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## *Is Crowdfunding an Adequate Form of Financing for Opportunity- or Necessity-Based Enterprises?*

**Keywords:** crowdfunding; opportunity-based entrepreneurship; necessity-based entrepreneurship; newly-founded business financing

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### **Abstract**

**Theoretical background:** This article addresses issues related to the possibilities of using crowdfunding by newly-founded enterprises in Poland. Previous research results have shown that even small amounts obtained at a vital moment may be of key importance for an enterprise's development. Crowdfunding is a form of financing where decisions on providing the funds are made voluntarily, predominantly by individuals, and there are no traditional intermediaries engaged in the funding process or the project evaluation. Therefore, what matters in fundraising is the business concept itself, which the enterprise wants to implement.

**Purpose of the article:** The main objective of this article is to find out whether crowdfunding is an adequate form of funding for opportunity- or necessity-based enterprises newly founded in Poland. Hence, this article starts with distinguishing between opportunity-based enterprises and necessity-based enterprises, using different criteria. Furthermore, an attempt is made to modify the criteria for classification of newly-founded business entities as opportunity- and necessity-based enterprises, to reflect the specific conditions prevailing in Poland.

**Research methods:** The research study involved a representative sample of newly-founded enterprises based in the West Pomerania Voivodeship in Poland. Based on public statistical records, a group of newly-founded

entities was identified, a research sample was selected, and a survey was carried out using a questionnaire as a tool. The CATI method was used in the research, which made it possible to reach entrepreneurs rather than random employees to answer the questions. In the survey the main characteristics were studied like: the financing structure and innovativeness of the newly-founded enterprises, but also the knowledge about crowdfunding and the assessment of this form of financing.

**Main findings:** The completed research study has shown that although crowdfunding is seen as an adequate form of funding for newly-founded enterprises, especially opportunity-based ones, the potential for using this form of funding by the surveyed enterprises in Poland is still low, which may result from the enterprises' low awareness of possibilities offered by crowdfunding, as well as low innovativeness.

## Introduction

The use of information technologies in everyday life and business processes has been continuously increasing in developed and – which is extremely important – developing economies. Numerous research studies have shown that the Internet, which may be accessed via almost every mobile phone, contributes to, e.g. decreased financial exclusion, and – most importantly – fosters development and integration of the Internet-based community (Reisdorf & Rhinesmith, 2020; Broadbent & Papadopoulos, 2013; Warschauer, 2004). Many a time so-called “crowds” (understood as Internet-based communities) have demonstrated their social and political power, also by engaging in fund-raising activities. Thanks to financial engagement of a “crowd” comprising often anonymous Internet users, many individuals and charity organizations were able to obtain financial support via crowdfunding. The financial potential of Internet-based communities can also be used for eliminating financial gaps encountered by enterprises, particularly those newly founded or still at early stages of development.

According to the theory of enterprise financing, the main sources of funding for new enterprises at their early stages of development are the entrepreneurs' own funds or loans received from their families and friends, i.e. the so-called 3F (founders, family, friends) funding (Berger & Udell, 1998; Richard et al., 2014). Also, what is important, articles published over the recent years point to crowdfunding as another major source of financing for new business entities (Gierczak et al., 2015; Brown et al., 2018; Lukkarinen et al., 2016; Richard et al., 2014; Flebbe, 2016). However, reports on funding sources of Polish newly-founded ventures have concluded that the use of crowdfunding in Poland is still limited. However, it is worth mentioning as well that in Poland both the value of the capital raised and the number of equity crowdfunding campaigns are increasing. The value of the capital raised has increased from PLN 3 million in 2016 to PLN 262 million in 2021. In 2021, 76 entities accessed funds on equity crowdfunding platforms (Trzebiński, 2022, p. 15, 20). But first, significant growth has only been seen since 2020. Second, the increase is more pronounced in relative terms than in absolute terms. Therefore, from a researcher's perspective, it would be interesting to find out the reason for the relatively small interest in this form of funding. The main objective of this article is to find out whether

crowdfunding is an adequate form of funding for opportunity- or necessity-based enterprises newly founded in Poland.

To attain the main objective, the research hypothesis was formulated as follows: The majority of newly-founded enterprises in Poland are necessity-based ones, as a result of which the awareness of crowdfunding, its utilisation, and the potential for its use in the future are still low.

Moreover, to reflect the specific conditions prevailing in Poland, this article attempts at modifying the hitherto used criteria for classifying newly founded enterprises as opportunity- and necessity-based enterprises, and additionally at proposing a new set of criteria.

The first part of this article is a review of the literature on the criteria to distinguish between opportunity- and necessity-based enterprises. Next, the concept of financial bricolage is applied to substantiate the use of crowdfunding by newly founded enterprises. The subsequent chapter presents details on the surveys held in the research sample of newly founded enterprises. The last chapter contains the research conclusions indicating a slight prevalence of opportunity-based enterprises in the surveyed group of newly-founded enterprises in Poland, little knowledge of the term “crowdfunding” in the studied group of newly-founded enterprises, and the relatively low potential for using this form of funding.

## Literature review

Research done so far on newly-founded Polish enterprises focused mainly on their viability (Zawadzka & Kudryś-Kujawska, 2016), capital expenditure (Zawadzka et al., 2017), demand-side barriers (Zawadzka & Kudryś-Kujawska, 2018), and also motivations for entrepreneurship (Wasilczuk, 2009). The literature provides numerous reasons for taking up business activities (Carsrud & Brännback, 2011; Shane et al., 2003; Wasilczuk, 2009), these include, i.a.: need for achievement, strive for independence, fulfilling one’s dreams, need to earn a living, or desire to improve one’s financial standing (Wasilczuk, 2009, p. 461). Although motivations for entrepreneurship are not the subject of this article, knowing them helps to some extent in profiling both entrepreneurs and enterprises. Namely, on the basis of certain information about entrepreneurs’ features and incentives that incline them to start a business activity, the literature distinguishes two types of entrepreneurship: opportunity-based entrepreneurship, and necessity-based entrepreneurship. The literature points to some features demonstrated by entrepreneurs and enterprises themselves, which make it possible to distinguish between those categories. For example, necessity-based entrepreneurship is indicated to be an effect of some sort of coercion that forces an individual to start a business activity. The coercion most often results from the lack of other possibilities of earning a living or career development, where a self-employment is a form of escaping from unemployment (Hinz & Jungbau-

er-Gans, 1999). The term “opportunity-based entrepreneurship” denotes initiatives taken by entrepreneurs who want to take advantage of existing business opportunities (Kariv & Coleman, 2015, pp. 197–198). Hence, the fundamental difference between the two types of entrepreneurship is that some people set up enterprises because they noticed a business opportunity, whereas some others are forced to start business activity out of necessity or lack of other options on the labour market (Fairlie & Fossen, 2019, p. 1). Also, some other terms may be found in the literature, such as “pull entrepreneurship” versus “push entrepreneurship”, or, respectively, “innovative entrepreneurship” versus “disadvantaged entrepreneurship” (Fairlie & Fossen, 2019, p. 1). Thus, a “pull entrepreneur” is an entrepreneur of choice who wants to create an innovative enterprise and, in response to the perceived market opportunities, wants to offer innovative services and products. A “push entrepreneur”, in turn, is one who as a result of the situation on the labour market was forced to start their business activity, which makes it the so-called “disadvantaged entrepreneurship”. The kind of motivation for starting a business activity also influences the potential for business growth and creating new jobs.

“Opportunity-based entrepreneurship” is characterised by a high potential for activity growth and it is associated with good business ventures (Dau & Cuervo-Cazurra, 2014). Due to the fact that “necessity-based entrepreneurship” mainly involves self-employment as a better perspective than unemployment or a badly-paid job (Angulo-Guerrero et al., 2017), it does not have a potential for active job creation. Of course, there are more differences between the two types of entrepreneurship. In addition to expectations regarding job creation, they can include a potential for internationalisation of business activity, imitative or innovative nature of business activity, market share, or impact on economic growth (He et al., 2020, p. 3).

The literature on the subject indicates that “necessity entrepreneurs” derive from groups characterised by hindered/weaker positions on the labour market, i.e. women, ethnic or national minorities, and immigrants. Most research studies show that necessity-based entrepreneurs encounter higher barriers to development, have less funds at their disposal, and their financial performance is poorer (Kariv & Coleman, 2015, pp. 197–198). However, it is not only entrepreneurial features that are relevant for distinguishing the two categories of enterprises. The studies aimed at identifying the two types of entrepreneurs also applied information about their status on the labour market (employed versus unemployed) and motivations inclining entrepreneurs to take up economic activity (need for self-actualisation and independence versus necessity and being forced to earn a living) (Fairlie & Fossen, 2019, p. 8). Nevertheless, it cannot be arbitrarily stated that entrepreneurs are motivated by only a single set of factors. There is no universal, generally adopted methodology to distinguish between these two categories. The analysis of the studies completed hitherto shows that various criteria are applied. None of the factors used in classifying entrepreneurs into the two categories is free from constraints and errors. The considered factors include the entrepreneur’s status on the labour market (Fairlie &

Fossen, 2019), but also gender, ethnic or nationality background (Kariv & Coleman, 2015) as well as motivations inclining them to take up business activity (He et al., 2020). Table 1 presents the criteria for distinguishing between opportunity- and necessity-based entrepreneurship, based on the analysis of the literature and published research results. It should be noted that the criteria may not be treated arbitrarily, and some of them are debatable (e.g. entrepreneur's profile), still, they were studied and determined on the basis of some consensus or an adequately adjusted methodology (for example: to assure transparency of the classification, the occupational status was checked for several periods preceding the engagement in business activity) (Fairlie & Fossen, 2019, p. 4).

**Table 1.** Features of opportunity- and necessity-based enterprises

Feature	Opportunity-based entrepreneurship	Necessity-based entrepreneurship
Motivation to engage in business activity	Business development	Necessity to make a living
Kind of needs to be met	Mainly recognition and self-actualisation	Mainly safety, and also recognition
Entrepreneur's profile	Full-time employee, university graduate	Unemployed person, someone forced to be self-employed
Growth potential	High	Medium/low
Innovation potential	High	Low
Possibility of creating jobs	Considerable	Limited
Nature of the business activity	Making new ventures; Significant originality of activities	Repetition/copying of business activities performed hitherto; Negligible originality of activities
Impact on economic growth	Positive	Rather insignificant

Source: Author's own study based on the cited literature.

The growth potential of enterprises is determined by availability of sources of finance, and access to funding is a key factor in any enterprise's development. Newly-founded enterprises which can mainly rely on 3F financing, i.e. financial means provided by founders, friends, and family, are the ones with limited access to capital (Beck et al., 2005; Hernández-Trillo et al., 2005; Lee et al., 2015). A source of finance for this category of business entities may also be microfinance, understood as financial services and instruments mainly targeted at poor people with low incomes (Adamek, 2010, p. 25), as well as crowdfunding which consists in gathering small sums of money sourced from a large number of individuals or organizations via Internet platforms in order to finance a project, venture, or other needs (Kirby & Worner 2014, p. 4). In accordance with the concept of financial bricolage, small sums of financial means obtained by an enterprise at a vital moment may have a significant impact on the enterprise's profitability (Kariv & Coleman, 2015, p. 197). The term "bricolage" as such derives from anthropology where it is defined as a process

of utilising available resources and resulting in new methods of solving problems or availing oneself of opportunities (Kariv & Coleman, 2015, p. 201). Bricolage as a process was introduced to anthropology by Claude Levi-Strauss in the 1960s, and then it was implemented in other research disciplines (Baker, 2007, p. 698), including economics. Based on research studies, it is possible to identify three basic elements of bricolage, i.e. (Senyard et al., 2014, p. 213):

1) focus on active engagement in problem solving, willingness to experiment, and searching for ways to attain goals, regardless of resources,

2) utilisation of “available resources”, i.e. those coming from within the enterprise, and also external resources as long as they are available free of charge or at a low cost;

3) utilisation of resources to attain new goals, i.e. the idea of bricolage is not just saving the resources and reuse of old and used-up resources, but a creative combination of resources and engaging them for purposes for which they were not originally intended.

In economic sciences, bricolage is perceived as a strategy particularly suitable for entities with limited access to resources (Kariv & Coleman, 2015, p. 201). It is also defined as a capability of “making do by applying combinations of the resources at hand to new problems and opportunities” (Baker, 2007, p. 698). A synonym of financial bricolage can be “bootstrapping” defined as “launching new ventures with modest personal funds” (Bhide, 1992). However, Baker (2007, p. 699) pointed out that bootstrapping may take a form of bricolage. Importantly, however, the idea of bricolage is not reduced only to utilisation of scarce financial resources, but rather it focuses on activities taken by entrepreneurs with limited resources at hand, which in effect make it possible to gain access to further resources (Baker, 2007, p. 699). The resources being at the entrepreneur’s disposal are not only the resources at hand (including financial means), but also resources available due to the social capital and own network of contacts, referred to as network bricolage (Baker et al., 2003, p. 270).

It appears that crowdfunding – regardless of the model – perfectly fits into the financial bricolage concept, where enterprises and entrepreneurs who initiate crowdfunding campaigns source small amounts from a large number of persons. In addition to that, they gather opinions about the proposed product/service, promote the brand in the Internet, while building a social capital and sourcing potential contractors, customers and, of course, investors. Moreover, in compliance with the network bricolage concept, crowdfunding campaigns are very often financed by friends and family of the entrepreneurs taking this initiative (Agrawal et al., 2011, pp. 16–18). Nevertheless, it should be pointed out that Baker et al. (2003, p. 271) still distinguishes between bricolage and active seeking of financial resources, whereas Kariv and Coleman (2015) extend the bricolage concepts which, in accordance with the proposed theory of financial bricolage, include active seeking of resources, e.g. microfinancing. Microfinance and microloans are considered to be financial instruments that are aimed at “necessity-based entrepreneurs”, i.e. persons that did

not find opportunities and their place on the labour market, as a result of which they were forced to become self-employed (Kariv & Coleman, 2015, p. 197). However, based on the studies of enterprises that used microloans, Kariv and Coleman (2015, pp. 215–216) pointed out that in accordance with the financial bricolage theory, entrepreneurs (whether or not they are necessity- or opportunity-based) are engaged in seeking small amounts of financial resources in the first years of their operation, and their availability is of key importance for the enterprise's development due to limited access to other sources of finance.

Studies by Kariv and Coleman (2015) proved that microfinance is suitable not only for “necessity-based entrepreneurs”, even though it originated as a form of financing aimed at businesses started by persons who for various reasons are excluded from or discriminated on the labour market. Also an “opportunity-based entrepreneur” may find it necessary to obtain a small loan that can be of vital importance for the business development. Similarly as microfinance, crowdfunding provides funding of relatively small amounts; yet, even such small sums may be of key importance for the business development. Crowdfunding as a form of financing by an Internet crowd started its fast development after the 2007–2009 crisis, when access to funding – especially debt financing – was considerably hindered. The Internet crowd filled that gap to a certain extent. Although individual models of crowdfunding<sup>1</sup> differ in terms of characteristics and motivations shown by both fund-raising initiators and funding providers, each of those models may be a potential form of financing any newly-founded enterprises. The donation-based model is adequate more for charity projects; however, many informal groups, passionate, visionaries, or artists, used donation platform to obtain the financial resources for developing the idea or the project. Although the initiators of the fundraising were not formal entrepreneurs during the crowdfunding campaign, they implemented the projects that had the business form. The lending-based model is used as well by newly-founded enterprises, but it has the disadvantage – the money must be paid off. Therefore, the most appropriate for business is the investment-based model, but it requires a well-thought-out and refined business concept. However, it seems that crowdfunding is rather a form of financing intended for “opportunity-based entrepreneurs”, at least due to the fact that they must invoke interest among potential funding providers and also gain some trust for the business concept. It seems that necessity-based enterprises will be unable to attract the attention of an Internet crowd, as their operations tend to be imitative and often standardised.

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<sup>1</sup> There are three major models of crowdfunding: donation-based (the idea is to donate fund-raising collections and projects totally for free or in return for a small non-financial consideration connected with the donated project), lending-based (consists in temporary lending of financial means in the form of a loan which should be paid back by a specific date, along with interest), and investment-based (it boils down to investing any disposable financial means in shares of enterprises which usually plan to finance innovative products or services).

## Research methods

In the case of crowdfunding which is still a relatively new form of funding, the knowledge about the possibilities of its use by enterprises in Poland is still poor. Therefore, in the crowdfunding process, the issue of key importance is not only the attitude of potential funding providers to projects, but also entrepreneurs' awareness of the possibilities offered by crowdfunding. Consequently, the author of this article decided to carry out a research study to find out the level of knowledge about crowdfunding, the extent to which it is utilised by newly-founded enterprises, and whether the newly-founded enterprises planning to use crowdfunding in the future may be classified as necessity- or opportunity-based enterprises. Due to the still poor awareness of crowdfunding possibilities among entrepreneurs, the research study did not differentiate between the individual models and used the catch-all term "crowdfunding".

The research study involved a representative sample of newly-founded enterprises based in the West Pomerania Voivodeship in Poland. Based on public statistical records, a group of newly-founded entities was identified, a research sample was selected, and a survey was carried out using a questionnaire as a tool. The object of the study was the financing structure and innovativeness of the newly-founded enterprises, predominantly the knowledge about crowdfunding demonstrated by the surveyed enterprises and the extent to which this form of financing is applied by them. This article presents the research results regarding crowdfunding. The details related to the research methodology are contained in the table below:

**Table 2.** Research methodology

The research object	Enterprises registered in 2018 or 2019 (selected sectors)
Total count	27,109
Estimated fraction size	50%
Confidence level	95%
Estimated error	7%
Sample	195 enterprises

Source: Author's own study.

The research object comprised newly-founded enterprises, i.e. registered in 2018 or 2019 and running their business operations not more than two years from registration. During the interview, the responders were informed about the background and the aim of the study; however, the issues connected with crowdfunding itself were not explained. The study covered business entities registered in the Central Register and Information on Economic Activity (CEIDG) in 12 sectors as per the Polish Classification of Business Activity (PKD): C (industrial processing), D (production and supply of electric power, gas, steam, hot water and air for air-conditioning systems), E (water supply; waste and waste water management, and land reclamation activities), F (construction industry), G (wholesale and retail trade; motor vehicle repair, including motorcycles), H (transport and warehousing), I (accommodation



and catering services), J (information and telecommunication), K (financial and insurance services), L (real property services), M (professional, scientific and technical activity), R (activities related to culture, entertainment and recreation).<sup>2</sup>

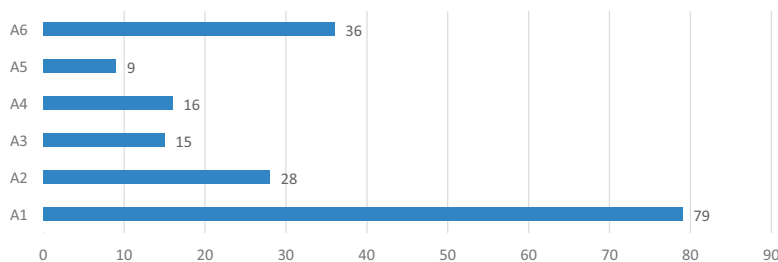
The detailed characteristics of the analysed sample are presented in Table 3 and Figures 1 and 2 below. The study has shown that the sample of newly-founded enterprises is dominated by microenterprises taking the form of sole proprietorship. The major sectors of activity include construction industry, wholesale and retail trade, motor vehicle repair – this might suggest that in this case running a business is an alternative to an employment contract, and the nature of the business is hardly innovative, with little development potential (Table 3).

**Table 3.** Characteristics of the analysed enterprises

Organization form	Sole proprietorship		Civil law partnership		Limited liability company		Limited partnership				
		175		7		12		1			
Number of employees	0–9				10–49						
	196				9						
Activity sector	C	D	F	G	H	I	J	K	L	M	R
	25	1	42	34	11	25	6	10	2	29	10

Source: Author’s own study.

The surveyed entities had been financing their activities mainly with their own funds, and they indicated that the level of external funding was constrained by banks’ requirements, and the funds were offered to a limited extent (Figure 1).



**Figure 1.** Assessed availability of external funding

A1 – very limited, we mainly use own funds, A2 – limited due to the banks’ strict requirements and numerous procedures, A3 – limited due to the level of funding available, A4 – procedures may seem complicated, but financial means are available, A5 – there are many institutions providing financial support to enterprises, A6 – needed funding may be obtained, but it requires considerable engagement.

Source: Author’s own study.

<sup>2</sup> Due to their specific nature, the analysis excluded enterprises from sectors: A (agriculture, forestry, hunting, fishery), B (mining and extraction), N (administration services and support activities), O (public administration and national defense; compulsory social security), P (Education), Q (healthcare and social welfare), S (other service activities), T (households as employers of domestic personnel; households manufacturing products and providing services for their own needs), U (ex-territorial organizations and teams).

In the next question, the entrepreneurs confirmed that the owners' own funds are crucial for all newly-founded enterprises. The second rank has net profit, but rather in terms of accessibility than the value, because newly-founded enterprises record a very limited level of profit (Figure 2).

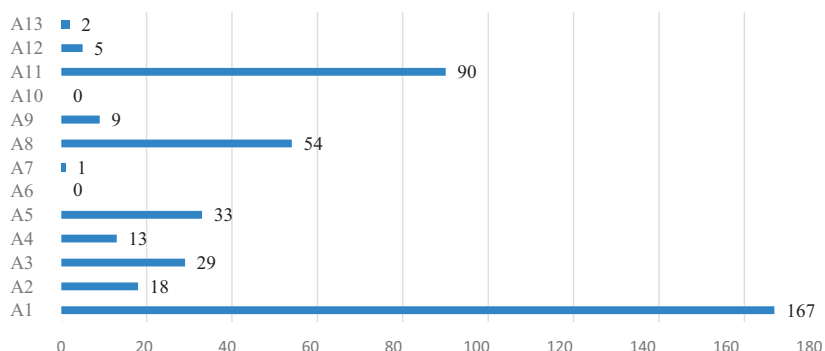


Figure 2. Sources of finance used

A1 – owners' own funds, A2 – loans from friends and family, A3 – bank loan, A4 – trade credit, A5 – leasing, A6 – crowdfunding, A7 – business angels/venture capital, A8 – public support programmes, including EU funds, A9 – support from loan/guarantee fund, A10 – issuing of bonds or other debt securities, A11 – net profit, A12 – factoring, A13 – other.

Source: Author's own study.

## Results

In their categorisation of opportunity- and necessity-based enterprises, Kariv and Coleman (2015) adopted the following criteria: gender, ethnic background, and the entrepreneur's position on the labour market (employed or unemployed). In terms of national and ethnic background, Poland is a strongly homogeneous country (Poles account for 97% of the population), also in terms of religion a vast majority – 88% of the population – are Roman Catholics. Therefore, it was necessary to find another criterion for categorising the enterprises into opportunity- and necessity-based ones. It is generally believed that “pull” entrepreneurs are more likely to launch growth-oriented businesses with higher levels of performance (Kariv & Coleman, 2015, p. 215). It is also worth noting that in order to distinguish between opportunity- and necessity-based enterprises, Global Entrepreneurship Monitor (GEM) applies just a simple, direct question: Are you involved in this start-up to take advantage of a business opportunity or because you have no better choices for work? Besides, the literature review has shown that there is no standardised criterion adopted to distinguish between opportunity- and necessity-based entrepreneurship. Various criteria are applied, depending on the research group and research methodology. In desk research, it is possible to use information on entrepreneurs' characteristics, because

such data are usually disclosed in public statistical records. Survey research, in turn, makes it possible to apply classification criteria such as entrepreneurs' motivations or qualitative features of enterprises. Based on the results of the literature review, it is possible to state that opportunity-based enterprises show features of innovative enterprises. Therefore, in order to classify the enterprises by their organization form or sector, an analysis was run (using Cramér's V coefficient) to find correlation between innovativeness and business sector/organization form (chi square test and Cramér's V coefficient values are presented in Table 4). The features adopted as evidence of an innovative nature of an enterprise were: implementation of innovations, and demand for R&D financing.

**Table 4.** Analysis of correlation between innovativeness and business sector/organization form

		Innovation implementation	Demand for R&D financing
Sector	chi-square	13.28	12.91
	Cramér's V	0.26	0.26
Organization form	chi-square	7.36	3.94
	Cramér's V	0.19	0.14

Source: Author's own study.

The results have shown a weak correlation between business sector and innovation implementation, business sector and the need for R&D financing, business organization form and innovation implementation, as well as business organization form and the need for R&D financing (Cramér's V coefficient below 0.3). This excluded the possibility of classifying enterprises as opportunity-based using the business sector or business organization form criteria.

Therefore, taking the approach of GEM, a subjective assessment of an enterprise was adopted as a criterion. Enterprises were qualified as opportunity-based on the basis of responses to the questions regarding innovativeness and R&D. To be classified as an opportunity-based enterprise, the entity had to provide a positive answer to at least one of the three questions:

- Has the enterprise implemented or is the enterprise implementing an innovation regarding its product or process?
- Is the enterprise planning to implement an innovation within the next two years?
- Does the enterprise need financing to develop its innovativeness?

As a result of the classification, the surveyed entities were divided into two categories: opportunity- and necessity-based enterprises. The former category encompassed 54.36% of the surveyed entities, out of which 85% were sole proprietorships. The remaining 45.64% were necessity-based enterprises (Table 5).

**Table 5.** Crowdfunding in opportunity- and necessity-based enterprises

	% share	Know the term "crowdfunding"	Consider use of crowdfunding	Think of crowdfunding as a form of financing suitable for new, innovative enterprises
Opportunity-based enterprises	54.36%	25%	27%	35%
Necessity-based enterprises	45.64%	24%	5%	62%

Source: Author's own study.

Thus, the first part of the hypothesis was disconfirmed, as the study sample of newly-founded enterprises in Poland was dominated by opportunity-based enterprises. However, it seems that the responses were rather declarative. This opinion may be substantiated by the analysis of the detailed responses to the questions, namely 23% of the surveyed enterprises declared that they had implemented or were implementing an innovation regarding its product or process. Moreover, 1% of the enterprises provided a positive answer to the question regarding the need for innovation funding, but a negative one to the question about the planned implementation of innovations, which may be indicative of vague, rather unrealistic plans. In turn, 4% of the surveyed entities were planning to implement innovations, but they did not need funding for this purpose.

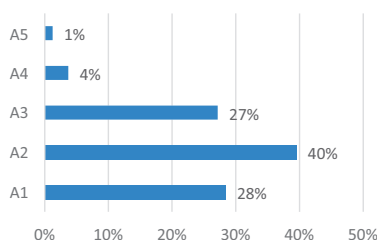
The knowledge of the term "crowdfunding" among the opportunity-based enterprises was only slightly better than among the necessity-based enterprises. Summing up, in both categories one in four entrepreneurs declared knowledge of the term. This means that the awareness of crowdfunding is low. Willingness to use crowdfunding in the future was definitely higher in the case of opportunity-based enterprises. This may be connected with the perception of crowdfunding as a form of financing for innovative enterprises – this opinion was voiced by 62% of necessity-based enterprises. So, from 24% of necessity-based enterprises familiar with the term "crowdfunding", the majority see this form of financing as a form of attracting innovative projects. This point of view, which is basically right when it comes to equity crowdfunding, can result from a conviction that more complex forms of financing target more complex projects.

**Table 6.** Knowledge of the term "crowdfunding" and approach to innovation

	Know the term "crowdfunding"	Do not know the term "crowdfunding"	Total
Total	47	148	195
Have implemented innovations	32%	20%	23%
Are planning to implement innovations	51%	36%	40%
Are planning to source funding to develop innovativeness	38%	32%	34%

Source: Author's own study.

It is worth taking a close look at the group of enterprises declaring knowledge about crowdfunding, which accounted for 24% of the whole sample. Within this group, 32% of the entities had implemented a certain form of innovation, 51% of the entities were planning to implement innovations, and 38% of the entities were planning to source funding for R&D in connection with innovativeness (Table 6). At the same time, within the group that declared knowledge of the term “crowdfunding”, the dominant perception of this form of funding was seeing it as suitable for innovative projects and enterprises, and also for newly-founded enterprises (Figure 3).

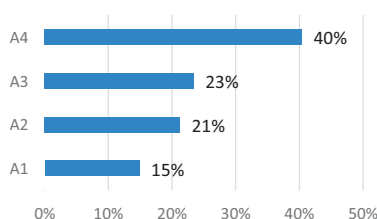


**Figure 3.** Perception of crowdfunding by newly-founded enterprises

A1 – form of funding suitable only for social and charity initiatives, A2 – form of funding suitable for innovative projects and enterprises, A3 – form of funding suitable to newly-founded enterprises, A4 – only small sums may be raised, A5 – I do not know much about this form of financing.

Source: Author’s own study.

In the sample declaring knowledge about crowdfunding, most of the entities do not plan to include it in funding sources (Figure 4).



**Figure 4.** Potential of crowdfunding utilisation by newly-founded enterprises (Are you planning to source finance via crowdfunding?)

A1 – Yes, A2 – No, this form of funding is suitable only for social and charity initiatives, A3 – No, we need larger sums for our innovative activity, A4 – No, for other reasons.

Source: Author’s own study.

Merely 15% of the respondents were planning to use crowdfunding as a form of funding, over 21% excluded the possibility of making use of crowdfunding, because they perceived it as a form of financing intended for social and charity projects. At

the same time, as many as 40% of the surveyed entities pointed to other reasons for their lack of interest in crowdfunding, such as: no need for funding and non-innovative profile of their operations.

## Conclusions

Due to the lack of unambiguous criteria to categorise newly founded enterprises into opportunity- and necessity-based ones, comparability of the two categories is hindered. On the one hand, the considerable subjectivism of the criteria may lead to a situation where the percentages of opportunity-based enterprises may differ in individual samples. On the other hand, it enables adjustment of criteria to the specific nature of studied groups. The results of earlier studies demonstrated a prevalent dominance of opportunity-based enterprises in the USA (80%) and Germany (90%), at the same time, pointing to the correlation between that percentage and the macroeconomic conditions, mainly the unemployment rate (Fairlie & Fossen, 2019). In this study, similarly as in GEM's methodology, the classification was predicated on answers to the questions posed to newly-founded enterprises, out of which the prevailing majority (90%) were sole proprietorships. Given the relatively low level of innovativeness in the Polish economy and also preference (in selected occupational groups) for self-employment rather than an employment contract, it was expected that necessity-based enterprises would prevail. The research results based on the adopted methodology have demonstrated that in the research sample of enterprises newly founded in Poland there were more opportunity-based ones, which disconfirmed the first part of the hypothesis. It seems, however, that the prevalence of opportunity-based enterprises is an outcome of the declarative nature of responses provided to the questions about the innovative potential rather than of any actually planned or implemented innovative activities. The knowledge of crowdfunding is still poor (one in four surveyed entities declared they knew the term). None of the enterprises in the surveyed group used crowdfunding as a form of funding. In comparison, nationwide studies have shown that 4% of Polish innovative newly-founded enterprises used crowdfunding (Startup Poland, 2021). However, it must be noted that the Start-Up Poland studies are run among innovative enterprises that apply new technologies, so their awareness of financial innovations is greater. Back to the research, a positive thing is the percentage of enterprises planning to use crowdfunding in the future: among the opportunity-based enterprises it was 27%, whereas in the necessity-based group – 1%. This could be a confirmation that crowdfunding as a form of financing better corresponds to newly-founded enterprises categorised as opportunity-based. So, although crowdfunding is an adequate form of funding in the study sample of newly-founded enterprises in Poland, the potential for using this source of financing in that group is still low, which may result from the enterprises' low awareness of possibilities offered by crowdfunding: one in four surveyed enterprises perceived crowdfunding as a form of funding intended for social and charity projects.

Even though most entities in the surveyed group were those classified as opportunity-based enterprises and they declared they had an innovation potential, their knowledge about crowdfunding was rather poor, and only a small percentage of them were planning to use this source of funding in the future. In general, enterprises newly founded in Poland use external sources of finance to a small extent – according to the data provided by the Polish Central Statistical Office, nearly 80% of their capital expenditure is financed with own funds (GUS, 2021). It seems that social campaigns might help to raise the level of awareness, and in consequence contribute to increased utilisation of crowdfunding. Use of crowdfunding may also be fostered by legal changes (e.g. in 2021, a new organization form was introduced into the legal order, i.e. simple joint-stock company which as a rule may be founded without a required specific amount of stock capital), and also the plans of the Warsaw Stock Exchange regarding establishment of a crowdfunding platform, which would certainly make this form of funding more popular.

The studies presented in this article are not free from limitations. First and foremost, it should be noted that the sample (even though considerable) was limited to just one region (voivodeship). However, the scope of the study was broad and the application of the CATI (computer-assisted telephone interviewing) method allowed entrepreneurs rather than random employees to answer the questions. In future research studies it would be worth focusing on a group of newly-founded enterprises which used crowdfunding, in order to learn about their experiences and to specify the features of such business entities.

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### References

- Adamek, J. (2010). *Mikrofinanse islamskie. Zakożenia, produkty, praktyka*. Warszawa: CeDeWu.
- Agrawal, A., Catalini, C., & Goldfarb, A. (2011). The geography of crowdfunding. *NBER Working Paper, Series 16820*. National Bureau of Economic Research. doi:10.3386/w16820
- Angulo-Guerrero, M.J., Perez-Moreno, S., & Abad-Guerrero, I.M. (2017). How economic freedom affects opportunity and necessity entrepreneurship in the OECD countries. *Journal of Business Research, 73*(4), 30–37. doi:10.1016/j.jbusres.2016.11.017
- Baker, T. (2007). Resources in play: Bricolage in the toy store(y). *Journal of Business Venturing, 22*(5), 694–711. doi:10.1016/j.jbusvent.2006.10.008

- Baker, T., Miner, A.S., & Easley, D.T. (2003). Improvising firms: Bricolage, account giving and improvisational competencies in the founding process. *Research Policy*, 32(2), 255–276.  
**doi:10.1016/S0048-7333(02)00099-9**
- Beck, T., Demirgüç-Kunt, A., & Maksimovic, V. (2005). Financial and legal constraints to growth: Does firm size matter? *The Journal of Finance*, 60(1), 137–177. **doi:10.1111/j.1540-6261.2005.00727.x**
- Berger, A.N., & Udell, G.F. (1998). The economics of small business finance: The roles of private equity and debt markets in financial growth cycle. *Journal of Finance*, 22(6–8), 613–673.  
**doi:10.1016/S0378-4266(98)00038-7**
- Bhide, A. (1992). Bootstrap finance: The art of start-ups. *Harvard Business Review*, 70(6), 109.
- Broadbent, R., & Papadopoulos, T. (2013). Impact and benefits of digital inclusion for social housing residents. *Community Development*, 44(1), 1–13. **doi:10.1080/15575330.2012.662990**
- Brown, R., Mawson, S., Rowe, A., & Mason, C. (2018). Working the crowd: improvisational entrepreneurship and equity crowdfunding in nascent entrepreneurial venture. *International Small Business Journal*, 36(2). **doi:10.1177/0266242617729743**
- Carsrud, A., & Brännback, M. (2011). Entrepreneurial motivations: What do we still need to know? *Journal of Small Business Management*, 49(1), 9–26. **doi:10.1111/j.1540-627X.2010.00312.x**
- Dau, L.A., & Cuervo-Cazurra, A. (2014). To formalize or not to formalize: Entrepreneurship and pro-market institutions. *Journal of Business Venturing*, 29(5), 668–686. **doi:10.1016/j.jbusvent.2014.05.002**
- Fairlie, R.W., & Fossen, F.M. (2019). Defining opportunity versus necessity entrepreneurship: Two components of business creation. *NBER Working Paper*, No. 26377.
- Flebbe, M. (2016). *Crowdfunding als alternative Finanzierungsform. Durch die Methode der Schwarmfinanzierung von der Idee zum Massenprodukt*. Hamburg: Diplomica Verlag.
- Gierczak, M., Bretschneider, U., Haas, P., Blohm, I., & Leimeister, J.M. (2015). Crowdfunding – outlining the new era of fundraising. In O. Gajda & D. Brüntje (Eds.), *Crowdfunding in Europe. State of the Art in Theory and Practice* (pp. 7–23). FGF Studies in Small Business and Entrepreneurship. Springer Science + Business Media.
- GUS. (2021). *Przedsiębiorstwa niefinansowe powstałe w latach 2016–2020*. Warszawa.
- He, J., Nazari, M., Zhang, Y., & Cai, N. (2020). Opportunity-based entrepreneurship and environmental quality of sustainable development: A resource and institutional perspective. *Journal of Cleaner Production*, 256. **doi:10.1016/j.jclepro.2020.120390**
- Hernández-Trillo, F., Pagán, J.A., & Paxton, J. (2005). Start-up capital, microenterprises and technical efficiency in Mexico. *Review of Development Economics*, 9(3), 434–447.  
**doi:10.1111/j.1467-9361.2005.00286.x**
- Hinz, T., & Jungbauer-Gans, D. (1999). Starting a business after unemployment: Characteristics and chances of success (empirical evidence from a regional German labour market). *Entrepreneurship & Regional Development*, 11(4), 317–333. **doi:10.1080/089856299283137**
- Kariv, D., & Coleman, S. (2015). Toward a theory of financial bricolage: The impact of small loans on new businesses. *Journal of Small Business and Enterprise Development*, 22(2), 196–224.  
**doi:10.1108/JSBED-02-2013-0020**
- Kirby, E., & Worner, S. (2014). Crowd-funding: An infant industry growing fast. *Staff Working Paper of the IOSCO Research Department*, DWP3/2014.
- Lee, N., Sameen, H., & Cowling, M. (2015). Access to finance for innovative SMEs since the financial crisis. *Research Policy*, 44(2), 370–380.
- Lukkarinen, A., Teich, J.E., Wallenius, H., & Wallenius, J. (2016). Success drivers of online equity crowdfunding campaigns. *Decision Support Systems*, 87, 26–38. **doi:10.1016/j.dss.2016.04.006**
- Reisdorf, B., & Rhinesmith, C. (2020). Digital inclusion as a core component of social inclusion. *Social Inclusion*, 8(2), 132–137. **doi:10.17645/si.v8i2.3184**
- Richard, B., Lata, J., Groce, J., Walzer, N., Harger, B., & Blanke, A. (2014). *Sustainable Funding for Early Stage Small Businesses in the State of Ingenuity: An Analysis of Business Readiness for Capitalization*.



- Report to the United States Economic Development Agency, Northern Illinois University, Center for Governmental Studies.
- Shane, S., Locke, E.A., & Collins, C.J. (2003). Entrepreneurial motivation. *Human Resource Management Review*, 13(2), 257–279. doi:10.1016/S1053-4822(03)00017-2
- Senyard, J.M., Baker, T., Steffens, P., & Davidsson, P. (2014). Bricolage as a path to innovation for resource-constrained new firms. *Journal of Product Innovation Management*, 31(2), 211–230. doi:10.1111/jpim.12091
- Startup Poland. (2021). *Polskie Startupy 2021*. Warszawa: Fundacja Startup Poland.
- Trzebiński, A. (2022). *Crowdfunding udziałowy 3.0. 2021*. Gdańsk: Związek Przedsiębiorstw Finansowych w Polsce.
- Warschauer, M. (2004). *Technology and Social Inclusion. Rethinking the Digital Divide*. Cambridge: MIT Press.
- Wasilczuk, J. (2009). Motywacje założycielskie właścicieli mikro i małych przedsiębiorstw a rozwój firm. *Zeszyty Naukowe Uniwersytetu Szczecińskiego*, 540. *Ekonomiczne Problemy Usług*, 34, 460–467.
- Zawadzka, D., & Kudryś-Kujawska, A. (2016). Przeżywalność nowo powstałych przedsiębiorstw w Polsce w latach 2003–2014. *Marketing i Zarządzanie*, 2(43).
- Zawadzka, D., Kudryś-Kujawska, A., & Sempolska-Rzechuła, A. (2017). Finansowanie nakładów inwestycyjnych nowo powstałych przedsiębiorstw w początkowej fazie rozwoju i kolejnych latach działalności gospodarczej w ujęciu branżowym w Polsce. In S. Wieteska & D. Burzyńska (Eds.), *Granice finansów XXI wieku. Finanse publiczne. Rynek finansowy. Finanse przedsiębiorstw* (pp. 249–268). Łódź: Wydawnictwo Uniwersytetu Łódzkiego. doi:10.18778/8088-792-3.20
- Zawadzka, D., & Kudryś-Kujawska, A. (2018). Znaczenie barier popytowych i podażowych w działalności nowo powstałych przedsiębiorstw w Polsce. *Finanse, Rynki Finansowe, Ubezpieczenia*, 1(91), 125–135. doi:10.18276/frfu.2018.91-11