THE EMERGENCE OF CROWDFUNDING IN POLAND: THEORETICAL FRAMEWORK FOR THE ANALYSIS

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Abstract

The financial crisis of 2007-2009 had many serious consequences for the global economy and

in particular for many markets. Consumer confidence in financial organisations has declined

and the balance of power in these industries has generally changed. It was then that the most

popular crowdfunding platforms were created. In this situation one can observe two phenom-

ena. On the one hand, there emerged alternative ways of investing money without the partici-

pation of the financial markets through investing in crowdfunding projects. On the other hand,

companies, inventors and creators gained the opportunity to obtain financing from alternative

sources and not rely heavily on banking and investment industries. Also in Poland, the possi-

bility of using such services appeared immediately after the crisis, which might have a posi-

tive influence on the development of the economy. The aim of the paper is to present the phe-

nomenon of crowdfunding in Poland (connected with global processes) and to place it in the

theoretical framework of economic sciences. The paper serves as an introduction to more in-

depth studies on crowdfunding and a summary of current research agendas.

Key words: crowdfunding, sharing economy, two-sided markets, network effects

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Introduction

Crowdfunding is one of the manifestations of a wider phenomenon of crowdsourcing, defined

as a process in which a person (natural or legal) conducts sourcing in order to obtain specific

goods or services from a wide, often anonymous group of people. Crowdsourcing is a process

different from outsourcing, where the acquisition of goods or services takes place from specif-

ic individuals. In this context, crowdfunding is about raising funds for projects or ventures

from a wide group of people usually via the Internet.

The crowdfunding platform is an intermediary between two groups of people: on the

one hand, project developers who seek to finance them, and on the other hand, people who are

motivated in a variety of ways to support such projects. Crowdfunding platforms, due to their

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nature, generate various network effects. They can be positive and negative, and occur both within the same user group of users, as well as crosswise in opposite groups and through complementary goods. Each group of users of the crowdfunding portal can ultimately benefit from participation. However, the use of crowdfunding is not cost-free, in many cases this cost takes the form of an opportunity cost (Belleflamme, Lambert, & Schwienbacher, 2014).

We can indicate six basic types of crowdfunding projects. The first of them, the **business** one, is usually based on financing enterprises or undertakings whose intention is to provide a new and innovative product. The second one, **social**, concerns initiatives of financing activities, which aim is to increase the quality of life of specific social groups, usually of a local character. The third one, **cultural**, includes projects for financing films, music recordings, book publications, theatre performances, video games, board games and many others. The fourth, **scientific**, focuses on research funding. A fifth, **personal**, concerns the financing of projects that benefit a specific person and that are of a medical, recreational, sporting, and developmental nature. The sixth, **political**, is to seek to finance the objectives of political parties, electoral campaigns and other activities in this area.

There are two types of crowdfunding platforms: **equity** and **non-equity**. The former offers the possibility of investing in projects and obtaining some kind of co-ownership as a result. In exchange for cash, supporters of the project receive financial rewards (shares in profits or revenues or royalties) and equity in the project. The latter may be of a threefold nature. Firstly, it may take the form of a **non-reward** (donation), where projects are usually of a medical nature, aimed at saving the life of a specific beneficiary. In such a case, crowdfunding is similar to charity. Secondly, it can take the form of projects with **rewards**, where the contributors select the amount of support and the reward depends on it. Thirdly, they may have a **loan** (or access – contribution enables the use of the capital of others) character, where the contributors count on financial gain (interest) or only the return of the transferred funds when providing financial support.

1 Theoretical approaches to crowdfunding

Crowdfunding, besides being an interesting tool for business, social, political or cultural entrepreneurs, became a viable topic of research. What is very important, crowdfunding provides "food for thought" for many scholars in various research areas. Ranging from economics, through management and finance, ending with sociology and psychology, crowdfunding has emerged as one of the hot research agendas.

Crowdfunding is mainly connected with economic sciences, as it directly concerns **financial and managerial phenomena**. Involvement in crowdfunding in order to obtain financing is one of the possibilities that project creators and managers have, who can alternatively obtain funds in a different way to achieve their goals: through bank loans, venture capital, issue of shares and bonds, government grants and subsidies, and many others.

Some scholars pursue the formalization of typology of crowdfunding (e.g. Estellés-Arolas & González-Ladrón-de-Guevara, 2012) and place it within a larger context of crowdsourcing. Some scholars study managerial and financial outcomes of crowdfunding, e.g. analyse the situation of originators who also contribute as donors in a peer-economy manner or look at the crowdfunding as an investment model.

The organization of crowdfunding has become an opportunity to create new businesses, whose aim is to create a service that enables connecting project creators with the "crowd". As a result, there are many opportunities for the researchers to analyse crowdfunding as **a two-sided platform**. In this context, the most important element of the analysis of two-sided platforms should be considered, i.e. the inclusion of network effects in the considerations. The pioneering work in the area of two-sided markets (different authors conduct analyses of different scope using the terms two-sided platforms or two-sided strategies) was done by Tirole and Rochet (2003) followed by many others.

The continuation of these studies was extended to the phenomenon of crowdfunding, especially due to the presence of many different types of network effects: positive cross effects, negative and positive direct effects and, potentially, positive indirect effects. Among others, Belleflamme, Omrani, Peitz (2015) studied crowdfunding from the point of view of two-sided markets and network effects occurring on them.

Crowdfunding may be considered in the wider context of economics and problems related to the **economic efficiency of markets, economy and regulations**. In this analytical aspect it is important to consider crowdfunding as part of a wider competitive and institutional environment. Crowdfunding becomes a process which, on the one hand, is **a response to market failures** (especially financial markets, which may not ensure project implementation due to lack of funds, too much risk or short-sightedness of investors).

On the other hand, crowdfunding can be **a way to reduce government failures** (especially in the areas of social, healthcare, cultural, sports or innovation policies). Crowdfunding bridges the gap in which more conservative type of funding is not possible to achieve. Examples of the research include those that focus on economic policy perspective on online plat-

forms which transcends onto crowdfunding and analyses of experiences in regulation of crowdfunding.

Crowdfunding can be also analysed as a network of transactions (**contracts**) and interactions, i.e. an environment exposed to **opportunism**. In this context it is possible to take advantage of the achievements of the transaction cost economics and treat crowdfunding as a set of contracts with specific features. The first feature is uncertainty, which may be natural, related to the unpredictability of future events or behavioural, resulting from opportunistic actions of people. The second feature is the frequency of transactions, which is important for the level of transaction costs. However, it does not affect the absolute level of transaction costs, but the relationship of costs associated with the implementation of the contract. The third feature are specific assets (investments), namely expenditures incurred in the performance of a contract, which lose value when engaged in other applications. In an extreme case, the opportunity cost of using a specific resource may be zero.

In a situation of crowdfunding, we can observe asymmetry in the specificity of assets between the "crowd" and project developers, the occurrence of uncertainty and a significant impact of the frequency of transactions. In this case, according to the economics of transaction costs, there is a need to establish an **appropriate governance structure** which, under certain conditions, will ensure that transaction costs are minimized. Among others, Giudici (2016) and Vismara (2018) strive to incorporate opportunism and related concepts into the studies of crowdfunding.

Crowdfunding can be treated as a **motivational phenomenon**. On the one hand, it is possible to study the motivation of project developers to engage in this type of activity. This aspect relates to the problem of market efficiency mentioned in the third point, where it is indicated how crowdfunding can reduce failures occurring in the economy. On the other hand, donors' motivations may be examined. In this case, it may be important to distinguish between types of crowdfunding, which will form the basis for reasoning in terms of motivation according to the type of effect of the project for the donors.

In this area of the research it is possible to study success factors in crowdfunding or pursue the topic of "the crowd" motivations to back up a project. Other important studies on motivations to participate in crowdfunding include Zheng, Li and Hou (2011), Allison, Davis, Short and Webb (2015; 2017) or Battistella and Nonino (2012).

Crowdfunding can be analysed from the point of view of their **social** effects. In this case, crowdfunding becomes a social phenomenon, which is very justified, because in its case

there are various kinds of phenomena studied by sociologists, especially those related to group behaviours.

Crowdfunding can be analysed by psychologists, especially in respect to **behavioural and cognitive psychology**. In the case of the former, it is important to study the motivations of the people involved in the process induced by the stimuli in the environment and the behaviour resulting from the history of the people involved in the crowdfunding. Here you can find parallels to the research presented in 1.5. In the case of the latter, it is important to study the mental processes leading to participation in crowdfunding.

2 Crowdfunding as a process to achieve goals

Given the types of crowdfunding and variety of projects financed through crowdfunding, it can be concluded that both parties, project originators and contributors, have certain specific benefits, both **intrinsic** and **extrinsic**. It is possible to present a short list of aims and motivations for both sides of the platform, based upon the literature analysis and own observations of authors.

The main goal of the project creators is **raising funds** – such conclusion is trivial. However, through crowdfunding, treated as a process, originators can achieve also other, non-financial goals. Firstly, it is possible to gain **publicity** and undertake **PR** actions. If the project is successful it might be a starting point for a larger enterprise or even selling the company with profit in the future. It might be a vehicle of self-promotion or raising awareness of some issues. Secondly, crowdfunding might be used to **capture market information**. Starting a project might bring additional information about the demand for the product (especially if the market for the product is still emerging) or study the viability of the product before offering it to the wider audience.

Taking into consideration the aims of the contributors, we also might observe differentiated motivations. Firstly, supporters might be motivated by the same factors as it happens in the situation of **charity**. Especially when the matter of a reward is unimportant (or there isn't any reward), contributors might do it from the sheer goodness of their hearts, purely altruistically or to achieve some other benefits, such as recognition, respect of the society or similar. Secondly, contributors might be motivated by the **reward** promised if the project will succeed. It might be a new and innovative product, simple acknowledgement, additional service or some other tangible or intangible product. Thirdly, contributors might be motivated by the **income**, they can achieve through a percentage of enterprise's profit or revenue, royalties,

interest, the increase of value of equity or tax exemptions. Fourthly, in some cases contributions allow access to e.g. lending platform, where you cannot borrow without lending first. Moreover, in such cases contributors might achieve some degree of the control over the project and steer it in the direction the most desirable for them.

3 Opportunities and threats of crowdfunding

Crowdfunding, as any other endeavour, can bring benefits but comes with costs. It will be appropriate to present the opportunities and threats separately for three groups of actors: project originators, project contributors, third parties and the economy as a whole.

Tab. 1: Opportunities and threats for project originators

Opportunities	Threats
• alternative source of capital	• constrained success
 activation of possibilities 	• too much capital / too little capital
• increase of revenue	• immitation
• crowdmarketing	• costly process

Source: own

For project creators, crowdfunding offers the opportunity to raise capital from an alternative source that is relatively quickly available, flexible and cheap. It gives access to new opportunities and additional revenue, also from the sale of finished products, which do not need to be additionally advertised. On the other hand, the design of the crowdfunding platform reduces the flexibility of the project and can lead to too little capital being raised. Next, despite the fact that it is said that "plenty is no plague", the project may gain too much capital and end in failure due to e.g. poor scalability. Using crowdfunding also reveals the details of the project to competitors and may lead to imitation, and the implementation of crowdfunding may be costly in terms of money and effort and involve the need to acquire additional skills.

Tab. 2: Opportunities and threats for contributors

Opportunities	Threats
• make use of resources	• risk
• increase satisfaction	• opportunism
• acquire product	
• generate income/revenue	
• advertising	
• tax exemptions	

Source: own

For supporters, crowdfunding provides a number of possibilities. Thanks to this phenomenon, they can find ways to apply the resources they have, gain otherwise unavailable products and services, generate additional income or make it possible to take advantage of tax

exemptions. They can use crowdfunding for self-promotion and also satisfy their other internal needs. On the other hand, crowdfunding may involve additional risks, mainly due to information asymmetry (lack of know-how and know-what), as well as time constraints. In addition, it is possible to fall victim to opportunistic behaviour of project developers, who may succumb to moral hazard, fraud and signal false information.

Tab. 3: Opportunities and threats for the economy and 3rd parties

Opportunities	Threats
• innovations	takeover of crowdfunding
• jobs	• potentially worse allocation of capital
• potentially better allocation of capital	
• income from taxation of successful businesses	
• substitute/complement governments' policies	

Source: own

From the point of view of third parties and the economy as a whole, crowdfunding can provide incentives for innovation, create new jobs, increase revenue from direct and indirect taxation. Crowdfunding, especially in its dimension of health and social services, can be complementary (or even substitutable) to the relevant economic policies of the state. On the other hand, crowdfunding may be appropriated by organisations that will use it for their own purposes (especially organisations from the financial industries). The effect of crowdfunding on the allocation of resources is undefined and little recognized. On the one hand, it can be assumed that a better allocation will take place, but on the other hand, there may be failures of crowdfunding platforms and the whole process will be burdened with the stigma of a worse allocation of capital.

4 The development of crowdfunding in Poland

Fig. 1 presents the growth of crowdfunding services in Poland between 2008 and 2016, divided into five types of platforms: reward based, donation, equity and loan/access and hybrid type (these are platforms that elude a straight classification and usually incorporate more than one primary type). First two crowdfunding platforms emerged in Poland in 2008 and they belonged to reward and loan types. Between 2008 and 2010 the development of crowdfunding platforms was relatively slow: 5 platforms were created at that time. Only since the next year we could observe a significant increase in dynamics – in 2011 6 more crowdfunding websites were created. Another rapid growth was recorded in 2014, when 19 new platforms were created (7 donation, 9 reward and 3 loan/access ones). Since then, the growth rate of the number of platforms has been falling.

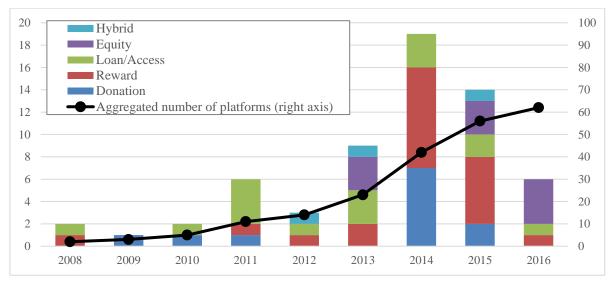


Fig. 1: Change in the number of crowdfunding platforms in Poland

Source: own calculations based on (Dziuba, 2016)

Between 2008 and 2012 the platforms that were created belonged to the non-equity type. It was only in 2013 that the first equity platforms were created, and a particularly large increase of them can be observed in the years 2015-2016. In the middle of 2016 62 crowdfunding platforms could be identified, of which 49 were non-equity, 10 equity and 3 hybrid ones.

Cumulated capital of Polish crowdfunding platforms can be estimated for \$142.175 million (for June 2016). Despite the fact that the loan platforms are relatively few in number, they have raised almost \$102 million. Donation platforms have raised \$19.9 million, while rewards platforms have raised about \$6.3 million. Such disproportion shows how popular crowdsourced loans became, especially right after the financial crisis: four of the six new crowdfunding platforms which emerged in 2011 were loan ones. Investment platforms, as relatively new phenomenon gathered only \$11.2 million¹.

Conclusion

The development of crowdfunding in Poland has accelerated in recent years, there are more and more platforms that raise funds. Crowdfunding is a phenomenon that is less prone to innovation. Only the emergence of equity crowdfunding shows that this type of digital services is still under development in Poland. The remaining types of services are relatively stable, which is reflected for example in the stabilization of the appearance of websites.

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¹ Source of the data: (Dziuba, 2016); calculations: own.

More and more Poles decide to support projects, which is facilitated by the development of Internet access, accelerated broadband connections and increased awareness. Crowdfunding has also broken through to mainstream media, where important projects are discussed, increasing the awareness of Poles about the existence of such platforms. While such sources of information primarily talk about donation and reward-based projects, Loan/access platforms are the most popular type of platform from the point of view of the funds collected. The image of the Polish crowdfunding industry is stabilizing, allowing for deeper analysis of this phenomenon taking advantage of the fact that this phenomenon is of an interdisciplinary nature.

In the same time scientific studies over crowdfunding in the area of social sciences proceed rapidly. There are six basic themes for research activities. First of all, crowdfunding can be considered as a matter of finance and management. Secondly, it can be analysed as an issue in the fast-growing economics of the digital economy. Thirdly, crowdfunding has a wider impact on the economy, so it can be analysed in terms of regulation and externalities. Fourthly, crowdfunding is a network of contracts, so it is possible to develop an analysis of this issue using the tools of institutional economics. Fifthly, crowdfunding can be considered from the point of view of the motivation of each side to participate in this process, and sixthly, sociological and psychological analyses related to it can also be carried out.

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