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DEVELOPMENT OF ALTERNATIVE FINANCE MODELS AND THE POSITION OF CROWDFUNDING IN ALTERNATIVE FORMS OF FINANCE

Abstract:

Considering recent developments in IT and the wake of the global economic crisis, crowdfunding has become an increasingly significant alternative form of finance. The aim of this paper is to analyse and discuss the current state and development of alternative finance markets focusing on crowdfunding. Firstly, we define the terms “alternative finance”, “alternative funding”, and “crowdfunding”. The paper continues with the theoretical framework of crowdfunding and discusses different models of this type of financing. Development of alternative forms of financing is analysed based on data from previous surveys carried out in the field of alternative finance markets and individual crowdfunding platforms functioning around the world. Crowdfunding is growing worldwide, and the Asia-Pacific region, headed by China, is the world’s largest alternative finance market, followed by the Americas. In Europe, the UK is the market leader in alternative finance. As individual models of financing are concerned, the most common forms of alternative finance activities are peer-to-peer consumer lending, reward-based crowdfunding, and peer-to-peer business lending. At the end of the paper, we provide a conclusion of the presented aspects of crowdfunding and development of alternative finance. Finally, we mention potentially problematic areas of this type of financing that could be elaborated upon in the future.

Keywords:

alternative finance; capital; crowdfunding; innovation; SMEs

JEL Classification: G24, G32, M13

1 Introduction

In a time of pressing issues concerning innovation, the accessibility of funds in the early phases of innovation implementation is often a serious hurdle (Cosh et al., 2009). In light of the difficulties that new companies face in gaining finances from “angel” investors, banks, and risk capital funds, many entrepreneurs have drawn from the online communities of investor-consumers (Economist, 2010; Schwienbacher & Larralde, 2012).

Thanks to this, alternative finance holds an important place in today’s European markets. Alternative finance is a fast-growing area of financial sector services; however, in terms of data, there are only a small number of studies that actually deal with this topic directly.

Until recently, alternative forms of finance represented a sort of gap in the financial system and lacked a larger perspective. Today, this has all changed. Alternative forms of finance have developed thanks to innovations and technical platforms that can be shared via modern information technologies.

The rapid growth of alternative finance can be seen across Europe, which is confirmed in the study by Wardrop et al. (2015). This study points to the fact that the European alternative finance market grew by 144% between 2013 and 2014. In regard to the size of these markets, three of the most productive markets can be found in the following countries: 1: Great Britain, 2. France, and 3. Germany.

Crowdfunding plays a crucial role in alternative finance and is defined and discussed in this paper together with other alternative forms of finance. Although the crowdfunding model has been remarkably successful and has proven to be a viable method of financing new companies and innovations, relatively few academic treatises have been published on the topic. Schwienbacher & Larralde (2012) offered one of the first descriptions of crowdfunding, which included a brief case study, and there have also been visible efforts to create a theoretical model of crowdfunding (Belleflamme et al., 2012). The first dynamic model of crowdfunding was proposed by Mollick (2012), but the possibilities for further publication are still very broad.

2 Brief Literature Review

The contemporary financial system represented by financial markets and traditional banks is constantly developing and is often accompanied by alternative finance. According to Allen et al. (2012, p. 2), alternative finance can be labeled as “all the non-market, non-bank sources, including internal finance (e.g., retained earnings) and alternative, external finance”. One of the reasons for the development of alternative finance is the fact that small and medium-sized enterprises have limited access to financial markets and also limits on acquiring capital (Degryse et al., 2012).

According to Fraser et al. (2015), companies with low capital are often afraid of external capital and primarily wish to finance their investment activities from internal sources. Alternative finance can actually be a financial complication for many companies. It is, however, necessary to consider that alternative finance expands financial possibilities and, more importantly, provides companies with needed capital.

Although many authors attribute alternative finance to companies, it actually exists in various contexts: business-to-business, consumer-to-business and consumer-to-consumer (Wardrop et al., 2015).

Alternative finance has seen rapid growth after the financial crisis and also in just the past few years, as discussed in e.g. Barnett & Jawadi (2012) or Bruton et al. (2015). The logical development of the use of alternative finance after the financial crisis was due to the unfavorable condition of economies (Allen et al., 2012). The next upsurge in alternative finance was caused by limited resources on the part of traditional financial systems. The internet and the development of information technologies, along with various platforms for innovation, have also played a crucial role (Bruton et al., 2015).

Despite the strong growth in the use of alternative finance, we can name some limiting factors that hamper the development of these sources of finance. These factors include the lack of trust in these sources of finance, but also include regulatory mechanisms that in the majority of countries are still in their infancy (see e.g. Wardrop et al., 2015; Pinotti, 2012). The speedy growth of unregulated alternative finance can also have negative impacts (e.g. the growth of information asymmetry), which is another argument for the regulation of these sources of finance and alternative markets.

Wardrop et al. (2015) argue that because alternative finance is so diverse, it can be divided into several basic forms that are categorized below in Tab. 1. These categorizations have been elaborated upon by other authors – see e.g. Bruton et al. (2015).

2.1 Basic models of alternative finance

Alternative finance is the term that covers a range of diverse models ranging from people lending money to each other or to businesses, to people donating to community projects and businesses trading their invoices (NESTA, 2014). Tab. 1 shows specifies of the main forms of alternative finance.

Tab. 1: Basic models of alternative finance and their specifications

Alternate finance model	Specifications
Peer-to-peer consumer lending	Debt financing based on transactions between individuals; deals primarily with unsecured loans.

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Reward-based crowdfunding	Reward type of finance in which backers gain a non-monetary material reward from the recipients of their contribution.
Peer-to-peer business lending	Debt financing based on transactions between individuals or institutional investors and existing companies; deals primarily with loans to small and medium-sized enterprises.
Equity-based crowdfunding	Type of finance in which investors gain a minority share in a project or company for the monetary contributions they provide.
Microfinance	Loans of small sums of money to local small and medium-sized enterprises, or to social enterprises that are economically disadvantaged.
Donation-based crowdfunding	Benefit-style finance in which donors do not gain any financial or material reward for their contributions (thus the recipient is not financially bound in any way to the providers); deals primarily with finance of various charity or other social projects.
Invoice trading	Finance via the sale of invoices to a group of individual or institutional investors.
Debt-based securities	Long-term type of finance in which creditors receive unsecured debt obligations, typically paid off over a longer period of time.
Other alternative finance sources	E.g. mini-bonds, convertible loans, or retirement funds of small and medium-sized enterprises.

Source: own based on Wardrop et al. (2015) and Crowder.cz. (2016)

The overview of the diversity of alternative finance described above in Tab. 1 could be specified more extensively to underline the weight and relevance of certain alternative finance initiatives. Some specific aspects of this are demonstrated in the following chapters of this paper.

2.2 Crowdfunding as an alternative form of finance

The term “crowdfunding” refers to a relatively new form of risk capital finance. According to Morduch (1999), the phrase crowdfunding is derived from the concept of microfinance and, as Poetz & Schreier (2012) define it, it is also derived from the concept of crowdsourcing.

Crowdfunding allows entrepreneurs to appeal to the general public and ask for resources for their innovations. As Belleflamme et al. (2012) state, crowdfunding entails an open call (over the internet) for the provision of financial resources in the form of gifts or in exchange for some type of reward, for the purpose of supporting the initiative for specific intentions (the reward may be financial or non-financial).

If we consider this in detail, we find that collecting small sums of money from a large amount of people has a long history (Ordanini et al., 2011). As e.g. Hemmer (2011) points out, President Obama’s campaign in 2008 was partially financed via crowdfunding, i.e. from small financial gifts received via the web. At present, there are several hundred online platforms in the world that facilitate crowdfunding transactions – see e.g. Adler (2011); Massolution (2012) or Chasan (2012).

Most of the crowdfunded projects in the past had little or no entrepreneurial ambition (Hemer, 2011). However, the new phenomenon of crowdfunding uses new tools such as social networks and other modern features of the Internet, especially the function of "virtual networking and marketing”.

As Salganik et al. (2006) point out, crowdfunding has two strong differences in comparison to traditional forms of finance:

- financing is provided by relatively small contributions of many individuals, done successively over a set period of time,
- potential donors can see the degree of support from other project patrons.

Giudici et al. (2012) define the specific aspects of crowdfunding in the following:

- pairing together those who seek capital and those who own capital,
- direct interaction between entrepreneurs and investors,
- the rise of social groups of investors and entrepreneurs.

Sharing information, or more precisely the use of social networks for crowdfunding, presents some large risks, as social information can lead to irrational behavior (Salganik et al., 2006).

According to Lambert & Schwienbacher (2010), crowdfunding involves an open call, essentially through the Internet, for the provision of financial resources either in the form of donations (without rewards) or in exchange for some form of reward and/or the right of vote in order to support initiatives for specific purposes.

There are many specific aspects to the process of crowdfunding, especially in the areas concerning the actors involved in crowdfunding, the forms of capital provision ranked, and the crowdfunding process involving intermediaries.

The key actors of crowdfunding are the following:

- project owners,
- funders,
- crowdfunding platforms.

Project owners are entrepreneurs or individuals who propose the idea that should be funded. The funders, i.e. “the crowd”, are donors, lenders/creditors, sponsors or clients. The funders decide to support dedicated initiatives while bearing risk and expecting some form of reward. Crowdfunding platforms play the role of an intermediary between the capital seeking venture and crowd funder. For more, see e.g. Hemer (2011), European Commission (2014a), or European Commission (2014b).

Crowdfunding campaigns are at times complemented by other strategies and use many crowdsourcing aspects such as crowdsourcing the campaign’s acceptance on a platform, reviewing the business model, sourcing potential distribution channels, and others. A crowdfunding campaign is typically conducted through a crowdfunding platform.

As the provision of capital can take the form of donations, sponsoring, pre-ordering or pre-selling, fees for membership in clubs, crediting or lending, and private equity investments, the complexity of processes varies greatly (Hemer et al., 2011).

In Europe, two categories of crowdfunding models can be identified. The first is actually a group of models where the expected return of the campaign is non-financial in nature and ranges from virtually nothing to a product or service. The second group of crowdfunding models is called crowdinvesting; the expected return is predominantly financial, often without any other consideration from the campaign backer other than his/her confidence in the viability of the campaigner’s business model and the projected returns (European Commission, 2014a).

As was mentioned above, there are many approaches to crowdfunding – see Fig. 2 and Fig. 3. For more information, studies of the European Commission (2014b), Bethlendi & Végh (2014), or ESMA's categorization (2014) can be referenced.

The specific crowdfunding model is known as peer-to-peer, is implemented outside regulated institutions (such as banks) and can be done with or without interest rates (Staszkiewicz et al., 2014).

3 Purpose

The purpose of this paper is to highlight the development of alternative finance in Europe and point out its most common models and forms. Its goal was also to discuss problematic areas that should be dealt with the area of alternative finance in the future. The research goal was to analyze the current state and development of alternative finance models with a more detailed focus on crowdfunding as a globally developing phenomenon in terms of the sources for the finance of entrepreneurial schemes. To reach this goal, the authors first created a theoretical framework of alternative finance globally in connection with the growing necessity for finance in the environment of the global economy. Then, they carried out taxonomy of the models of alternative finance and defined these individual models. Previous studies and academic papers on the topic of alternative finance were used as the primary sources of information. The contemporary state and development of the models of alternative finance were then analyzed by the authors based on data analysis and statistics published by the Cambridge Centre for Alternative Finance, which annually carries out research on the alternative markets of finance across individual countries. In the conclusion, the authors of this paper also highlight problematic areas and potential trends in this area.

4 Results

The use of alternative finance has been growing rapidly throughout the world since 2008. By 2013, there were over 800 various alternative finance internet platforms around the world, with financial resources from over one million investors (ESMA, 2014). In terms of the development of alternative finance capacity on international markets in previous years (see Fig. 4), Asia and the Pacific are clear leaders, with a total finance capacity of 94.61 billion EUR in 2015 (in comparison with American capacity at 33.58bn EUR and European capacity at 5.43 EUR). In all world regions, the country that generally affects the given market always stands out against the rest. In Asia and the Pacific, the largest global market is held by China, which has taken a leading role, while the USA is the leader in the Americas.

If we focus on the European market, the strongest position is held by the United Kingdom, whose share on the European alternative finance market has steadily grown annually (in 2015 the United Kingdom made up 81% of the European market while the remaining 19% belonged to other various European countries). As is evident in Tab. 2, which provides a summary on the development of the overall capacity of alternative finance in other European countries, the largest market capacities outside the United Kingdom are held in France, Germany, and the Netherlands.

Tab. 2: Alternative finance in selected European countries in 2014 and 2015

Country	Volume of transactions in millions of EUR	
	2014	2015
United Kingdom	2337	4348
France	154	319
Germany	140	249
Sweden	107	13
Netherlands	78	111
Spain	62	50
Estonia	22	32
Finland	17	64
Switzerland	12	16
Italy	8.2	32
Poland	4	10
Austria	3.6	12
Belgium	2.5	37
Denmark	2.5	24
Czech Republic	2	9

Source: own source based on data from Wardrop et al. (2015) and the Cambridge Centre for Alternative Finance (2016)

If we focus on the geographic distribution of the individual platforms of finance that operate in Europe, the strongest concentration of alternative finance is located in Great Britain (94 platforms), followed by France (49), Germany (35), Italy (30), Spain (29), and the Netherlands (27). We can also see developments in alternative finance in Eastern

Europe, e.g. in Russia, Lithuania, or Estonia – for more details, see the Cambridge Centre for Alternative Finance (2016).

From the perspective of individual models of finance, the most widespread form of alternative finance in Europe is the loan form of crowdfunding, specifically P2P consumer lending, where debtors receive primarily unsecured personal loans from a number of individual creditors via on-line platforms (usually in small sums of money). In Germany and France, this form of finance reached roughly 80 million EUR in 2014.

Reward-based crowdfunding is the second most widespread form of finance, with a growth rate of 127% in 2012 – 2014 (see Tab. 3). This finance model is used by start-ups and artists, but also by small and medium-sized enterprises in order to gain initial investments, advance sale of products, involvement of customers, or establishing partnerships. This model is widely used in Spain (35.1 mil. EUR in 2014), France (35.42 mil. EUR) and Germany (29.82 mil. EUR).

In comparison to reward-based crowdfunding, P2P business lending is a relatively new form of finance; however, as can be seen in Tab. 3, it has been developing rapidly in previous years (i.e. it has shown the highest average growth rate of all the primary models of alternative finance – 272% from 2012 to 2014).

Equity-based crowdfunding allows entrepreneurs and start-ups to increase their startup capital in exchange for offering a minority share in the company. Therefore, the company grows quickly and thus complements the basic models of alternative finance. It is also appropriate to mention the finance of small and medium-sized enterprises via the sale of debt to individual or institutional investors (invoice trading), which has also shown growth in previous years.

Tab. 3: Alternative finance models in Europe (outside the United Kingdom) and its growth from 2012 to 2014

Finance model	Volume of finance in millions of EUR			Degree of growth in %
	2012	2013	2014	2012-2014
P2P Consumer Lending	62.5	157.1	274.6	113
Reward-based Crowdfunding	24	63.1	120.3	127
P2P Business Lending	7.8	39.6	93.1	272
Equity-based Crowdfunding	18.4	47.5	82.6	116
Community Shares / Microfinance	19.6	16.5	19.9	2
Donation-based	4.3	11.2	16.3	104

Crowdfunding				
Invoice Trading	0	0.9	6.6	4768
Debt-based Securities	0.5	1.7	3.6	171
Other	0	0.1	1.3	633

Source: own source based on Wardrop et al. (2015)

5 Conclusion

The present situation on financial markets and the emphasis on issues of small and medium-sized enterprises in Europe have created a space for the alternative finance market to grow. In recent years, we have seen a strong growth in the use of alternative finance. Interest in other possible sources of finance, primarily for innovations and small projects on the level of small and medium-sized enterprises, began to grow after the financial crisis, accompanied by the onset of new information technologies.

In terms of alternative finance, crowdfunding holds a significant position. The advantages of crowdfunding lie mainly in the strong role of social media, in creating more personal ties and communication, and in the large number of entities that are potentially interested in becoming involved in crowdfunding. Crowdfunding is specific in that the motivation of interested parties in carrying out transactions is very diverse. Also, it leads not only to the reduction of transaction costs, but also promotes feedback and better access to knowledge and innovations (Belleflamme & Lambert, 2014). Crowdfunding also has its various negative aspects. These can include information leaks, when sharing information can have a negative impact on revealing the patents, contracts, deals, products, services, key employees, strategies, etc. It can also be difficult to gain additional forms of finance and presents the problem of information asymmetry.

Around the world, there has been strong growth in the use of alternative finance including crowdfunding, which is primarily due to the fact that small and medium-sized enterprises need capital for their growth, which cannot be provided by traditional forms of finance.

The development of alternative finance and crowdfunding is limited by issues in the regulatory mechanisms of financial law, insufficient awareness and research on the topic, and currently inadequate data on the topic. Until now, research on this matter has been relatively limited, which points to further opportunities in analyzing and evaluating data of crowdfunding.

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References

Adler, C. (2011, May). *How Kickstarter became a Lab for Daring Prototypes and Ingenious Products.* Retrieved from http://www.wired.com/magazine/2011/03/ff_kickstarter/all/1

Allen, F., Qian, J., Carletti, E., & Valenzuela, P. (2012, March). Financial intermediation, markets, and alternative financial sectors. *Markets, and Alternative Financial Sectors*.

Belleflamme, P., Lambert, T., & Schwienbacher, A. (2014). Crowdfunding: Tapping the right crowd. *Journal of Business Venturing, 29*(5), 585-609.

Belleflamme, P., Lambert, T. & Schwienbacher, A. (2012, October). *Tapping the Right Crowd.* Retrieved from http://ssrn.com/abstract=1836873

Bethlendi, A., & Végh, R. (2014). Crowdfunding–could it become a viable option for Hungarian small businesses? *Financial and Economic Review, 13*(4), 100-124.

Brutton, G., Khavul, S., Siegel, D., & Wright, M. (2015). New Financial Alternatives in Seeding Entrepreneurship: Microfinance, Crowdfunding, and Peer-to-Peer Innovations. *Entrepreneurship Theory and Practice, 39*(1), 9-26.

Cambridge Centre for Alternative Finance. (2016). *Sustaining Momentum*. Retrieved from https://issuu.com/cambridgejbs/docs/2016-european-alternative-finance-r/9?e=1935864/38453215

Chasan, E. (2012, April). Crowd-Funding Industry Braces for Regulation. *Wall Street Journal.* Retrieved from http://online.wsj.com/article/SB10001424052702303302504577326200304117034.html

Cosh, A., Cumming, D., & Hugges, A. (2009). Outside Entrepreneurial Capital. *The Economic Journal, 119*(540), 1494-1533.

Crowder.cz. (2016, October). *Možnosti crowdfundingu*. Retrieved from http://www.crowder.cz/moznosti-crowdfundingu

Degryse, H., de Goeij, P., & Kappert, P. (2012). The impact of firm and industry characteristics on small firms` capital structure. *Small Business Economic, 38*(4), 431-447.

Economist. (2010, March). *Putting your money Where Your Mouse Is.* Retrieved from http://www.economist.com/node/16909869?story_id=16909869

ESMA. (2014, October). *Report on Trends Risks Vulnerabilities.* Retrieved from http://www.esma.europa.eu/content/Report-Trends-Risks-Vulnerabilities-No-2-2014

European Commission. (2014a). *Crowdfunding: Regulatory Framework in EU Member States and Perspectives for the EU.* Luxembourg: Publications Office of the European Union. doi 10.2759/91398

European Commision. (2014b). *Unleashing the potential of Crowdfunding in the European Union.*COM (2014), 172.

Fraser, S., Bhaumik, S. K., & Wright, M. (2015). What do we know about entrepreneurial finance and its relationship with growth? *International Small Business Journal, 33*(1), 70-88.

Giudici, G., Nava, R., Rossi Lamastra, C., & Verecondo, C. (2012, October). *Crowdfunding: The new frontier for financing entrepreneurship?* Retrieved from http://ssrn.com/abstract=2157429

Hemmer, J. (2011, October). *A snadshot on Crowdfunding.* Fraunhofer Working Paper. Retrieved from http://isi.fraunhofer.de/isimedia/docs/p/arbpap_unternehmen_region/ap_r2_2011.pdf?WSESSIONID=71fbeb093ebe9de0c0b8d0b9db7cda95

Lambert, T., & Schwienbacher, A. (2010, January). An Empirical Analysis of Crowdfunding. Retrieved from http://ssrn.com/abstract=1578175

Massolution (2012, May). Crowdfunding Industry Report. Retrieved from http://www.marketwire.com/pressrelease/crowdfunding-platforms-raise-15-billion-successfully-fund-one-million-campaigns-2011-1654020.htm

Mollick, E. (2012, October). *The dynamics of Crowdfunding Determinant of Success and Failure.* Retrieved from http://ssrn.com/abstract=2088298

NESTA. (2014). *Understaning alternative finance.* The UK Alternative Finance Report 2014, London.

Ordiani, A., Miceli, L, Pizzeti, M., & Parasumaran, A. (2011). Crowdfunding: Transforming Customers into Investors through Innovative Service Platform, *Journal of Service Management, 22*(4), 443-470.

Pinotti, P. (2012). Trust, regulation and market failures. *Review of Economics and Statistics, 94*(3), 650-658.

Salganik, M., Dodds, P., & Watts, D. (2006). Experimental Study of Inequality and Unpredictability in an Artificial Cultural Market. *Business Science, 311*(854), 854-856.

Schwienbacher, A., & Larralde, B. (2012). *Crowdfunding and Entrepreneurial Ventures.* In D. Cumming (ed.), The Oxford Handbook of Entrepreneurial Finance, Oxford: Oxford University Press.

Staszkiewicz, M., Zubíček, M., Inkéi, P., Urbaňska, O., Jaurová, Z., & Salajová, S. (2014, November). *Crowdfunding Visegrad.* A study. Visegrad Fund.

Wardrop, R., Zhang, B., Rau, R., & Gray, M. (2015, February). *Moving Mainstream. The European Alternative Finance Benchmarking Report.* Retrieved from http://ec.europa.eu/finance/general-policy/docs/crowdfunding/150304-presentations-ecsf_en.pdf