), and others (8). Of which others involved a lot of subsidy and funds. Only a small percentage of entrepreneurs that had received additional funding did so at a bank. This would lead to believe that the partnership that the bank has

with crowdfunding doesn't generate a lot of potential customers. But due to the small sample of this research it is questionable to make such conclusions.

#### Knowledge and usage of platforms

Question addressing the number of crowdfunding platform known and used is necessary to understand the knowledge of the entrepreneurs about the crowdfunding sector. If entrepreneurs are aware of a lot of crowdfunding platform than one can assume that they have more knowledge about crowdfunding and have made a better choice regarding which crowdfunding platform to use. Of the 28 crowdfunding platforms listed in the questionnaire, 24 were known by entrepreneurs in varying degree. Not surprisingly were the most known and used crowdfunding platforms were the once used in this research sample. Entrepreneurs knew on average approx. 3 crowdfunding platforms. 25-26% of entrepreneurs only knew one crowdfunding platform and 53% knew between 2-5 crowdfunding platform. The group that knew more than 5 crowdfunding platforms were 20-21% of the sample with the maximum number of crowdfunding platform known by a entrepreneur to be 10. Although 24 of the 28 listed crowdfunding platforms were mentioned by entrepreneurs (meaning a lot of awareness of platforms), a large group of 25% knew only one crowdfunding platform.



## Investors

Number of times invested	numbers	percentage
1	40	37.04%
2-10	61	56.48%
10-30	4	3.70%
>30	1	0.93%
I don't know	2	1.85%
Number of platforms invested on		
1	15	22.39%
2	25	37.31%
3	12	17.91%
4	5	7.46%
>4	3	4.48%
I don't know	7	10.45%

Table 61:General information investors

Relationship with project	number	percentages
No relation, it was a good investment	33	34.74%
Friend	24	25.26%
customer	16	16.84%
No relation, I invest regularly on this crowdfunding platform	13	13.68%
fan	11	11.58%
Relative	6	6.32%
Friend of a friend	5	5.26%
family	4	4.21%
visitor	3	3.16%
Other namely,	23	24.21%
Communication channel employed		
Social media	50	52.63%
e-mail	35	36.84%
conversation	30	31.58%
Website of crowdfunding platform	25	26.32%
Website of project or company	21	22.11%
News article or magazine	8	8.42%
TV	4	4.21%
I can't remember	7	7.37%
Other namely	8	8.42%

Questionnaire had 5 general questions: how many times have you invested, on how many different platforms did you invest, on which crowdfunding platforms have you invested, what was your relationship with the project or entrepreneur and lastly which communication channel were used to raise your awareness of this project? These questions and their answers are displayed in tables

### Number of times invested

Many entrepreneurs had only once placed a crowdfunding project. Investors however, not surprisingly have invested multiple times on crowdfunding project . With investors the question "how many times the investor had invested?" had 1, 2-10, 10-30 and >30 as possible answers. Therefore the answers 2-10 and 10-30 as well as >30 are somewhat ambiguous, because the exact number can't be determined and answers can slightly or largely differ between investors. Leaving out the group that didn't know how many times they invested, 63% of investors had invested more than >1 times. Only 37% of the investors in the research sample had invested only once on crowdfunding projects. 4 respondents (3.70%) had invested 10 to 30 times and even 1 respondent had invested more than 30 times. Overall most investors had invested 2-10 times.

### Number of platforms

When investors invested they did this on multiple platforms. 75% of the investors had invested on more than 1 platform. This research can assume that investors are very knowledgeable about crowdfunding and their platform variables. Because investors invested multiple times and on different crowdfunding platforms.

### Relationships with project

Due to the option of indicating multiple answers in the questionnaire it is difficult to make assumptions on this aspect. Interestingly, a large group of investors indicated that they didn't have a

relationship with the project but merely invested because it was a good investment. It would have been logical that the direct environment of the entrepreneur would have made up the largest amount of investors. 13.68% of investors indicated that they regularly invested on the crowdfunding platform. Research of Fiddelaar et al. (2014) had indicated that 33% of the investors on their selected Dutch crowdfunding platform were dedicated investors that often invested on projects. This sample has a much lower amount of these investors. This could be due to the crowdfunding platforms chosen or investors contracted.

#### Communication channel

Social media was the most employed communication channel in line with logic and theory (Mishra & Koren, 2011). Research of Fiddelaar et al. (2014) also specified that 33% of investors are attracted by the network of the platform itself. Percentage of investors that became aware of the project invested upon was 26.32% for the variable: website of crowdfunding platform. This seems to be in line with the findings of Fiddelaar et al. (2014). Further interesting was the mentioning of TV 4 times.

## Appendix G: Crowdfunding success factors

The crowdfunding success factors of which this thesis assumed that bank involvement couldn't contribute are listed here. These were cost, control, crowdfunding opportunities and financial flexibility.

### Cost

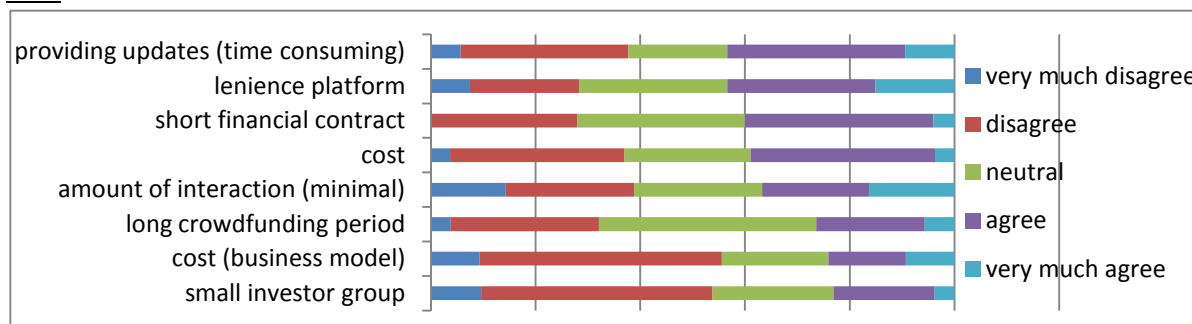


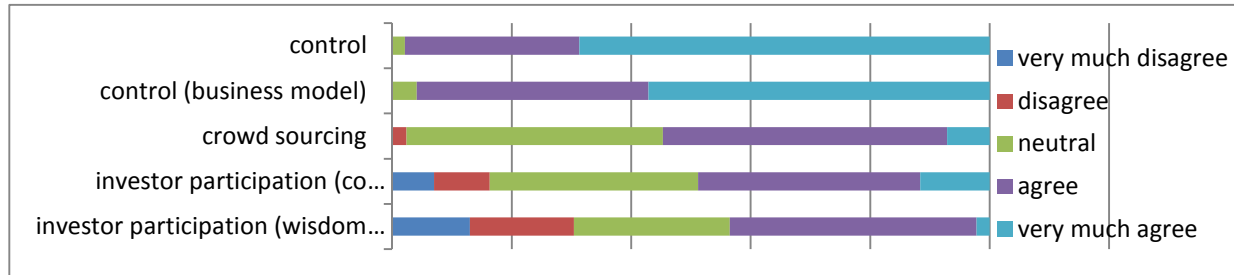
figure 26 & table 62: Cost

Cost	mode	Mean (1-5)
Lenience of platform	3 <sup>1</sup>	3.23
Preference for a short financial contract	4	3.16
Updates are time consuming	4	3.09
Cost most important factor	4	3.02
Amount of interaction with investors should be minimal	2 <sup>1</sup>	3
Preference for a long crowdfunding period	3	2.96
Business model is irrelevant except for the cost involved	2	2.69
Preference for a small investor group	2	2.63

Figure 24 & table 62 display the importance of cost factors when deciding which crowdfunding platform to employ. Cost was defined as all the resources, time and energy needed to fulfil the crowdfunding period

(successfully). This includes the actual cost of crowdfunding, time spent collecting funds (crowdfunding period), duration of the crowdfunding contract, energy needed to satisfy investors (updates) and the amount of investors that the project has (investor group size). How do entrepreneurs perceive the components which make up the construct cost. Overall the means of the variables are slightly above and below 3, ranging from 2.63-3.23. Modes of 4 were obtained for lenience of platform, short financial contract, updates are time consuming and importance of cost. Modes of 2 were obtained for small investor group and business model. Two variables had multiple modes i.e. lenience of platform and amount of interaction with investors. Entrepreneurs (slightly) agreed with the fact that platforms should be more lenient in providing extra time when the target amount hasn't been reached. However given this statement, providing extra time, it could have been expected that this statement would have received much more support instead of only a mean of 3.23. Some findings on cost are in line with theory described. This questionnaire shows that time and resource commitment towards crowdfunding is seen by entrepreneurs as a nuance. Therefore they have a preference for a short crowdfunding period, they indicate that providing updates to investors is time consuming and lastly want a short financial contract with investors. In contrast to the trend described above and theory identified entrepreneurs indicated a preference for a large investor group. Theory had specified that disincentive within crowdfunding is the large amount of investors that have to be satisfied. Given the other results in the questionnaire (updates time consuming, small crowdfunding period & contract) it would have been logical that entrepreneurs would value a small group of investors. It could be that entrepreneurs believe that a large group of investors is more likely to fund their project and therefore prefer this.

## Control



Control	mode	Mean (1-5)
Retain management control (financing company)	5	4.67
Control is a important factor when choosing what business model to use	5	4.53
Preference for platform who offers crowd sourcing on platform	4	3.60
Investor participation is good for my company but only for co creation of services and products	4	3.37
Investor participation is good for my company because problems can be solved (wisdom of crowd)	4	3.02

Figure 27 & table 63: Control

Figure 25 and table 63 shows that all variables received positive responses from entrepreneurs. Management control and importance of control had modes of 5 and means >4. Other statements had modes of 4 and means between 3-4. Entrepreneurs wanted to retain management control over the decision making in their company when financing their company and will choose their business model based on the amount of control that they have. The positive incentive identified in literature was the amount of control that entrepreneurs can keep when crowdfunding is used as a funding method. With other funding methods more control is forsaken to outsiders. This could also be an explanation for the fact that a large group of entrepreneurs indicated that crowdfunding was their first choice and no other pre- crowdfunding financing methods were used. The fact that co creation and wisdom of the crowd in this likert scale receive less agreement would further strengthen this theory. The variables which indicated the amount of investor participation received positive answers (mode=4; mean>3) in which entrepreneurs indicated that investor participation is better if this involves co creation than wisdom the crowd argument.

### Crowdfunding opportunities

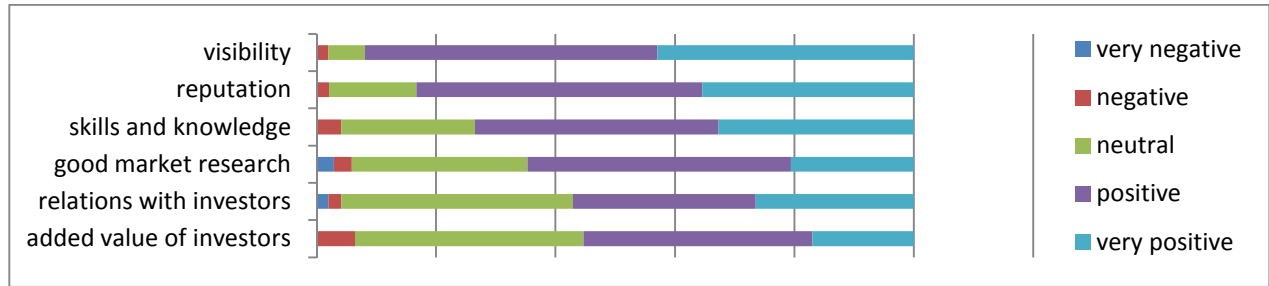


Figure 28 & table 64: diverged stack chart crowdfunding opportunities

	mode	mean	Negative
Visibility	4	4.33	2%
Reputation	4	4.17	2.1%
Knowledge and skills	4	4.02	4.1%
Good market research	4	3.76	5.8%
Relations with investors	3	3.78	4%
Added value of investors	3 <sup>1</sup>	3.66	6.4%

Crowdfunding opportunities were: creating more awareness and reputation of your work, learning a new fund raising method, involving investors with your project (added value +relations) and conducting a good market research.

Entrepreneurs overall indicated that the platform

positively influenced all the likert items displayed i.e. visibility of their project, reputation of their work, learning new skills and knowledge, establishing relationships with investors, investors were value adding and in case a market research was conducted this was done "good". With market research there was a higher than usual, and higher compared to the other items, mentioning of non applicable. Presumably because not all projects have conducted a market research. With crowdfunding opportunities it is interesting to view which variables were perceived to be influenced negatively. The added value of investors was perceived to be the variable which most negatively influenced (6.4%), followed by market research (5.8%). Relations with investors also gets almost 4% negative responses. This could be due to the investors that are attracted by the platform since it would be surprising if entrepreneurs would indicate that investors from their own network were less value adding, created worse relationships ect. Overall negative statements are small in comparison to the overall positive and neutral answers.

### financial flexibility

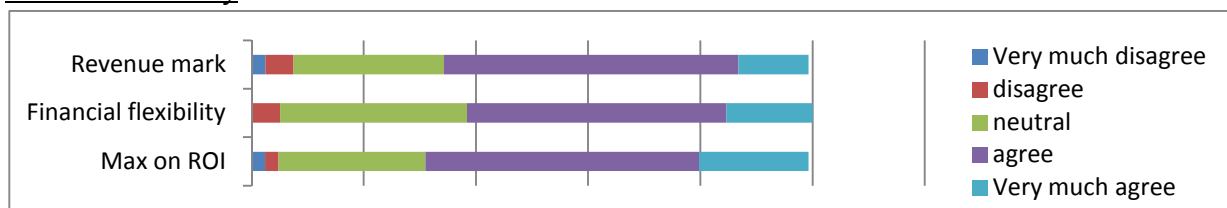


Figure 29 & table 65: diverged stack charts financial flexibility

	mode	Mean
Financial flexibility	4	3.73
Maximum on ROI	4	3.72
Revenue marks	4	3.62

The business model of Seeds allowed entrepreneurs to have more financial flexibility. How did other entrepreneurs perceive this? Overall entrepreneurs positively agreed with the fact that more financial flexibility is welcome (all modes of 4). This construct was tested because this thesis had hoped for more entrepreneurs on Seeds with which this could have been compared. This best case scenario didn't happen.

## Appendix H: p value: awareness & crowdfunding area

Investors			Entrepreneurs		
	Awareness	Crowdfunding area		Awareness	Crowdfunding area
<b>Choice of platform</b>			<b>Choice of platform</b>		
Idea behind project is beneficial	0.97	0.93	Quality of projects	<b>0.04</b>	0.84
Feel satisfied to help this project	0.10	0.31	transparancy	0.16	0.22
Nice to be part of a project	0.64	0.82	visibility	0.32	0.36
Financial return	0.74	<b>0.03</b>	reputation	0.57	0.34
Quality of project	0.10	0.82	control	0.07	<b>0.006</b>
Relations with people	0.19	0.21	Cost for investors	0.11	<b>0.01</b>
Type of crowdfunding	0.37	0.41	Projects financed	0.41	0.62
Minimal investment	0.07	0.46	Cost of crowdfunding	0.61	0.16
Interaction with entrepreneurs	0.91	0.10	Projects placed	0.26	0.24
Crowd sourcing	0.60	0.49	Crowdfunding contract	0.59	0.09
% already collected	0.96	0.23	Crowdfunding period	0.80	1
Target amount	0.08	0.09	Funding range	0.14	0.25
Reputation of platform	<b>0.051</b>	0.78	Minimal investment	0.45	0.86
Openness and transparency	0.70	0.60	Business model	0.64	0.47
Risk analysis	0.22	0.39	Additional funding	0.42	0.25
screening	0.39	0.62	Network platform	0.35	0.85
AFM Licenses	0.98	0.25	Crowd sourcing	0.08	0.68
100% threshold agreement	0.64	0.88	Jurisdiction	0.94	0.18
Cost of investing	0.20	0.68	licenses	0.57	0.39
Involvement of trustworthy partners	0.71	0.84	Involvement of partners	<b>0.003</b>	0.79
banks	0.68	0.48	banks	0.22	0.17
<b>Target amount</b>			<b>cost</b>		
Financial return	0.80	1	updates	0.60	0.20
Passion of entrepreneurs	0.28	0.68	Interaction with investors	-	0.88
Knowledge of entrepreneurs	0.22	<b>0.02</b>	Investor group	0.31	0.49
Updates and information	0.23	0.66	Financial contract	0.75	0.86
Quality of project	0.37	0.68	Lenience platform	0.37	0.49
Network of project	0.66	<b>0.01</b>	Crowdfunding period	0.06	0.31
% already collected	0.74	0.66	Business model	0.40	0.89
Target amount	0.22	0.27	cost	0.64	0.28
Involvement of trustworthy partners	0.41	0.17	<b>control</b>		
Reputation of platform	0.08	0.60	Investor participation_wisdom	0.27	<b>0.01</b>
Visibility of platform	1	0.74	Investor participation_co creation	0.80	0.43
Risk analysis	0.30	0.94	Preference Crowd sourcing		1
screening	0.13	1	Business model	<b>0.02</b>	0.53
guidance	0.13	0.41	control	<b>0.04</b>	0.36
Crowdfunding period	0.89	0.47	<b>Financial flexibility</b>		
Network platform	0.30	0.28	Financial flexibility	0.79	0.67
Involvement of trustworthy partners	0.46	1	Max. on return	0.86	0.37
banks	0.87	0.81	Revenue marks	0.88	0.60
<b>Quality of projects</b>			<b>Trust_jurisdiction</b>		
Passion of entrepreneurs	0.86	0.88	Information disclosure	0.89	0.39
Knowledge of entrepreneurs	0.45	0.31	investor contract	0.19	0.35
Project information	0.39	0.73	regulations	0.37	0.28
Information about purpose	0.80	0.24	Openess and transparancy	0.87	0.80
% already collected	0.38	1	<b>Trust_social capital</b>		

Target amount	0.89	0.17	bank backed up platform	0.34	0.20
Involvement of trustworthy partners	0.11	0.36	Bank involvement	0.95	0.77
Reputation of platform	0.77	0.90	Platform with partnerships	0.74	0.26
expertise	1	0.97	Network of platform	0.69	0.67
licenses	0.89	0.68	Network of entrepreneur	0.45	0.09
Involvement of trustworthy partners	0.28	0.10	<b>Crowdfunding opportunities</b>		
banks	0.29	0.85	Market research	0.86	0.79
<b>fraud</b>			Added value	0.25	0.63
Project information	0.057	0.94	Relations with investors	0.28	0.48
Information about people	0.53	0.19	Knowledge and skills	0.73	0.64
Relations with people	0.63	0.24	reputation	0.70	0.50
Involvement of trustworthy partners	0.21	0.26	visibility	0.07	1
jurisdiction	0.95	0.43	<b>Quality of project</b>		
expertise	0.13	0.27	Social media	0.20	<b>0.01</b>
licenses	0.73	0.91	video	0.17	<b>0.05</b>
Involvement of trustworthy partners	0.50	0.34	Examples projects	0.36	0.18
banks	0.97	0.72	Project information	0.68	0.42
<b>Quality platform</b>			Interact with investors	0.91	0.11
Knowledge, expertise and reputation people	0.13	0.66	<b>Tools_additional funding</b>		
Number of projects placed	0.33	0.53	Bank backed up platform	0.34	0.18
Number of projects financed	0.81	0.40	Bank involvement	0.08	0.16
Quality of screening	0.93	1	Partners of platform	0.06	0.31
Risk analyses	0.89	0.72	platform	0.13	0.06
guidance	0.64	0.75	Failure of crowdfunding	0.51	0.30
network	0.45	0.80	crowdfunding	0.90	0.94
Reputation	0.87	0.55	<b>community</b>		
visibility	<b>0.05</b>	0.53	community	0.57	0.63
licenses	1	0.70	reputation	0.94	0.61
Involvement of trustworthy partners	0.88	0.87	Business model	0.60	0.50
banks	0.87	0.96	Financed projects	0.84	0.34
			Projects placed	0.57	0.87
			Risk analyses	1	0.36
			screening	0.81	0.78

## 5. References

- Agrawal, A. K., Catalini, C., & Goldfarb, A. (2011). *The geography of crowdfunding* (No. w16820). National Bureau of Economic Research.
- Agrawal, A. K., Catalini, C., & Goldfarb, A. (2013). *Some simple economics of crowdfunding* (No. w19133). National Bureau of Economic Research.
- Ahlers, G. K., Cumming, D. J., Günther, C., & Schweizer, D. (2013). Equity crowdfunding. *Available at SSRN 2362340*.
- Akker, P. van den., Kleverlaan, R. Koren, G., Van Vliet, K. (2013). *Samen mogelijk maken. Onderzoek naar de motivaties van crowdfunders in Nederland*.
- Allen, I. E., & Seaman, C. A. (2007). Likert scales and data analyses. *Quality Progress*, 40(7), 64-65.
- Banken en crowdfunding* (n.d.) Retrieved from [http://cpb.bnpparibasfortis.be/Middelgrote-Ondernemingen/Business-Finance/Business-insights/Details/page.aspx/5471?xd\\_itemId=7560](http://cpb.bnpparibasfortis.be/Middelgrote-Ondernemingen/Business-Finance/Business-insights/Details/page.aspx/5471?xd_itemId=7560).
- Bakker-Rakowska, J. (2014). CROWDFUNDING FOR INNOVATION: A QUALITATIVE RESEARCH ON RESOURCES, CAPABILITIES AND STAKES.
- Belleflamme, P., Lambert, T., & Schwienbacher, A. (2013). Crowdfunding: Tapping the right crowd. *Journal of Business Venturing*.
- Belleflamme, P., & Lambert, T. (2014). Crowdfunding: Some Empirical Findings and Microeconomic Underpinnings. *Available at SSRN 2437786*.
- Boddy, D. (2011). *Management An Introduction* 5th.
- Boone, H. N., & Boone, D. A. (2012). Analyzing likert data. *Journal of Extension*, 50(2), 1-5.
- Burgelman, R.A., 1984. Designs for corporate entrepreneurship in established firms. *California Management Review* 26 (3), 154–166.
- Bygrave, W., Hay, M., Ng, E., & Reynolds, P. (2003). Executive forum: a study of informal investing in 29 nations composing the Global Entrepreneurship Monitor. *Venture Capital: An International Journal of Entrepreneurial Finance*, 5(2), 101-116.
- Charitou, Constantinos and Markides, Constantinos (2003). Responses to Disruptive Strategic Innovation. *Sloan Management Review* 44(2):55–63
- Christensen, C. M. (1997). *The innovator's dilemma: When new technologies cause great firms to fail*. Boston: Harvard Business School Press.
- Christensen, C. M. (2003). *The innovator's dilemma: The revolutionary book that will change the way you do business* (Collins Business Essentials). *Scarborough, ON: Harper Paperbacks*.
- Christensen, C., & Raynor, M. (2013). *The innovator's solution: Creating and sustaining successful growth*. Harvard Business Review Press.
- Cocheo, S. (2013). Crowdfinance: Banks' Friend or Foe? as Crowdfunding Expands under JOBS Act, Banks Must Assess Position of This Upstart for Startups. *ABA Banking Journal*, 105(10), 34.
- Cumming, D. J., Leboeuf, G., & Schwienbacher, A. (2014, June). Crowdfunding Models: Keep-it-All vs. All-or-Nothing. In *Paris December 2014 Finance Meeting EUROFIDAI-AFFI Paper*.



- Daft, R.L., Murphy, J., Willmott, H. (2010). *Organization Theory and Design*. Cengage Learning
- Danneels, E. (2004). Disruptive technology reconsidered: A critique and research agenda. *Journal of product innovation management*, 21(4), 246-258.
- De Buysere, K., Gajda, O., Kleverlaan, R., Marom, D., & Klaes, M. (2012). A framework for European crowdfunding. *European Crowdfunding Network (ECN)*, available at [www.europecrowdfunding.org/european\\_crowdfunding\\_framework](http://www.europecrowdfunding.org/european_crowdfunding_framework).
- De Veaux, R. D., Velleman, P. F., Bock, D. E. (2008). *Stats: Data and Models*. Pearson Education
- Douw&Koren (2013a). *Crowdfunding in Nederland 2012. Crowdfunding in Nederland: de cijfers*.
- Douw&Koren (2014). *Crowdfunding in Nederland 2013. De status van crowdfunding in Nederland*.
- Evers, M. W., Lourenço, C., & Beije, P. (2012). *Main drivers of crowdfunding success: a conceptual framework and empirical analysis*. Erasmus Universiteit.
- Feigenberg, B., Field, E. M., & Pande, R. (2010). *Building social capital through microfinance* (No. w16018). National Bureau of Economic Research.
- Fiddelaar, S., Geluk, G., & Zuijderhoudt, B. Crowdfunding in Gelderland.
- Franke, T. M., Ho, T., & Christie, C. A. (2012). The Chi-Square Test Often Used and More Often Misinterpreted. *American Journal of Evaluation*, 33(3), 448-458.
- Friedman, B. M. (2014). *Has the financial crisis permanently changed the practice of monetary policy? Has it changed the theory of monetary policy?*(No. w20128). National Bureau of Economic Research.
- Fritz, C. T. (2006). *Die transaktionskostentheorie und ihre kritik sowie ihre beziehung zum soziologischen Neo-Institutionalismus*. Frankfurt am Main: Peter Lang.
- Garland, R. (1991). The mid-point on a rating scale: Is it desirable. *Marketing bulletin*, 2(1), 66-70.
- Gerber, E. M., Hui, J. S., & Kuo, P. Y. (2012, February). Crowdfunding: Why people are motivated to post and fund projects on crowdfunding platforms. In *Proceedings of the International Workshop on Design, Influence, and Social Technologies: Techniques, Impacts and Ethics*.
- Gerber, E. M., & Hui, J. (2013). Crowdfunding: Motivations and deterrents for participation. *ACM Transactions on Computer-Human Interaction (TOCHI)*, 20(6), 34.
- Gilbert, C., Eyring, M., & Foster, R. N. (2012). Two routes to resilience. *Harvard Business Review*, 90(12), 67-73.
- Giudici, G., Guerini, M., & Rossi Lamastra, C. (2013). Why crowdfunding projects can succeed: the role of proponents' individual and territorial social capital. *Available at SSRN 2255944*.
- Golić, Z. (2014). ADVANTAGES OF CROWDFUNDING AS AN ALTERNATIVE SOURCE OF FINANCING OF SMALL AND MEDIUM-SIZED ENTERPRISES. *Zbornik radova Ekonomskog fakulteta u Istočnom Sarajevu*, (8), 39-48.
- Grant, R. M., & Baden-Fuller, C. (2004). A knowledge accessing theory of strategic alliances. *Journal of management studies*, 41(1), 61-84.
- Gulati, R., Nohria, N., & Zaheer, A. (2006). Strategic networks. In *Strategische Unternehmensplanung—Strategische Unternehmensführung* (pp. 293-309). Springer Berlin Heidelberg.

- Hazue, C. A. (2007). *Institutionele economie: een optiek op organisatie – en sturingsvragenstukken* (2nd ed.). Bussum, Uitgeverij Coutinho.
- Hebbink, G., Kruidhof, M., & Slingenberg, J. W. (2014). *Bank lending and capital* (No. 1203). Netherlands Central Bank, Research Department.
- Hellwig, M. F. (2010). Capital regulation after the crisis: business as usual?. *MPI Collective Goods Preprint*, (2010/31).
- Hemer, J. (2011). *A snapshot on crowdfunding* (No. R2/2011). Working papers firms and region.
- Holland, J. (2010). *Banks, Knowledge and crisis: a case of knowledge and learning failure*. Journal of Financial Regulation and Compliance, 18 (2), 87-105.
- Hui, J. S., Gerber, E., & Greenberg, M. (2012). Easy money? The demands of crowdfunding work. *Proceedings of the Segal Technical Report: 12, 4*, 2012.
- Johnson, G., Scholes, K., & Whittington, R. (2010). *Exploring corporate strategy: text & cases*. Pearson Education.
- Klein, P. G., & Shelanski, H. A. (1996). Transaction cost economics in practice: Applications and evidence. *Journal of Market-Focused Management*, 1(4), 281-300.
- Koleva, G., Thrane, S., & Mouritsen, J. (2002). Alliances, joint ventures, networks: a comparison. *Frederiksberg: Copenhagen Business School. Acedido Janeiro, 1*, 2012.
- Kraaijenbrink, J., Spender, J. C., & Groen, A. J. (2010). The resource-based view: a review and assessment of its critiques. *Journal of management*, 36(1), 349-372.
- Kuppuswamy, V., & Bayus, B. L. (2014). Crowdfunding creative ideas: The dynamics of project backers in Kickstarter. *UNC Kenan-Flagler Research Paper*, (2013-15).
- Lammers, M., Loehndorf, N., & Weitzel, T. (2004). Strategic sourcing in banking-A framework.
- Lasrado, L. A., & Lugmayr, A. (2013, October). Crowdfunding in Finland: A New Alternative Disruptive Funding Instrument for Businesses. In *Proceedings of International Conference on Making Sense of Converging Media* (p. 194). ACM.
- McDonald, J.H. 2014. Handbook of Biological Statistics (3rd ed.). Sparky House Publishing, Baltimore, Maryland
- Marshall, M. N. (1996). Sampling for qualitative research. *Family practice*, 13(6), 522-526.
- McGrath, R. G., & MacMillan, I. C. (2000). *The entrepreneurial mindset: Strategies for continuously creating opportunity in an age of uncertainty*. Harvard Business Press.
- McGrath, R. G., MACMILLAN, I., & Strategy, D. S. (2012). How to rethink your business during uncertainty. *Image*.
- Miller Jr, R. G. (1997). *Beyond ANOVA: basics of applied statistics*. CRC Press.
- Mishra, A. & Koren, G. (2011). *Crowdfunding, het nieuwe investeren*. Almere: Uitgeverij Multilibris
- Mohr, J., & Spekman, R. (1994). Characteristics of partnership success: partnership attributes, communication behavior, and conflict resolution techniques. *Strategic management journal*, 15(2), 135-152.
- Mollick, E. R. (2013). The dynamics of crowdfunding: Determinants of success and failure.

- Mollick, E. (2014). The dynamics of crowdfunding: An exploratory study. *Journal of Business Venturing*, 29(1), 1-16.
- Moeninghoff, S. C., & Wieandt, A. (2013). The future of peer-to-peer finance. *Zeitschrift für betriebswirtschaftliche Forschung*, 466-487.
- Monitor Deloitte. (2015). *NL crowdfunding potential... A role for banks?* Retrieved from <http://www.maastrichtuniversity.nl/web/file?uuid=abf28ade-4e11-45b6-aada-2527637a777f&owner=dfea7bd2-6790-4e55-8302-01cf044b3bd8>.
- Nederhof, H.P. (1996). *Dynamiek van de markt*. Utrecht, Uitgeverij Lemma.
- Noordam, C.J. (2014) Crowdfunding: een nieuw, maar niet minder risicovol alternatief. *Tijdschrift financiering Zekerheden & Insolventierechtpraktijken*, 223.
- Noordhof, S. (2005). Het succes van Low Cost Carriers ten opzichte van Full Service Carriers in Europa.
- O'Reilly, C. A., & Tushman, M. L. (2004). The ambidextrous organization. *Harvard business review*, 82(4), 74-83.
- O'Reilly, C., & Tushman, M. (2013). Organizational ambidexterity: Past, present and future. *The Academy of Management Perspectives*, amp-2013.
- Paap, J., & Katz, R. (2004). Anticipating disruptive innovation. *Research-Technology Management*, 47(5), 13-22.
- Primack, D. (2012, June 13). Exclusive: Clayton gets into crowdfunding. *Fortune*. Retrieved from <http://fortune.com/2012/06/13/exclusive-clayton-christensen-gets-into-crowdfunding/>
- Rabobank: banken moeten crowdfunding omarmen. (2013). Retrieved from: <http://www.banken.nl/nieuws/1249/rabobank-banken-moeten-crowdfunding-omarmen>
- Robb, A. M., & Robinson, D. T. (2012). The capital structure decisions of new firms. *Review of Financial Studies*, hhs072.
- Rossi, M. (2014). The New Ways to Raise Capital: An Exploratory Study of Crowdfunding. *International Journal of Financial Research*, 5(2), p8.
- Röthler, D., & Wenzlaff, K. (2011). Crowdfunding schemes in Europe. *EENC Report*, 9, 2011.
- Schwiebacher, A., & Larralde, B. (2010). Crowdfunding of small entrepreneurial ventures. *HANDBOOK OF ENTREPRENEURIAL FINANCE*, Oxford University Press, Forthcoming.
- Schwiebacher, A. (2014). Crowdfunding in the Netherlands: Market Analysis, Securities Regulation and Policy Options.
- Sijtsma, K. (2009). On the use, the misuse, and the very limited usefulness of Cronbach's alpha. *Psychometrika*, 74(1), 107-120.
- Simpson, W. G., & Kohers, T. (2002). The link between corporate social and financial performance: evidence from the banking industry. *Journal of Business Ethics*, 35(2), 97-109.
- Stellmaszek, F. (2010). *Real Options in Strategic Decisions: An Empirical Case Study Analysis of how Companies Integrate Real Options Into Strategic Decisions* (Vol. 50). book-on-demand. de.
- Stiglitz, J. E., & Weiss, A. (1981). Credit rationing in markets with imperfect information. *The American economic review*, 393-410.

- Stolk, N. (2013, November 25). ABN AMRO – topman Zalm is sceptisch over crowdfunding. *Elsevier*. Retrieved from <http://www.elsevier.nl/Carriere/nieuws/2013/11/ABN-Amro-topman-Zalm-is-sceptisch-over-crowdfunding-1416107W/>.
- Strahan, P. E., & Weston, J. P. (1998). Small business lending and the changing structure of the banking industry. *Journal of Banking & Finance*, 22(6), 821-845.
- Tadelis, S., & Williamson, O. E. (2012). Transaction cost economics. *Available at SSRN 2020176*.
- Tellis, G. J. (2006). Disruptive Technology or Visionary Leadership?\*. *Journal of Product Innovation Management*, 23(1), 34-38.
- Thomsen, S., & Conyon, M. (2012). *Corporate governance: Mechanisms and systems*. McGraw Hill.
- Tidd, J., & Bessant, J. R. (2009). *Managing innovation: Integrating technological, market and organizational change* (4th ed.). Chichester, England: Wiley.
- Todeva, E., & Knoke, D. (2005). Strategic alliances and models of collaboration. *Management Decision*, 43(1), 123-148.
- Tomczak, A., & Brem, A. (2013). A conceptualized investment model of crowdfunding. *Venture Capital*, 15(4), 335-359.
- Tushman, Michael L. and O'Reilly, Charles A. (1996). The ambidextrous organization: managing evolutionary and revolutionary change. *California Management Review*, 38: 1-23.
- US economic Outlook. (2013). Crowdfunding: A disruptive technology for commercial banks? *BBVA Research*
- Williamson, O. E. (1975). *Markets and hierarchies: Analysis and antitrust implications, a study in the economics of internal organization*. New York: Free Press.
- Van Essen (2014). Ceo Seeds: Crowdfunding geen alternatief voor banklening. *CXO*. Retrieved from <http://cxo.nl/e-commerce/83933-ceo-seeds--crowdfunding-geen-alternatief-voor-banklening>.
- Van de Laar (2014). Banken steeds minder schuw voor crowdfunding. *Banking review*. Retrieved from <http://www.kpmg.com/nl/nl/issuesandinsights/articlespublications/pages/banken-steeds-minder-schuw-voor-crowdfunding.aspx>.
- Van Wingerden, R., & Ryan, J. (2011). Fighting for funds: An exploratory study into the field of crowdfunding. *Extraction*, 14(151), 1-082.
- Vasileiadou, E., Huijben, B., & Raven, R. (2014). *Crowdfunding niches? Exploring the potential of crowdfunding for financing renewable energy niches in the Netherlands* (No. 14-11).
- Voorbraak, K. J. P. M. (2011). Crowdfunding for financing new ventures: consequences of the financial model on operational decisions. *Eindhoven: Eindhoven University of Technology*.
- Yu, D., & Hang, C. C. (2010). A reflective review of disruptive innovation theory. *International Journal of Management Reviews*, 12(4), 435-452.
- Zvilichovsky, D., Inbar, Y., & Barzilay, O. (2014). Playing both sides of the market: success and reciprocity on crowdfunding platforms. *Available at SSRN 2304101*.