Corvinus University of Budapest
Faculty of Business Administration
Department of Finance

Crowdfunding – the new superstar of entrepreneurial finance?

Sára Vargha
BA in Finance and Accounting
Finance major
2016

Thesis Supervisor: Dr. Zsolt Bihary
I, Sára Vargha in full knowledge of my liability, hereby declare that all the texts, diagrams and tables in this Thesis Work are based solely on my own individual work and is not based on work published in another document or by another contributor. Where I have drawn on the work of others, this has been appropriately and fully acknowledged in the form of citation and references as set out in the Guidance for Preparing Thesis Work and/or the Corvinus Business School’s Addendum to the Study and Exam regulations.
Table of contents

1. Introduction ......................................................................................................................... 5
   1.1. Explanation of the subject choice ............................................................................. 5
   1.2. The subject and scope of research .......................................................................... 6
2. Methodology ....................................................................................................................... 8
3. Theoretical background ..................................................................................................... 10
   3.1. The role of SMEs and their financial difficulties ...................................................... 10
   3.2. Corporate strategy and financing decisions ............................................................... 11
   3.3. Sources of capital ....................................................................................................... 12
      3.3.1. Internal and external sources of financing ......................................................... 12
      3.3.2. Informal and formal sources of financing ......................................................... 13
   3.4. Capital structure theories and the optimal capital structure ..................................... 13
      3.4.1. Modigliani-Miller theorem ............................................................................... 15
      3.4.2. Trade-off theory ................................................................................................. 16
      3.4.3. Pecking order theory ......................................................................................... 16
   3.5. The life-cycle model .................................................................................................... 17
   3.6. The funding gap .......................................................................................................... 19
4. Crowdfunding .................................................................................................................... 21
   4.1. Crowdsourcing .......................................................................................................... 21
      4.1.1. What is crowdsourcing? .................................................................................... 21
      4.1.2. The rise of crowdsourcing ............................................................................... 22
      4.1.3. The four primary types of crowdsourcing ......................................................... 24
   4.2. Crowdfunding ............................................................................................................. 25
      4.2.1. What is crowdfunding? ..................................................................................... 25
      4.2.2. Actors of crowdfunding ..................................................................................... 25
      4.2.3. Crowdfunding models ....................................................................................... 26
4.2.4. The crowdfunding process ......................................................... 28
4.2.5. Legal background ........................................................................ 29

5. A SWOT analysis on crowdfunding ......................................................... 32

5.1. Strengths .......................................................................................... 32
5.2. Weaknesses ...................................................................................... 34
5.3. Opportunities .................................................................................... 35
5.4. Threats .............................................................................................. 35

6. Summary ............................................................................................. 37

6.1. Further research ............................................................................... 37
6.2. Conclusion ......................................................................................... 37

7. Bibliography ........................................................................................ 39

8. Other sources – interviews .................................................................. 44

9. List of tables ......................................................................................... 45

10. List of figures ....................................................................................... 45

11. Annexes ............................................................................................. 46

11.1. Annex 1: Description of the various investor types in the life-cycle model 46
11.2. Annex 2: The notion of crowdfunding .............................................. 47
11.3. Annex 3: Fact sheet - Regulation Crowdfunding ............................... 48
11.4. Annex 4: Interview questions – project owners ................................. 53
11.5. Annex 5: Interview questions – investment professionals .................. 53

STATEMENT ABOUT THE ORIGINALITY OF THE THESIS WORK ......... 54
STATEMENT ABOUT THE PUBLICITY OF THE THESIS WORK .............. 55
1. Introduction

1.1. Explanation of the subject choice

At the time I had to choose the subject of my thesis work, I did not have much information about crowdfunding. As previously I had the chance to spend my compulsory internship at a Hungarian venture capital fund management company, I gained a little insight into new venture financing, started exploring the Hungarian start-up ecosystem and heard the success stories of Hungarian startuppers who managed to raise money by using crowdfunding. To give an illustration, Sára Gulyás, a Hungarian designer obtained $21,108 on Kickstarter to produce her do-it-yourself PIKKPACK shoes (Kickstarter, 2016), while the team of Brewie, a hardware start-up, got financing over $700,000 in two rounds on Indiegogo (Pál, 2016). Not to mention the worldwide crowdfunding “superstar” smart watch, Pebble, which obtained over $10.2 Million in just 37 days from over 65,000 backers on Kickstarter in the first round and more than $20 Million from over 78,000 backers in the second to finance production and sales of the gadget. (Kuppuswamy-Bayus, 2015)

Besides, I found fascinating how significant the biggest platforms have become just in a few years. Kickstarter was launched in April 2009 and since then, 11 Million people have participated in a crowdfunding campaign as a backer, $2.3 Billion has pledged and more than 100,000 projects have been successfully funded. (Kickstarter, 2016) Similarly, one of its main competitors, Indiegogo have had 9 million backers, who has pledged a total amount of over $800 Million to around 600,000 projects. (Indiegogo, 2016) The whole crowdfunding industry seems to grow continuously at an unprecedented rate: while crowdfunding platforms raised $6.1 Billion in 2013, this amount went up to $16.2 Billion in 2014, which means a 163% increase. (Massolution, 2015) Moreover, Massolution (2015) expected crowdfunding volumes to double again and reach $34.4 Billion in 2015. With this in mind it is no surprise that crowdfunding has a significant impact on government policy in highly influential countries like the United States, and has the potential to change the role of financial institutions in the world.

All things considered, crowdfunding sparked my interest as a potential new method for venture financing and I decided to write my thesis work in this topic.
1.2. The subject and scope of research

The aim of this paper is to introduce crowdfunding, as a new and innovative tool for venture financing and to present its major strengths, weaknesses, as well as the external factors that may shape its future applicability from the entrepreneurs’ point of view.

To start with, I give brief overview on the methodological background of my research, in which I summarize the applied research instruments in a nutshell.

In the theoretical section of my thesis work I introduce the most important theories that facilitate the understanding the capital seeking entrepreneurs’ motivations and the role of financing choices in corporate strategy making. Furthermore, I provide a possible categorization of the various sources of financing (including crowdfunding) and give an introduction to the major capital structure theories that enable the easier conception of the financial decision making process and the factors that shape a company’s capital structure. Finally, I illustrate the financial difficulties facing early stage ventures through the life-cycle model with a focus on the funding gap.

I begin the introduction of crowdfunding with the basic explanation of crowdsourcing, as the definition of crowdsourcing and the factors that lead to its recent rise are closely related to the popularity of crowdfunding. Thus, hereinafter I discuss crowdfunding within the framework of this broader concept. The description of crowdfunding aims the fundamental understanding of how the platforms and the campaigns works, therefore includes the definition of the concept and the participating actors, as well as the explanation of the process. At last, a briefly present the existing legal framework with respect to the US and the EU.

Based on my conducted research and the in-depth interviews, I illustrate my findings with the use of a SWOT matrix and discuss them according to the four aspects of the SWOT analysis. The scope of my research can be summarized in the following research questions:

- What are the added values that incite entrepreneurs to start a crowdfunding campaign instead of choosing other forms of financing?
- Where is the place of crowdfunding among the other sources of funding?
What are the main internal/external advantages and disadvantages (SWOT) of crowdfunding, as an innovative method of fundraising from the entrepreneurs’ point of view?
2. Methodology

The point of this section is to present the various primary and secondary research tools I applied in my thesis work.

In my secondary research I discovered the existing literature both on entrepreneurial finance and crowdfunding. I have read chapters of several related university school books, working papers and researches, and synthetized their findings to provide an overview about the concerned topics. Besides the literature analysis, I also conducted a thorough internet research in order to gain up to date information about the legal background of crowdfunding and the crowdfunding process, furthermore to get insight into the world of the various crowdfunding platforms.

As my aim was to provide not only a theoretical but also a practical approach to the topic and to examine the subject from different point of views, I decided to make interviews as part of my primary research with investment professionals and entrepreneurs who have already participated in crowdfunding campaigns. I managed to organize in-depth interviews with the following executives and project owners:

- Antal Károlyi is a former investment banker, who is currently works as an active angel investor and partner at Traction Tribe, a tech, dot-com and healthcare start-up accelerator.
- Attila Almás is the investment director of GB & Partners Investment Management, a Budapest based venture capital fund and private equity management company.
- Marcell Szirtes is the CEO and co-founder of MiniBrake. Marcell, along with his teammates, invented a remote controlled bike brake system for children that enables parents to protect their kids on the road. MiniBrake started a crowdfunding campaign on Indiegogo back in 2014, but they couldn’t reach their targeted amount.
- Károly Oláh works as an embedded systems engineer at the Hungarian tech start-up, Codie. Codie’s product is an interactive robotic toy that introduces the basics of computer coding in a fun way. The team made a successful crowdfunding campaign on Indiegogo in 2014 and raised more than $90 000.
Marcell Pál is the CEO and co-founder of Brewie. Brewie’s product is fully automated home brewing machine and it managed to raise capital twice via Indiegogo in 2015.

In-depth interview is an unstructured type of interviews and a widely used instrument of data collection in qualitative research. In general, in-depth interviews are conducted face-to-face, and, thus, interactive in nature. The researcher needs to have some knowledge on the subject and the interview is based on a topic guide that includes the main topics to be covered. Based on the guide, the interviewer asks initial questions and the interviewee can talk freely when answering the questions. Consequently, the content is generated by the interaction between the researcher and the participant. However, interviewees may direct the conversation at some point in an unexpected way of thinking they haven’t explored formerly. (Legard et al., 2003) The application of this research made possible for me to get a deeper insight into new venture financing and crowdfunding campaigns. Besides, I got the chance to hear the stories of three real-life crowdfunding campaigns at first hand, which I consider as great added value to my thesis work as well as great personal experience.

Based on the findings of my secondary research and the interviews, I analysed the gathered information within the SWOT framework. SWOT analysis is a widely adopted qualitative research tool in strategic management, which can be used to identify the significant external and internal factors that may have an impact on the subject. SWOT is an acronym for strengths, weaknesses, opportunities and threats. (Valanciene-Jegeleviciute, 2013) I decided to apply this method in my thesis work, as it is a great and easy-to-use instrument that facilitates information gathering and decision making.
3. Theoretical background

3.1. The role of SMEs and their financial difficulties

Both national and international communities regard entrepreneurship as the “lifeblood” of economic development. (Kirchhoff, 1991; Benneworth, 2004; Grilo and Irigoyen, 2006 in Lam, 2010) In the European Union 99.8% of all companies can be categorized as small and medium-sized enterprises\(^1\) (SMEs) and employ 2/3 of all private sector employees. Furthermore, the SME sector’s contribution to the revenue generation and value creation of the EU is almost as significant as that of the corporate sector. (Béza et al., 2013) Similarly, in the US small businesses\(^2\) represent 99.7% of all employer firms, employ ca. half of all private sector workers and create more than 50% of the nonfarm private GDP. (SBA, 2011)

Lee (2011) analysed the Small Business Survey (SBS) and Annual Business Survey, a unique data set of SMEs across the UK, and identified obtaining finance and ensuring an adequate level of cash flow among the main obstacles that prevent potential high growth firms from exploiting their growth potential. Denis (2004) also enhances that although there are several different forms of financing available for businesses in general, entrepreneurial firms are particular in a way, because their ability to access capital is limited. As such companies are often not yet profitable and lack tangible assets, internal financing and debt financing are usually not relevant alternatives for them.

With this in mind it is clear that the role and demand of entrepreneurial finance is beyond question and reforms would be needed in order to facilitate SMEs in gaining access to finance. Given the above detailed difficulties in attracting financing from “conventional” sources of financing (e.g. business angels, banks, venture capital funds), some entrepreneurs tend to see the solution in large, online communities of consumer-investors and start using a new form of informal venture financing called crowdfunding. (Kleemann et al., 2008; Schwienbacher-Larralde 2012; Kuppuswamy-Bayus, 2015)

---

\(^{1}\) “The category of micro, small and medium-sized enterprises (SMEs) is made up of enterprises which employ fewer than 250 persons and which have an annual turnover not exceeding EUR 50 million, and/or an annual balance sheet total not exceeding EUR 43 million.” (2003/361/EC)

\(^{2}\) The SBA Office of Advocacy defines small businesses in the US as independent firms with fewer than 500 employees. (SBA, 2011)
3.2. Corporate strategy and financing decisions

A firm’s success depends basically on the decisions that are made by the management and on the strategy they decide to follow, thus strategy making is of great importance regarding the corporation’s future. Three main types of managerial decisions can be distinguished that aim the profit hunt by using the company’s sources (Virág, 1996):

- Investment decisions
- Financing decisions
- Operative decisions

No corporate strategy can be successful without synchronizing these three kinds of decisions and financing choices must fit into the “big picture” as well. (Virág, 1996) However, there are several factors (e.g. life cycle, industry, economic environment, available sources) that affect both the financing structure and the corporate strategy, therefore every firm needs a unique solution. (Berger – Udell, 1998, in Papp, 2012, p. 10)

**Figure 1: Firm Environment and Corporate Strategy**

![Diagram showing firm environment and corporate strategy](image)

Source: Hillier et. al. (2012, p. 557)

These days financing decisions involve not only raising money for the investments that the firm aims to make, but also meeting obligations to banks, bondholders, and stockholders that formerly contributed financing. (Brealey et al., 2014)
3.3. Sources of capital

3.3.1. Internal and external sources of financing

Table 1: Sources of capital

<table>
<thead>
<tr>
<th>BUSINESS FINANCING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internal financing</td>
</tr>
<tr>
<td>Equity financing</td>
</tr>
<tr>
<td>Reinvested earnings</td>
</tr>
<tr>
<td>Asset sale</td>
</tr>
<tr>
<td>Amortization</td>
</tr>
<tr>
<td>Equity model</td>
</tr>
<tr>
<td>Financial return models</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

Source: Own edition based on Nemes (2014) and Illés et. al. (2013, p. 11)

Enterprises can get capital basically from internal and external sources. In case of internal financing, the company uses its own sources (e.g. assets, earnings, amortization) to cover future investments, while external financing means that the money comes from the owners, lenders or other third parties.

If a company chooses internal financing, it has three options to do so. Firstly, a firm can reinvest the amount of Balance Sheet Earnings (Balance Sheet Earnings=Net Income-Amount of Dividends) and thus increase shareholders’ equity. The second option is amortization: according to the company’s accounting policy, the capital expenses for assets are spread over their useful life, so the cost of assets will be built in the price of products and services provided and the assets’ expenses will be roughly covered by the revenues they generate. Finally, a company can also sell superfluous assets and reinvest their selling price. (Illés et. al., 2013.)

In case of external financing the company raises capital from owners, lenders or other third parties. Equity investors invest in hope of future returns on the firm’s future cash
flow; this type of financing is usually available for longer periods of time. Debt financing means that independent sources, such as credit institutions, creditors, and commercial banks, lend money to the firm for a specified period with interests. Other forms of financing, for instance member loan, are created as the combination of equity and debt financing. (Illés et. al., 2013)

As it can be seen from Table 1, crowdfunding is a form of external financing. The various crowdfunding models can easily be divided into the classical types of external financing. It is quite clear that the equity model belongs to equity financing, as investors realize returns on the future cash flows of the company or, in case of crowdfunding, of the project. Similarly, lending model is actually an innovative form of traditional debt financing in which the public provides the loan for a stated time period with interests. As non-financial return models differ largely from both equity and debt financing, I categorize them, as Nemes (2014) has suggested, as other forms of external financing.

3.3.2. Informal and formal sources of financing

In addition to the above detailed categorization of various forms of financing, there is another way in which we can differentiate the external sources of finance. Depending on whether the investor or lender require a business plan (including all the key elements, such as planning, financial management, budgeting, marketing strategy, etc.) before the investment decision is made, we distinguish informal and formal sources of financing. With this in mind the 3F is considered as informal, while business angels, venture capital and bank finance, which usually demand a business plan from the firm as a prerequisite, are considered as formal sources of financing. (Lam, 2010)

As crowdfunding does not require such detailed plans from entrepreneurs, I regard the various crowdfunding models as informal sources of finance.

3.4. Capital structure theories and the optimal capital structure

The aim of this section is to introduce the main capital structure theories to facilitate the understanding of the financial decision making process and the factors that shape a company’s capital structure. In reality, entrepreneurs prefer a rather practical approach in

Crowdfunding models are presented in this paper under the chapter „Crowdfunding models”.

---

3 Crowdfunding models are presented in this paper under the chapter „Crowdfunding models”.
strategy and decision making, as theories are often way too mathematical, abstract and hard to understand, furthermore they are based on several assumptions that make more difficult their application in unique cases. However, the concepts discussed in this paper are essential provided that our goal is to gain deeper insight into the problems and challenges that entrepreneurs have to cope with.

According to Béza et al. (2013) a company’s capital structure basically refers to the proportion of its equity and debts, or, to put it another way, to a combination of its equity (E) and debts (D) that minimizes the overall costs of financing. The aim is to reach the optimal mix that maximizes the company’s value (V), which can be defined as the sum of the firm’s equity and debt (V=E+D) or as the present value of the expected future cash flows on the firm. (Damodaran, 2012) Nevertheless, the various theories dispute not only the exact ratio of this optimum but also its existence.

In general, a company can choose from debt or equity financing in financing decision situations and this choice is called the capital structure decision. If it decides to borrow, the lenders contribute the money and the corporation has to pay back the principal with the fixed rate of interest at pre-defined times. (Braeley et al., 2014) The lender can reduce the risk by claiming guarantees and backings, however, the expected return decreases this way as well. In case of equity financing the original owners and/or external investors put up the cash and, thus, increase the company’s founding capital. Then, the company provides the business share of the share capital increase for them to buy. Importantly, equity investors do not get a fixed return, but they are eligible to receive dividend and the offset of their investment increased with returns if they sell their share. Equity investors take higher risks as their return on investment depends largely on the company’s performance and they can set up their claims only after the lenders in case of liquidation. (Béza et al, 2013)

One of the main assumptions of finance is that investors invest because they want to realize some kind of financial return on their outlay and that there is a risk-return trade-off in the securities markets, which basically means a positive relationship between the risk level of an investment and the expected yield on it. Consequently, it is clear that

---

4 The risk-return trade-off means that “assets with higher expected returns entail greater risk”. (Bodie et al., 2013, p. 11)
equity investors take higher risk in the hope of higher returns, whereas the cost of equity financing exceeds the cost of debt financing. (Brealey et al., 2014; Béza et al., 2013)

3.4.1. Modigliani-Miller theorem

The Modigliani-Miller theorem forms the foundation for modern concepts on capital structure, hence the literature often considers it as a starting point. Modigliani and Miller (1958) states that under the conditions of perfect financial markets the earning power of a company is determined by its underlying assets and not by its capital structure. That is to say that the asset structure is independent from the financing decisions, thus the financial and investment decisions can be separated. (Modigliani-Miller, 1958; Béza et al., 2013)

Nevertheless, if the assumptions of the original model are not applicable, as it is very often the case in the real life, the results become distorted. In response to the critics, the authors broadened their theorem with taxes in 1963, given that the cost of debt financing, the interest, reduces the tax base. To that end, debt financing provides a tax benefit for the companies and is, thus, cheaper than equity financing. The modified theory states that the market value of the firm is not independent from its capital structure and it suggests that the optimum occurs when the company is exclusively financed from loans. (Modigliani - Miller, 1963; Béza et al., 2013)

However, critiques on the theorem argue that this conclusion absolutely contradicts to practice. Firstly, lenders are also aware of the risks that originate from the higher level of indebtedness and apply certain guarantees and backings as compensation. Second, tax benefits only occur when the company is profitable. Furthermore, if financing and investment decisions were independent from each other, then there would be no connection between the capital costs of the company and the way of financing, which is inconsistent with practical experience. Finally, several firms, especially SMEs, barely have any bank loans and, hence, the optimization of the capital structure is not applicable. (Chittenden et. al., 1996 in Béza et. al., 2013) Despite of the above detailed criticisms I will use the Modigliani-Miller theorem as a benchmark in the following sections of this paper.
3.4.2. Trade-off theory

The trade-off theory is based on Modigliani-Miller’s conclusion: debt financing is the most advantageous form of financing for firms due to tax benefits. In light of the fact that in practice companies combine equity financing and debt financing in their financial decisions, we can conclude that there are factors that offset these tax sparing opportunities. For instance, there is a positive correlation between bankruptcy costs and the level of indebtedness, as higher loans outstanding means higher fix costs because of the repayment obligation. Therefore, highly leveraged\(^5\) companies become insolvent easier. (Béza et. al., 2013)

In this concept the company tries to find the balance between the value of interest tax shields\(^6\) and the cost of bankruptcy or financial troubles. In order to reach this balance, the firm substitutes equity for debt or debt for equity until it reaches the optimal debt ratio in which the value of the firm is maximized. (Myers, 1984) The theory properly explains the sector-specific differences in the companies’ capital structure and shows the relationship between company size and capital structure. Nevertheless, it also states that profitable firms with lower bankruptcy risk tend to have a higher leverage than lossmaking firms with higher risk and that is just the opposite of what we can notice in practice, as successful businesses prefer equity financing in general. (Myers, 2001)

3.4.3. Pecking order theory

Unlike trade-off models, pecking order theory do not aim to find the optimal capital structure: it assumes that companies set up a financial pecking order in financial decision making. The bottom line of the concept is the following:

1) Companies prefer internal finance to external finance, because, due to the information asymmetry that occurs when the owner and the manager of the firm is not the same person, managers tend to avoid external sources of financing, as external investors can decrease their freedom of choice. (Béza et. al.,2013)

According to Braely et. al. (2014) firms use internal sources first (e.g. reinvested

---

\(^5\) Leverage refers to “the amount of debt used the finance a firm’s assets” and “A firm with significantly more debt than equity is considered to be highly leveraged.” (Investopedia.com, 2016)

\(^6\) A tax shield is “a reduction in taxable income for an individual or corporation achieved through claiming allowable deductions” (e.g. interest on debt). (Investopedia.com, 2016)
earnings, free cash flow, amortization), then, if external finance is needed, they choose debt and issue equity only as a last resort.

2) The theory assumes that, in contrast to the other two models discussed in this paper, financial and investment decisions are made simultaneously and are not independent from each other. This means that the company’s capital structure is determined by the nature of its running projects. (Béza et al., 2013)

Thus, the main merit of the pecking order theory is that it explains the fluctuation of capital structure in the short run and the reason why the most profitable companies are the least indebted (namely because they use the realized gains for funding their investments). (Béza et al., 2013)

3.5. The life-cycle model

The life-cycle model is widely used to illustrate the relationship between the company’s age and size. The size is measured most often in the number of employees and in the amount of revenues, but earnings can also be a good touchstone if we apply a rather financial approach. There are several different variants of the model that present the firm’s growth path and the related challenges, such as strategy, organizational structure, managerial assignments, financing decisions, marketing, etc. (Béza et al., 2013) The concept states that a company’s expenditure over time can be described with an almost S-shaped curve. (Azides 1992; Salamonné 2006; Szerb, 2000 in Béza et al., 2013)
The five-period corporate life-cycle model and the typical sources of financing

Figure 2: The five-period corporate life-cycle model and the typical sources of financing

Source: Own edition based on Béza et al. (2013, p. 278)

The model divides the corporate life-cycle in two stages and 5 subphases as it can be seen from Figure 2.

In the seed phase the main goal is the validation of the business idea, therefore it is basically the period of R&D, business planning and market research. Although risks are high and failures are common, equity requirements are relatively low except for research and capital intensive projects. The next step is the start-up phase, which starts when at least the prototype of the product or service exists and the business is ready to start the operation. As equity requirements are getting higher, the founders savings may not be enough anymore and alternative sources of financing are needed. The most typical early stage sources of financing are informal investors, for instance the “3F”, and business angels. (Szerb, 2006)

In the early growth phase the firm begins to operate, hire employees and generate revenues. The product or service may still be under development, but due to the low starting point the growth is fast. As financing needs are also increasing, informal investors’ contributions might not be sufficient. In the late growth phase the product or
service is sold in large quantities and the firm continues to expand the team. Importantly, companies face more complex challenges in this period, as they have to cope both with various organizational problems and the increasing demand of financial and information transparency. Furthermore, in order to ensure future growth, they also have to handle the potentially high competition and invest in innovation. Firms typically need capital (especially working capital) in this period and not debts, not to mention that their risk is still too high for conservative banks to tolerate. As a result, venture capital investors or strategic mergers and acquisitions are the main sources of financing for companies in growth phases. Mezzanine financing is also an option to finance expansion especially for companies facing initial public offering (IPO). (Szerb, 2006)

A company reaches its maturity, when the growth rate slows down, sales stops to grow and the operation becomes stabile. However, firms had better prepare for the future in this phase, as the ability to innovation is essential for the sustainability of business. As risks fall with stability, bank loans become relevant financing choices, while IPO is a good alternative in order to facilitate further growth or internationalization. (Béza et al., 2013)

3.6. The funding gap

While the life-cycle model can present the relative importance of the various sources of financing, it fails to demonstrate certain situations in which the balance is broken. Such situation occurs when the demand for available sources of financing exceeds their supply (Béza et al., 2013; Lam, 2010) – the literature refers to this phenomenon as the funding gap or the financing constraint. (Storey, 1994; Vos et. al., 2005 in Béza et al., 2013)

The causes of the problem can arise both on the demand and on supply side. On the one hand, demand side complications occur when the company fails to evaluate its growth opportunities and financing needs or the chosen form of financing do not match with its growth dynamics. On the other hand, underdeveloped financial markets cause supply side problems, as they are not able to satisfy the equity requirements of growing firms. (Béza et. al., 2013)
Figure 3: The wave-model – The demand and supply of external sources of finance in terms of corporate life-cycles

Figure 3 shows that based on the wave-model the funding gap generally occurs at the seed and growth stages of the corporate life-cycle. Funding gaps can also lead to the stagnation, acquisition or, in worst case, bankruptcy of the underfunded firm. (Béza et. al., 2013)
4. Crowdfunding

4.1. Crowdsourcing

My objective in this section is to provide insights into the modern phenomenon of crowdsourcing, because the subject of this study, the concept of crowdfunding, is often researched within the framework of this broader concept. First, I introduce some useful definitions in order to understand the underlying idea, then I discuss the main factors that contributed largely to its recent development. Finally, I close this section with the presentation of the four primary types of crowdsourcing.

4.1.1. What is crowdsourcing?

The term “crowdsourcing” was originally coined by Jeff Howe (2006) in the computer magazine Wired, who describes the phenomenon as follows:

“The new pool of cheap labour: everyday people using their spare cycles to create content, solve problems, even do corporate R & D.”

Likewise many other definitions that show up in a magazine of this kind, the new phrase became widely used among bloggers and the popular press within a short period of time. Crowdsourcing started to be published in academic journals by 2008 and several different definitions were born since then. In 2012, Enrique Estellés-Arolas and Fernando González-Ladrónde-Guevara surveyed the scholarly literature on crowdsourcing and introduced the following comprehensive interpretation by synthetizing the almost 40 existing definitions: “Crowdsourcing is a type of participative online activity in which an individual, an institution, a nonprofit organization, or company proposes to a group of individuals of varying knowledge, heterogeneity, and number, via a flexible open call, the voluntary undertaking of a task. (Estellés-Arolas & González-Ladrónde-Guevara, 2012, p. 9)

In sum, according to a few dozen of academics who have researched the phenomenon, the main characteristics of crowdsourcing are the following:

1. “An organization that has a task it needs performed,
2. a community (crowd) that is willing to perform the task voluntarily,
3. an online environment that allows the work to take place and the community to interact with the organization, and

4. mutual benefit for the organization and the community.” (Brabham, 2013, p. 3)

4.1.2. The rise of crowdsourcing

In the 1700s, Louis XVI of France tendered a gratuity for the public to invent a more effective way to produce alkali, and a French doctor and chemist, Nicolas Leblanc came up with the new technology that blazed a trail in the industry-scale production of soap. A century later, the authors of the Oxford English Dictionary asked people through an open call to collect English words and their terminology to be indexed in the dictionary. (Brabham, 2013) These historical examples were based on open calls to solve complex problems, thus, in this sense, can be regarded as the early ancestors of crowdsourcing. However, there are two very important factors that contributed largely to the recent spread and fast development of crowdsourcing in the 21st century: the emergence of Web 2.0 and the appearance of a new kind of consumers, the “working consumer” (Kleemann et al., 2008.).

Studying the available literature of crowdsourcing, it seems inevitable to mention Web 2.0 as its main technical prerequisite. A number of authors (inclusive Kleemann et al., 2008, Brabham, 2008, Schwienbacher & Larralde, 2010) emphasize the role of the internet in their works and argue that its unique structure made firms to be able to easily reach consumer networks that are, besides the companies themselves, the most important elements of the crowdsourcing activity.

It might seem hard to imagine, but internet didn’t work always in the way as known these days, hence it’s necessary to discuss the evolution of web and distinguish its two7 types to understand the innovative features of Web 2.0 as mentioned above.

Although there is no consensus about the exact definition of Web 1.0, it is generally accepted to describe the term as the era which started with the birth of Web in 1990 and lasted until the burst of the dot-com bubble in the early 2000s (Lee et al., 2008), or, in other words, as the first generation of commercialized internet. According to Techopedia.

---

7 The third type of web is called „WEB 3.0” or „semantic web” and refers to “a set of technologies that offer efficient new ways to help computers organize and draw conclusions from online data” (Markoff, 2006). In fact, it is the upcoming phase of the internet and, thus, the successor of Web 2.0. However, as it is not directly related to the phenomenon of crowdsourcing, it won’t be discussed in this paper.
(2016) Web 1.0 is “the first stage in the World Wide Web, which was entirely made up of Web pages connected by hyperlinks”, when all of the existing websites were static and therefore failed to provide interactive content.

The neologism “Web 2.0” was first coined in 2004 by Tim O’Reilly, the founder and CEO of O’Reilly Media, Inc. (Lee et al., 2008). In fact, Web 2.0 is a combination of crucial technological innovations (e.g. the development of “dynamic”, as opposed to static, HTML programming languages in the late 1990s and the creation of content management systems) and the increased prevalence of broadband internet connections. (Kleemann et al., 2008)

The main difference between the two concepts is that the idea behind Web 1.0 was to push information to a rather passive audience, while Web 2.0 enabled users to cooperate and create “user-generated content”. (Castelluccio, 2008 in Kleemann et al., 2008) In Web 2.0, a lot of applications appeared that enabled people to collaborate, interact and communicate through the internet and, therefore, users got involved in the construction of websites and in this way their individual knowledge became shared information, which largely contributed to the rise of crowdsourcing. (Kleemann et al., 2008)

While early industrial societies could be easily divided in two separate groups, producers and consumers, later in the history these spheres started to merge. First, self-service in department stores and vending machines appeared in the USA at the end of the 19th century and then spread to Europe shortly afterwards. Self-service became widespread by the middle of the 20th century, but the real “boom” came after firms like IKEA had started to use it in the 1970s. As discussed above, the emergence of the internet, and especially the Web 2.0, brought about significant changes in the relations between companies and consumers: these days consumers aren’t merely passive buyers of goods anymore. They often actively and directly take part in the production and service delivery processes and, thus, can be considered as a group of “outsider” co-workers, who performs certain tasks in the production process that remain under the control of a commercial enterprise. (Kleemann et al., 2008) Voß and Rieder (2005) described this evolution with the appearance of the new type of consumers: the “working consumer”.
4.1.3. The four primary types of crowdsourcing

Howe (2009) distinguished four primary types as presented in Table 2. Crowdfunding varies from the other categories, because it is the only one in which financing is the key component of the model. Hereinafter I discuss this particular kind of crowdsourcing, as the scope of this study, in detail.

**Table 2: The four primary types of crowdsourcing**

<table>
<thead>
<tr>
<th>Type</th>
<th>Description</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crowd Creation</td>
<td>Solving the various problems of individuals with the help of the crowd</td>
<td>• <em>iStockPhoto</em> offers user-generated stock photos, vectors and illustrations, video clips and music clips made by amateurs.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• <em>Innocentive</em> crowdsource innovation solutions from the world’s smartest people, who compete to provide ideas and solutions to important business, social, policy, scientific, and technical challenges.</td>
</tr>
<tr>
<td>Crowd Voting</td>
<td>Leveraging the crowd’s judgement to organize, filter and stack-rank content</td>
<td>• <em>Reality TV shows</em> (e.g. American Idol) rank the participants based on the votes of the viewers.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• <em>Threadless.com</em> uses crowd voting to decide which T-shirts to produce and sell on its webpage.</td>
</tr>
<tr>
<td>Crowd Funding</td>
<td>Financing individuals or groups that might otherwise have no other opportunity to raise capital</td>
<td>• <em>Sellaband</em> is a crowdfunding platform for musicians to raise money in order to launch a professional album.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• <em>Kickstarter</em> is one of the world’s largest crowdfunding platforms for creative ideas.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• <em>LendingClub</em> is a US peer-to-peer lending company that directly connects borrowers and investors.</td>
</tr>
<tr>
<td>Crowd Wisdom</td>
<td>Solving various problems by harnessing the crowd’s knowledge built upon the “Wisdom of Crowds” principle</td>
<td>• <em>Hollywood Stock Exchange</em> is the world’s leading entertainment stock market that syndicates the collected data as market research to entertainment, consumer product and financial institutions.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• <em>The simExchange</em> uses the Wisdom of Crowds to predict the upcoming best-selling and top rated video games.</td>
</tr>
</tbody>
</table>

Source: Howe (2009) and the websites of the listed companies

---

8 The “Wisdom of Crowds” principle is based on James Surowiecki’s book „The Wisdom of Crowds: Why the Many Are Smarter Than the Few and How Collective Wisdom Shapes Business, Economies, Societies and Nations” that states that decisions resulting from the aggregation of information in groups tend to lead to better outcomes than the ones that was made by any individual of the group. (Ball, 2014)
4.2. Crowdfunding

This section aims to introduce the subject of this thesis work, the concept of crowdfunding. To give a basic

4.2.1. What is crowdfunding?

Michael Sullivan, the founder of fundavlog⁹, coined the term crowdfunding back in 2006, but it became widespread only with the emergence of the platform Kickstarter. (Agrawal et al., 2013) Valanciene and Jegeleviciute (2013) collected several different explanations that occur in the literature (Annex 2) and created the following definition based on their findings:

“Crowdfunding could be described as a method to establish the connection between entrepreneurs, who aim to raise capital, and novel investors, who form an emerging source of capital and are willing to invest small amounts, through internet-based intermediaries.” (Valanciene-Jegeleviciute, 2013, p. 41)

4.2.2. Actors of crowdfunding

As it can be deduced from the definition above, the three primary actors of crowdfunding are entrepreneurs, intermediaries and funders.

- **Entrepreneurs or creators** are the ones who are seeking for funding through the crowdfunding campaign and might otherwise not be able to raise capital. (Valanciene-Jegeleviciute, 2013; Howe, 2009)

- **Intermediaries** are typically internet-based platforms and participate in the crowdfunding process as neutral facilitators for the entrepreneurs and the funders. While most of the platforms provide only a website to exhibit the project and a software through which the financial contributions are collected and administrated, there are some platforms that offer more added value (for instance due diligence, consulting, managing a co-investment fund, hunt for co-investors, etc.) for their users. (Hemer, 2011) Based on the way platforms manage collected funds, two types can be identified. The first type holds the money on an escrow

---

⁹ Fundavlog was an incubator for videoblog-related projects and events including a simple funding functionality. (Castrataro, 2011)
account, so in case the targeted amount is not reached, the investors get their contribution back. The second group of crowdfunding platforms allow entrepreneurs to keep the amount raised even if they did not reach their goal. (Valanciene-Jegeleviciute, 2013)

- **Funders or campaign backers** are large groups of people who provide small amounts of financing ($1-$100) to entrepreneurs, whose ideas or projects they find appealing. (Valanciene-Jegeleviciute, 2013) Depending on whether the expected return is financial or not for them, donators, sponsors, investors and lenders can also be adequate appellations. (SpaceTec Capital Partners, 2014)

4.2.3. Crowdfunding models

Based on the expectations, motives and goals of the campaign backer, two major types of crowdfunding models can be identified:

**Non-financial return models**

On the one hand, non-financial return crowdfunding models seek funding by emphasizing the emotional aspect of the campaign and its charitable side. On the other hand, they try to attract investors by appealing their interest or curiosity or by establishing a need for the hoped-for goods. Importantly, this group includes models that are non-financial in nature of the expected return, which varies by model (SpaceTec Capital Partners, 2014):

- **Donation model**: In the donation model, the creator raises donations in order to fund a non-profit or philanthropic project (e.g. funding medical treatments or educational initiatives, charity, etc.). Investors usually take part driven by intrinsic motives in this sort of campaigns and get virtually nothing but a “simple thank” in return. In 2013, the industry size was $1.4 Billion and campaigners raised an average of $1,400. The biggest platforms based on the donation model are gofundme.com, WeDidIt and Youcaring. (Crowdsunite, 2016)

- **Pre-selling and reward models**: These models suit mainly projects with large crowds and interesting goods or services to offer. (Crowdsunite, 2016) The difference between the reward and the pre-selling models is that in the reward model investors receive a symbolic reward for their donation, which is not proportionate to their contribution, while in the pre-selling model funders contribute in form of pre-purchase to the project and get, depending on the amount
of their funding, a prototype, a finished product or a service in return. (SpaceTec Capital Partners, 2014) Besides the desire for the product or service, intrinsic motivation also plays an important role in participation. The best-known platforms are Kickstarter, Indiegogo and RocketHub.

**Financial return models:**

Financial return models enable the crowd to provide capital or loans to (typically) early stage enterprises under a variety of legal instruments. Likewise in case of other classic types of financial investments, investor expects to gain financial return in exchange for bearing certain risks. (SpaceTec Capital Partners, 2014) Importantly, similarly to the non-financial return family of crowdfunding models, not only the desire to realize high yields but also intrinsic motivation incites the participation. (Pierrakis & Collins, 2013)

- **Equity model:** In case of equity crowdfunding, businesses offer a piece of their equity for a fixed amount of capital they want to raise through a crowdfunding platform. As a result, funders acquire shares in the participating privately held companies and, if the business runs well, are entitled to make a return on the investment. Furthermore, unlike public companies on the stock market, businesses seeking capital via equity crowdfunding platforms are not required to adhere to strict reporting standards. (Pierrakis & Collins, 2013) The top platforms based on equity model are Crowdcube, AngelList and SeedInvest.

- **Lending model:** In this model the crowd substitutes commercial banks in lending money to an individual (peer to peer lending) or to a company. Providing a loan to SMEs comes with higher risks, that is why commercial banks often decide not to lend. In case of lending model, the funders reduce the uncertainty by sharing the risk and get the instalment with interest in return during the lending period. (SpaceTec Capital Partners, 2014) The best-known platforms are Lending Club, Prosper and Funding Circle.
Figure 4: Crowdfunding models

Source: SpaceTec Capital Partners (2014)

4.2.4. The crowdfunding process

Figure 5: Simplified crowdfunding process

Source: SpaceTec Capital Partners (2014, p. 3)

Figure 5 gives a short overview about the crowdfunding process, which starts with campaign preparations. The development of the crowdfunding campaign requires a thorough research, including the analysis of both competitive successful and busted ventures in order to understand how the project or idea can be positioned to stand out and enhance its chance of success. Besides analysis, creators have to figure out which platform fits their project the most, make a video and write a pitch to introduce the product or service, plan the rewards and perks, define a reasonable funding goal and work out a marketing and PR campaign as well. (Steinberg-DeMaria, 2012)

After the preparations are ready, entrepreneurs can register on the chosen platform and launch the campaign. Some intermediaries screen the incoming ideas after registration and check the background of the project owners together with the achievability of the crowdfunding plan, while others publish every project without pre-selection. Once the
When the project is accepted, creators have to set the funding goal as well as the length of the campaign, and they can upload their introduction (video, text, etc.) and start the fundraising. (ECN, 2012)

During the campaign entrepreneurs keep in touch with their campaign backers and share updates about the process on the platform. When the allocated fundraising time frame is over, the campaign comes to an end. In case the targeted amount of funding is reached, project owners receive the money reduced with the transaction fee, which is typically 4-5% of the total funding amount. Whereas, if the campaign failed, the majority of platforms pay back the money to the campaign backers. However, there are some intermediaries that allow project owners to keep the raised capital even though the targeted amount wasn’t reached. (ECN, 2012)

After the campaign is closed, project owners have to deliver the promised objectives (e.g. product, service, etc.) to the funders. Although the crowdfunding process literally ends here, the communication between the entrepreneur and the campaign backers tend to continue through the online platform. Moreover, some funders choose to remain involved in the decision-and business strategy making in terms of post investment. (ECN, 2012)

4.2.5. Legal background

Crowdfunding is a relatively novel and innovative way of funding, therefore reforms in legal regulation are essential to enable its future growth. Policy makers, both in the US and in the EU, have also realized the role that crowdfunding may play in financing new ventures and economic growth, therefore they started to construct an adequate regulatory framework to overcome the lack of transparency in case of equity crowdfunding and fraud issues that may occur in non-financial return models. (SpaceTec Capital Partners, 2014)

This section aims to provide a short overview about the existing and planned legal regulation on crowdfunding in the United States and the European Union.

Legal framework in the United States

The United States is currently the largest market of crowdfunding. While donation, reward and lending based platforms, for instance the global leader Kickstarter, Indiegogo and Lending Club, could grow fast and easily, the access to equity based crowdfunding was limited until President Barack Obama signed the Jumpstart Our Business Start-ups Act (JOBS Act) in April 2012. (SpaceTec Capital Partners, 2014)
Prior to JOBS Act, SMEs could hardly get financing from traditional sources of finance (e.g. venture capital funds, bank loans, private equity, etc.) and their situation became even worse after the global financial crisis erupted in 2007-2008. Although equity crowdfunding seemed to be a viable option for these ventures, the strict regulations of the Securities Act of 1933 hindered its expansion. According to the law, the financial returns in equity based models must be regarded as shares. As a result, small businesses should have gone through the costly and time-consuming process of registering at the Securities and Exchange Commission (SEC) in order to get a permission to issue their stocks to the general public, which undermined the application of equity crowdfunding platforms. (Stemler, 2013 in Salamon, 2014)

JOBS Act is basically a regulation with a scope on the enhancement of venture investments in the United States including Title III, which aims to regulate equity crowdfunding and make it accessible to the general public. The SEC adopted the final rules (Regulation Crowdfunding) on October 30, 2015, so platforms can register with the Commission starting with January 29, 2016 and the regulation will be effective 180 days after its publication in the Federal Register. Regulation Crowdfunding allows individuals to invest in equity based crowdfunding campaigns with certain limitations regarding the investment volume and the amount of capital an entrepreneur can raise. Besides, it also imposes disclosure requirements on issuers and creates a regulatory framework for platforms that facilitates the crowdfunding transactions. (SEC, 2015)

**Legal framework in the European Union**

As in the EU it is the Member State’s authority to translate the relevant European directives into national regulation or guidelines, there is no such integrated legislation on crowdfunding like the JOBS Act in the United States. However, European regulation provides almost all of the building blocks that can enable Member States to sufficiently control crowdfunding.

services and activities and by providing harmonized protection for investors in financial instruments. Nonetheless, not all of the crowdfunding models fall under the scope of MiFID as transferable securities, thus the application of the directive and its transposition into national level legislation may cause difficulties both to companies and regulators and various judgments may be made. On the other hand, platforms that are not subject to the MiFID may not intend to apply for MiFID authorization unless they want to operate cross-border under the MiFID European passport. This means that intermediaries can avoid investor protection measures, such as client classification, in the absence of a national or European level legislation on crowdfunding. (SpaceTec Capital Partners, 2014)
5. A SWOT analysis on crowdfunding

The SWOT (Strengths, Weaknesses, Opportunities, Threats) framework is a widely used, simple and practical analytical tool in strategic management, which supports information gathering and decision making. (Valanciene-Jegeleviciute, 2013) The point of this section is to present the strengths and weaknesses along with the external opportunities and threats of crowdfunding as an innovative method of fundraising from the entrepreneurs’ point of view. When conducting my research, I used the following clarification of the four aspects of SWOT based on Valanciene-Jegeleviciute (2013):

- **Strengths** are classified as the distinctive features and advantages of crowdfunding in comparison with other sources of finance. Furthermore, they must be of internal origin and result from the nature of the method.
- **Weaknesses** must also be of internal origin and are disadvantageous features of crowdfunding compared to other means to raise capital.
- **Opportunities** refer to external factors that can be exploited in order to enhance and improve the use of crowdfunding.
- **Threats** are classified as negative conditions of external origin that are harmful to the method and reduce its performance.

5.1. **Strengths**

After reading the existing literature on crowdfunding and making interviews with investment professionals and entrepreneurs who got involved in crowdfunding activity in order to raise money to their projects, it seemed quite clear that the main strength of crowdfunding is the relatively easy access to capital. According to Almás (2016) and Károlyi (2016), crowdfunding may be a viable option especially for early stage ventures to overcome the funding gap, which typically arises between 3F and business angels or business angels and venture capitalists.
Agrawal et al. (2013) claim that the use of crowdfunding might be beneficial due to the lower cost of capital resulting from the increased supply of early-stage capital and information richness. Furthermore, Valanciene-Jegeleviciute (2013) also emphasize the exceptional accessibility of capital through crowdfunding platforms and Hemer (2011) claims crowdfunding to be one of the few instruments that can mobilize private capital in the early stages.

In addition to the obvious financial benefits, crowdfunding has several added values compared to other sources of financing. Besides the various authors who researched the applicability of crowdfunding (Hemer, 2011; Agrawal et al., 2013; Szirtes, 2014; Kuppuswamy-Bayus, 2015), all of my interviewees pointed out that it can also be used as a tool of validation and marketing, or as a sales channel. Szirtes (2016) accentuated that even though their campaign failed to reach the targeted amount, they succeeded in exploiting the above detailed features of crowdfunding as they could reach potential buyers and increase their press coverage through the platform. According to Károlyi (2016), crowdfunding may be more useful as a sales channel than as a funding instrument. However, they also mentioned that although crowdfunding can give a feedback whether there is a demand for the product or not, this may not represent the full market, therefore can only partly applied as a validation tool.
Another advantageous feature of crowdfunding is the lack of geographical constraints. Agrawal et al. (2011) studied the platform Sellaband and found that the geographic distance between entrepreneurs and investors are independent from the investment patterns over time, which contradicts to existing theories predicting that the two parties must be co-located in case of early stage ventures due to distance sensitive costs (e.g. information gathering, progress monitoring, etc.).

A successful crowdfunding may also facilitate fundraising initiatives, as it may be a signal of the existing market demand. For instance, Codie got financing after its Indiegogo campaign from an angel investor, who previously tied his support to a positive outcome. (Oláh, 2016) However, Károlyi (2016) and Almás (2016) stated that a successful campaign is no warranty for angel or venture capital, but it may positively influence the investment decision.

5.2. Weaknesses

First, crowdfunding is internet-based, therefore the problem of choosing a trustworthy crowdfunding platform arises, as it might be difficult for entrepreneurs to judge whether the chosen intermediary can be trusted based on the information given on the web. (Valanciene-Jegeleviciute, 2013)

Second, in contrast to traditional sources of financing, such as the 3F, banks or business angels, crowdfunding requires from entrepreneurs to disclose their innovation with the general public prior to selling. In addition, negative repercussions on patentability and on bargaining with other suppliers may arise. (Agrawal et al., 2013)

Furthermore, creators have to take in account the opportunity cost of raising capital from the crowd instead of turning to other types of investors. On the one hand, business angels and venture capitalists generally provide industry knowledge and network in addition to capital, which is not likely in case of crowdfunding. (Agrawal et al., 2013; Anshuman et al., 2012; Park-Vermeulen, 2015) On the other hand, successful crowdfunding campaigns require serious preparations which take time and money. (Oláh, 2016; Szirtes, 2016; Pál, 2016; Steinberg-DeMaria, 2012)

Finally, investor management can be challenging and costly as well due to the high number of investors who must be managed. Whenever a project does not meet a deadline or an expectation, costs are getting higher. (Agrawal et al., 2013)
5.3. Opportunities

The biggest opportunity lies in the crowd, or in the contemporary society, itself. Web 2.0 allowed users to interact and communicate on various webpages and, as a result, various social media platforms were born and emerged over time. (Kleemann et al., 2008) As crowdfunding platforms can use social media platforms for promotion and given the facts that friends and family play a key role in the early phase of funding and financing propensity increase with the accumulated capital during crowdfunding campaigns (Agrawal et al., 2013), entrepreneurs can reach their friends and, respectively, their social network as well. (Blechter et al., 2011 in Valanciene-Jegeleviciute, 2013)

As policy makers have already realized the role that crowdfunding may play in economic development, further positive steps can be expected in the near future that may contribute to its improvement and spread. For instance, JOBS Act was introduced in 2012 and Regulation Crowdfunding became effective in 2016 in the US: both of them are regulations designed to ease the access to capital for early stage ventures and, consequently, to increase employment and economic growth. (Valanciene-Jegeleviciute, 2013). Similarly, crowdfunding as an alternative form of financing is being discussed in the European Union within the framework of the European 2020 Strategy, which aims to support entrepreneurship in the EU. (European Commission, 2013)

According to Károlyi (2016) and Almás (2016), crowdfunding may complement traditional forms of financing, such as venture capital and provide funding for ventures that otherwise wouldn’t be able to raise money, for instance because of the lack of proven demand for their product or service. This aspect of crowdfunding is supported by various authors: Juhász (2012) claims that it can be the cure for the funding gap and Valanciene-Jegeleviciute (2013) point out that crowdfunding, as a niche investment opportunity, has no competitors among other sources of financing and investment opportunities.

5.4. Threats

The primary threat toward crowdfunding is probably the lack of a suitable legal framework, especially in case of equity crowdfunding, almost all over the world with some exemptions, such as Australia or the US. For example, in the European Union the existing regulation doesn’t include all of the crowdfunding models and it makes possible to ignore investor protecting rules. (SpaceTec Capital Partners, 2014) Furthermore, equity
Crowdfunding is still illegal almost everywhere in the world, which can limit the entrepreneurs’ access to capital (Valanciene-Jegeleviciute, 2013).

Besides, the risky nature of SMEs can also cause difficulties (Valanciene-Jegeleviciute, 2013), as the fear from fraud and creator incompetence (Agrawal et al., 2013) along with the risk of delayed development or delivery of the products (Szirtes, 2016; Oláh, 2016) may frighten away crowdfunding investors.

I summarized the identified strengths, weaknesses, opportunities and threats in Table 3.

**Table 3: A SWOT analysis on crowdfunding**

<table>
<thead>
<tr>
<th></th>
<th>Helpful</th>
<th>Harmful</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Strengths</strong></td>
<td></td>
<td><strong>Weaknesses</strong></td>
</tr>
<tr>
<td><strong>Internal</strong></td>
<td>- easy access to capital</td>
<td>- internet based platforms</td>
</tr>
<tr>
<td></td>
<td>- also useful as marketing and validation tool</td>
<td>- disclosure requirement</td>
</tr>
<tr>
<td></td>
<td>- can be applied as sales channel</td>
<td>- opportunity cost of raising capital from the crowd</td>
</tr>
<tr>
<td></td>
<td>- lack of geographic barriers</td>
<td>- investor management can be difficult</td>
</tr>
<tr>
<td></td>
<td>- potential to facilitate future fundraising</td>
<td></td>
</tr>
<tr>
<td><strong>Opportunities</strong></td>
<td></td>
<td><strong>Threats</strong></td>
</tr>
<tr>
<td><strong>External</strong></td>
<td>- crowd based model</td>
<td>- lack of suitable legal framework</td>
</tr>
<tr>
<td></td>
<td>- policy makers have a positive attitude towards crowdfunding due to its role in economic development</td>
<td>- higher risk level of SMEs</td>
</tr>
<tr>
<td></td>
<td>- niche investment opportunity</td>
<td></td>
</tr>
</tbody>
</table>
6. Summary

6.1. Further research

In general, knowledge and research on crowdfunding is relatively scarce and lacks sufficient empirical data. Therefore, the findings based on qualitative research would worth testing with quantitative research tools in order to get more precise results.

However, based on the SWOT analysis, further research areas can be identified both among the internal and external aspects. For instance, I claimed crowdfunding to be an effective validation tool based on my literature analysis and the opinion of my interviewees, but there is no consensus on this question. Thus, it would worth investigating the motivations of campaign backers: to what extent do they invest in crowdfunding projects because they think it is “fun” or because they have real interest in buying the product? On the other side of the coin, another interesting research question is the lack of suitable legal framework. In order to exploit the given opportunities, such as the policy makers’ positive attitude towards the method and the power of the crowd, this problem needs a solution as soon as possible. Moreover, most of the identified harmful aspects, like the disclosure requirement and the risky nature of SMEs could be mitigated by legal actions.

6.2. Conclusion

On the one hand, this paper aimed to define the value added features of crowdfunding, a new and innovative method in new venture financing, that incite entrepreneurs to engage in this particular type of fundraising instead of choosing other types of financing. Based on the findings of my SWOT analysis, I assume that the relatively easy access to capital and the potential advantages of a successful campaign in further fundraising attempts may attract many capital seeking entrepreneurs. Besides, crowdfunding can be used as a marketing and validation tool, or as a sales channel as well. Thus, although preparation for a successful crowdfunding campaign takes plenty of time and money, it can kill two birds with one stone, as the gain includes the capital coupled with the increased reach and online presence of the company.

On the other hand, crowdfunding has also disadvantages compared to professional investors, such as business angels and venture capitalists. While these types of investors
provide industry knowledge and network in addition to the financial support, crowdfunding can generally not give executive aid. Nevertheless, both of the investment professionals I managed to make an interview with stated, that crowdfunding can complement business angel and venture capital financing (Figure 6), as it provides capital for early stage ventures that otherwise wouldn’t be able to raise money. As the scholarly literature also seems to support this view, I believe that crowdfunding may fill in the early stage funding gap in the future and ensure an easier access to early stage capital for SMEs.

As a conclusion, I contend crowdfunding is a viable option for early stage ventures to get financing with a continuously growing base of funders. It is clear that this new way of financing has several opportunities and strengths, which can ensure its future growth. Although the appropriate legal framework still seems to be the major challenge to overcome, even on this field we can find constructive initiatives, such as Regulation Crowdfunding in the USA, which can serve as examples to follow for other countries and predicts a bright future for crowdfunding.
7. Bibliography


8. Other sources – interviews

Attila Almás, investment director at GB & Partners Investment Management

Antal Károlyi, angel investor and partner at Traction Tribe

Marcell Pál, CEO at Brewie

Marcell Szirtes, CEO at MiniBrake

Károly Oláh, embedded systems engineer at Codie
9. List of tables

Table 1: Sources of capital ...........................................................................................................12
Table 2: The four primary types of crowdsourcing .................................................................24
Table 3: A SWOT analysis on crowdfunding ..............................................................................36

10. List of figures

Figure 1: Firm Environment and Corporate Strategy ..............................................................11
Figure 2: The five-period corporate life-cycle model and the typical sources of financing ..........................................................................................................................18
Figure 3: The wave-model – The demand and supply of external sources of finance in terms of corporate life-cycles .........................................................................................20
Figure 4: Crowdfunding models ...............................................................................................28
Figure 5: Simplified crowdfunding process ..............................................................................28
Figure 6: The place of crowdfunding among other sources of finance .....................................33
11. Annexes

11.1. Annex 1: Description of the various investor types in the life-cycle model

<table>
<thead>
<tr>
<th>Type of investor</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>3F (Founders, Family, Friends)</td>
<td>3F refers to founders, family and friends, who usually provide smaller financial contributions to the firm. Emotional motivations play a more important role than professional or financial aspects by these type of investors.</td>
</tr>
<tr>
<td>Business Angel</td>
<td>Private investors who invest their own capital into early stage ventures, generally in a sector in which they have professional experience. In addition to the financial support, they bring precious industrial knowledge and a network of contacts within the sector; that is why the capital coming from business angels is regarded as “smart capital”.</td>
</tr>
<tr>
<td>Venture Capital</td>
<td>Investment funds for high-growth and early-stage companies. The investment horizon is typically longer (5-8 years) and the targeted companies are not yet listed. Importantly, venture capitalists invest 1st, 2nd or 3rd round venture capital according to the firms’ degree of development and are interested in the fast growth and value creation of the firm. The transaction ends with the exit, which means the sale of the shares.</td>
</tr>
<tr>
<td>Mezzanine</td>
<td>A hybrid form of financing that combines debt and equity financing. In general, only the interest must be paid during the term and the principal, which is usually paid back by selling the company or by going public, will be due as a lump sum at maturity.</td>
</tr>
<tr>
<td>IPO (Initial public offering)</td>
<td>The first sale of shares by a formerly private firm.</td>
</tr>
</tbody>
</table>

Source: Own edition based on Papp (2012); SpaceTec Capital Partners (2014); Szerb (2006); Bodie et. al. (2013)
### 11.2. Annex 2: The notion of crowdfunding

<table>
<thead>
<tr>
<th>Author(s)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ramsey, Y. A., 2012</td>
<td>The process of raising money to help turn promising ideas into business realities by connecting investees with potential supporters.</td>
</tr>
<tr>
<td>Lynn, D. M., 2012</td>
<td>A relatively new outgrowth of social media that provides funding for a variety of ventures.</td>
</tr>
<tr>
<td>Bechter, C; Jentzsch, S; Frey, M., 2011</td>
<td>An approach to raising capital required for a project or enterprise by appealing to large numbers of ordinary people for small ($1-$100) contributions.</td>
</tr>
<tr>
<td>Sigar, K., 2012</td>
<td>A capital formation strategy that raises small amounts of funds from a large group of people through online means.</td>
</tr>
<tr>
<td>European Crowdfunding Network, 2012-2013</td>
<td>Crowdfunding is the mechanism of pooling and distributing relatively small financial investments from a large audience of supporters in exchange for equity or liabilities carrying financial returns or other non-financial rewards, where supporters are people or organisations who network, usually via the internet, to jointly support other people or organisations.</td>
</tr>
<tr>
<td>Lynn, D. M.; Sabbagh, H., 2012</td>
<td>A new outgrowth of social media that provides an emerging source of funding for ventures.</td>
</tr>
<tr>
<td>Powers, T. W., 2012</td>
<td>A financial mechanism that allows startup companies to solicit funds from the general public through website intermediaries.</td>
</tr>
</tbody>
</table>

Source: Valanciene-Jegeleviciute (2013, p. 40)
11.3. Annex 3: Fact sheet - Regulation Crowdfunding

Action

The Securities and Exchange Commission will consider whether to adopt final rules that would allow the offer and sale of securities through crowdfunding. The recommended rules would give small businesses an additional avenue to raise capital and provide investors with important protections. If adopted, this would complete the Commission’s major rulemaking mandated under the JOBS Act.

Highlights of the Recommended Final Rules

The recommended rules would, among other things, enable individuals to purchase securities in crowdfunding offerings subject to certain limits, require companies to disclose certain information about their business and securities offering, and create a regulatory framework for the intermediaries facilitating crowdfunding transactions. More specifically, the recommended rules would:

- Permit a company to raise a maximum aggregate amount of $1 million through crowdfunding offerings in a 12-month period;
- Permit individual investors, over a 12-month period, to invest in the aggregate across all crowdfunding offerings up to:
  - If either their annual income or net worth is less than $100,000, than the greater of:
    - $2,000 or
    - 5 percent of the lesser of their annual income or net worth.
  - If both their annual income and net worth are equal to or more than $100,000, 10 percent of the lesser of their annual income or net worth; and
- During the 12-month period, the aggregate amount of securities sold to an investor through all crowdfunding offerings may not exceed $100,000.

Under the recommended rules, certain companies would not be eligible to use the exemption. Ineligible companies would include non-U.S. companies, Exchange Act reporting companies, certain investment companies, companies that are subject to disqualification under Regulation Crowdfunding, companies that have failed to comply with the annual reporting requirements under Regulation Crowdfunding during the two years immediately preceding the filing of the offering statement, and companies that have
no specific business plan or have indicated that their business plan is to engage in a merger or acquisition with an unidentified company or companies.

Securities purchased in a crowdfunding transaction generally could not be resold for one year. Holders of these securities would not count toward the threshold that requires a company to register its securities under Exchange Act Section 12(g) if the company is current in its annual reporting obligations, retains the services of a registered transfer agent and has less than $25 million in total assets as of the end of its most recently completed fiscal year.

In addition, all transactions relying on the new rules would be required to take place through an SEC-registered intermediary, either a broker-dealer or a funding portal.

**Disclosure by Companies**

Companies that rely on the recommended rules to conduct a crowdfunding offering must file certain information with the Commission and provide this information to investors and the intermediary facilitating the offering, including among other things, to disclose:

- The price to the public of the securities or the method for determining the price, the target offering amount, the deadline to reach the target offering amount, and whether the company will accept investments in excess of the target offering amount;
- A discussion of the company’s financial condition;
- Financial statements of the company that, depending on the amount offered and sold during a 12-month period, are accompanied by information from the company’s tax returns, reviewed by an independent public accountant, or audited by an independent auditor. A company offering more than $500,000 but not more than $1 million of securities relying on these rules for the first time would be permitted to provide reviewed rather than audited financial statements, unless financial statements of the company are available that have been audited by an independent auditor;
- A description of the business and the use of proceeds from the offering;
- Information about officers and directors as well as owners of 20 percent or more of the company; and
- Certain related-party transactions.
In addition, companies relying on the crowdfunding exemption would be required to file an annual report with the Commission and provide it to investors.

**Crowdfunding Platforms**

A funding portal would be required to register with the Commission on new Form Funding Portal, and become a member of a national securities association (currently, FINRA). A company relying on the rules would be required to conduct its offering exclusively through one intermediary platform at a time.

The recommended rules would require intermediaries to, among other things:

- Provide investors with educational materials that explain, among other things, the process for investing on the platform, the types of securities being offered and information a company must provide to investors, resale restrictions, and investment limits;
- Take certain measures to reduce the risk of fraud, including having a reasonable basis for believing that a company complies with Regulation Crowdfunding and that the company has established means to keep accurate records of securities holders;
- Make information that a company is required to disclose available to the public on its platform throughout the offering period and for a minimum of 21 days before any security may be sold in the offering;
- Provide communication channels to permit discussions about offerings on the platform;
- Provide disclosure to investors about the compensation the intermediary receives;
- Accept an investment commitment from an investor only after that investor has opened an account;
- Have a reasonable basis for believing an investor complies with the investment limitations;
- Provide investors notices once they have made investment commitments and confirmations at or before completion of a transaction;
- Comply with maintenance and transmission of funds requirements; and
- Comply with completion, cancellation and reconfirmation of offerings requirements.

The rules also would prohibit intermediaries from engaging in certain activities, such as:
• Providing access to their platforms to companies that they have a reasonable basis for believing have the potential for fraud or other investor protection concerns;
• Having a financial interest in a company that is offering or selling securities on its platform unless the intermediary receives the financial interest as compensation for the services, subject to certain conditions; and
• Compensating any person for providing the intermediary with personally identifiable information of any investor or potential investor.

Regulation Crowdfunding would contain certain rules that are specific to registered funding portals consistent with their more limited activities than that of a registered broker-dealer. The rules would prohibit funding portals from, among other things: offering investment advice or making recommendations; soliciting purchases, sales or offers to buy securities; compensating promoters and other persons for solicitations or based on the sale of securities; and holding, possessing, or handling investor funds or securities.

The rules would provide a safe harbor under which funding portals could engage in certain activities consistent with these restrictions. The rules also would require funding portals to maintain certain books and records related to their transactions and business.

**Background**

Crowdfunding is an evolving method of raising money through the Internet, but it has generally not been used to offer and sell securities. That is because offering a share of the financial returns or profits from business activities could trigger the application of the federal securities laws, and an offer or sale of securities must be registered with the SEC unless an exemption is available.

The JOBS Act included an exemption to permit securities-based crowdfunding and established the foundation for a regulatory structure for these transactions. It also created a new entity – a funding portal – and allows these Internet-based platforms or intermediaries to facilitate the offer and sale of securities without having to register with the SEC as brokers. The SEC was tasked with adopting rules to implement these provisions, which are intended to facilitate capital raising by small businesses while providing significant investor protections.
**Staff Report**

The staff would undertake to study and submit a report to the Commission no later than three years following the effective date of Regulation Crowdfunding on the impact of the regulation on capital formation and investor protection.

**What’s Next?**

The new rules and forms would be effective 180 days after they are published in the Federal Register, except that the forms enabling funding portals to register with the Commission would be effective January 29, 2016.

11.4. Annex 4: Interview questions – project owners

- Why did you decide to start a crowdfunding campaign? Why did you choose this particular type of financing?
- On which platform did you start your campaign and why did you do so?
- How and how long did you prepare for the campaign?
- How much was your funding target and how did you calculate it?
- What do you think was the key of your success/failure?
- What was the impact of the campaign on your team? What did you learn from it?
- Did the campaign facilitate your fundraising attempts afterwards?
- How do you see the future of crowdfunding?

11.5. Annex 5: Interview questions – investment professionals

- What do you think about crowdfunding in general?
- What kind of enterprises (phase, industry, activity, etc.) should consider a crowdfunding campaign?
- Where is the place of crowdfunding among the other sources of financing? Can it be the cure for the funding gap?
- Can we consider crowdfunding as the competitor of venture capital? is there any chance for the cooperation between crowdfunding and venture capital?
- Can a successful/unsuccessful campaign influence your investment decision either in a positive or in a negative way?
- How do you see the future of crowdfunding?
STATEMENT ABOUT THE ORIGINALITY OF THE THESIS WORK

Name:
E-mail address:
NEPTUN code:
Title of the Thesis Work:
Thesis Work consultant/supervisor’ name:
I, ………………………………………………………………(student’s name) in full
knowledge of my liability, hereby declare that all the texts, diagrams and tables in this
Thesis Work are based solely on my own individual work and is not based on work
published in another document or by another contributor. Where I have drawn on the
work of others, this has been appropriately and fully acknowledged in the form of citation
and references as set out in the Guidance for Preparing Thesis Work and/or the Corvinus
Business School’s Addendum to the Study and Exam regulations.
I wish to defend my Thesis Work in the thesis defence period of the Fall/Spring* semester
of the 20…./ 20…. academic year. (*Please underline as appropriate.)

Yes No

Budapest, ……………………………………………

__________________________
Student’s signature

Please fill in if you are enrolled in any other degree program!
I, ………………………………………………………………(student’s name) in full
knowledge of my liability, hereby declare that the overlap between my present thesis and
the thesis I submitted for the program I study/have studied in parallel does not exceed
10%. I take note of the fact that if the program directors (or the persons appointed by
them) find an overlap of more than 10%, then - based on 6. § (2) of the Corvinus Business
School’s Addendum to the Study and Exam regulations - I have not fulfilled the study
requirements so I will not be allowed to defend my thesis.

Budapest, ……………………………………………

__________________________
Student’s signature
STATEMENT ABOUT THE PUBLICITY OF THE THESIS WORK

Name (please provide in capital letters):

Bachelor program, name of the program:

I hereby make the following decision about the publicity of the electronic version (pdf document, reading, saving and printing allowed, processing not allowed) of my Thesis Work.

I allow (please underline your choice):

FULL PUBLICITY
The Thesis Work can be downloaded from the library’s website from Thesis Works/ TDK database (http://szd.lib.uni-corvinus.hu/), from everywhere on the internet in the form of a pdf document.

LIMITED PUBLICITY
The Thesis Work can be downloaded from the Library’s website from Thesis Works / TDK database (http://szd.lib.uni-corvinus.hu/), exclusively from the area of the Corvinus University of Budapest in the form of a pdf document.

NOT PUBLIC
The Thesis Work cannot be included in the register of the Central Library of Corvinus University of Budapest in any form (neither bibliographic description nor partial or full text).

Budapest, ………………………………………

………………………………………………

Author’s signature