

Success drivers of equity crowdfunding campaign. Empirical evidence from Poland

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Abstract: The success factors of equity crowdfunding are already well recognized in the literature but have not previously been studied in Poland. The aim of the paper is to fill the research gap by identifying the determinants of equity crowdfunding success in Poland based on empirical data. The article investigates whether and how entrepreneurs' conscious use of the non-financial benefits linked to equity crowdfunding (ECF) influences the campaign's success in Poland. We used data from a survey on the determinants of the success of equity crowdfunding. We conducted the survey using CAWI and CATI methods between September 2021 and January 2022 in collaboration with the Biostat Research and Development Centre as well as Beesfund, Crowdway and FindFunds platforms. Fifty-six companies accepted the invitation to participate in the study. Ultimately, the logistic regression model estimation was based on data obtained from 49 companies (28 of which had already succeeded in the equity crowdfunding campaign). Using the acquired data, we estimated a logistic regression model. As the results of our research show, the likelihood of campaign success is increased by the perception of equity crowdfunding as a tool enabling the acquisition of product and market knowledge, while using this form of financing mainly to obtain funds adversely affects the likelihood of campaign success. The results confirm that in Poland, as in other European countries, equity crowdfunding is no longer seen as a source of last-resort funding but is becoming more than just a fundraising tool. We recommend that entrepreneurs who plan to use this form of financing take advantage of the knowledge and experience of investors and treat equity crowdfunding as a strategic or first choice.

Keywords: Campaign success, non-financial motive, non-financial benefits, acquisition of product and market knowledge, alternative finance.

JEL Classification: G32, M13.

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Introduction

Equity crowdfunding (ECF) is one of the alternative forms of financing that, in recent years, has been enjoying growing popularity, especially among startups. As pointed out by Ahlers et al. (2015), the essence of equity crowdfunding is to collect a certain amount of funds from many investors using an open call to sell a specified amount of equity or bond-like shares

in a company on the Internet. This phenomenon involves three parties: 1) founders – the entrepreneurs pursuing equity investors; 2) funders – the crowd that is seeking investment opportunities; and 3) the platforms facilitating the transaction between the entrepreneurs and the investors (Mollick, 2013). Like other crowdfunding platforms, equity crowdfunding platforms are two-sided markets that match

founders with funders. These platforms operate based on the “all or nothing” model (enabling the entrepreneur to obtain funds only when at least 100% of the financial goal is achieved) or the “keep-it-all” model (enabling the entrepreneur to retain all the funds obtained regardless of their size) (Yasar, 2021). The ECF platforms that link fundraisers and backers operate in an electronic environment (online platforms) (Vismara, 2022; Vulkan et al., 2016). They disseminate information about the campaign but rarely verify the information disclosed in updates shared by entrepreneurs (Dorfleitner et al., 2018). ECF platforms are categorized as fintech. According to the Financial Stability Board (2022), fintech means technologically enabled innovation in financial services that could result in new business models, applications, processes or products with an associated material effect on financial markets and institutions and the provision of financial services.

In Poland, the ECF began in 2012 when the first campaign was conducted. We observed a dynamic market development for the first ten years, which slowed down in 2022. In 2021, the number of ECF campaigns in Poland reached 85, which constituted a 42% increase compared to 2020. Two hundred twenty-five campaigns were conducted between 2012 and 2021 (Association of Financial Enterprises in Poland, 2022). Significant changes have also been observed in the amount of capital accumulated through the ECF (from EUR 12,225 in 2012 to EUR 27.2 million in 2021; in all cases, the exchange rate at the end of the given year was used), with an increase of 4,868% between 2016 and 2021 (Duszczyk, 2022). The year 2022 was characterized by a significant slowdown in the ECF market in Poland. Only EUR 5.35 million was raised (while entrepreneurs sought to raise around EUR 21.2 million). The number of ECF campaigns conducted this year is only 47. Difficult for ECF in Poland was also another year in which only a limited number of companies decided to carry out a campaign – including, among others, Kombinat Konopny (the company provides easy access to high-quality hemp products), which raised EUR 1 million in less than three hours (Belcik, 2023). According to experts, the reasons for such a significant slowdown in the ECF market compared to previous years are to be found in the economic slowdown, high inflation, and interest rates. The ECF market in this period was

also significantly influenced by the fact that it was a period of critical changes related to Regulation on European Crowdfunding Service Providers – ECSP (Regulation on European crowdfunding service providers for business of 7 October 2020).

Legal regulations are among the factors determining crowdfunding development in a given country (Ande & Kavame Eroglu, 2021; Laz-zaro & Noonan, 2021; Li, 2022). In Poland, no legal regulations directly related to crowdfunding activities existed in the first nine years of the ECF market. ECF platforms operated primarily based on the rules provided for in the Public offering act (Act on public offering, conditions for introducing financial instruments to an organized trading system and public companies of 29 July 2005) and the Trading act (Act on trading in financial instruments of 29 July 2005). As of November 2021, the implementation of changes resulting from enacting a new law on crowdfunding for business ventures implementing the ECSP began. In 2022, the limit on the value of a public offering not requiring a prospectus was increased from EUR 1 million to EUR 2.5 million. As of November 2023, the limit has been increased to EUR 5 million, allowing mature companies to increase their participation. Since 10 November 2023, the platforms' operations have been licensed and supervised. The introduced changes are intended to foster the development of this form of alternative financing.

As entrepreneurs try to raise funds from investors using the ECF, one of the fundamental issues related to the phenomenon is identifying factors enabling entrepreneurs to reach a specific amount of financial resources (financial goal), i.e., identification of success determinants. Knowing the determinants of a campaign's success is a crucial issue for entrepreneurs because, as Ralcheva and Roosenboom (2020) point out, failure in earlier campaigns can significantly impact subsequent attempts at funding through ECF campaigns. As the first feedback from the public on a company's business ideas, ECF generates a first impression. The authors proved that more than half of the companies that launched campaigns after failing in the first one failed to succeed and raise the set amount. In turn, campaign success attracts success with subsequent campaigns (Ralcheva & Roosenboom, 2020; Signori & Vismara, 2018; Vismara, 2018).

The success factors of the ECF campaign are already well recognized in the literature but have not previously been studied in the context of Poland. This article aims to fill the research gap in identifying the determinants of ECF success in Poland based on empirical data. As the ECF market develops, the attitude of entrepreneurs to this method of financing also changes over time. Ralcheva and Roosenboom (2020) indicated that in recent years, this form of funding has also been used by older and more stable companies with better access to external financing than startups, which proves that the equity crowdfunding market has already reached a certain level of maturity. Di Pietro et al. (2018) also confirmed that the companies exploiting the crowd network – to get input on products, strategies, and other market knowledge – are more effective. Therefore, we aimed to demonstrate whether and how entrepreneurs' conscious use of the non-financial benefits linked to ECF influences the campaign's success in Poland. We compare the results obtained with those obtained by researchers in other European countries. To this goal, we surveyed companies already using ECF to raise funds in Poland. We applied a logistic regression model for the study, as we could not use structural equation modeling (SEM) due to the sample size. Our results show that the likelihood of campaign success is increased by entrepreneurs' perception of ECF

as a tool enabling the acquisition of product and market knowledge. Using this form of financing mainly to obtain funds adversely affects the likelihood of campaign success.

The article is structured as follows. Section 1 presents a literature review of ECF campaign success factors in selected countries. Based on the success determinants that emerged, we formulated the research hypotheses. Section 2 characterizes the research sample and discusses the research methodology, showing the construction of the PMK construct. Section 3 presents the results of the logistic regression model estimation, goodness of fit of the model, hypothesis testing, and discussion. The final section includes a discussion of key findings and conclusions, practical implications for companies that intend to use ECF in the future, and limitations and future directions.

1. Theoretical background and hypothesis development

There are many variations in content (selection of the determiners adopted for analysis), territory/geography (region analyzed), and methodology (the adopted research method) in the papers investigating the success factors of the ECF (Tab. 1).

Summarizing the data in Tab. 1, it is possible to distinguish three main groups of determinants affecting the success of ECF, which are presented in Fig. 1.

Tab. 1: Characteristics of selected studies on ECF success factors – Part 1

| Authors | Factors adopted for analysis | Geographical area | Research method |
|--------------------------|---|-------------------|---------------------|
| Ahlers et al. (2015) | <ul style="list-style-type: none">Human capitalSocial capitalIntellectual capitalEquity shareFinancial projectionsAdditional control variables to account for factors that may either influence the funding process or are related to a venture's future performance | Australia | Regression analysis |
| Lukkarinen et al. (2016) | <ul style="list-style-type: none">Campaign characteristicsAttracting traditional early-stage company financing | Finland | Regression analysis |
| Vismara (2016) | <ul style="list-style-type: none">Equity retention and social network | UK | Regression analysis |

Tab. 1: Characteristics of selected studies on ECF success factors – Part 2

| Authors | Factors adopted for analysis | Geographical area | Research method |
|---------------------------------------|---|---|---|
| Di Pietro et al. (2018) | <ul style="list-style-type: none"> Non-financial benefits for entrepreneurs | Six European equity crowdfunding platforms: Crowdcube and Seedrs in the United Kingdom, Symbid in the Netherlands, FoundedByMe in Sweden, Wiseed in France, and Seedmatch in Germany (60 European startups) | Qualitative study |
| Estrin et al. (2018) | <ul style="list-style-type: none"> Reasons for bypassing institutional funding models (banks and VCs) Reasons for using ECF for fundraising Reasons for avoiding ECF for fundraising | UK | Qualitative study (Gioia methodology) |
| Rossi and Vismara (2018) | <ul style="list-style-type: none"> Pre-launch services Ongoing campaign services Post-campaign services Control variables: the platform's year of launch and the type of business model adopted | Italy, France, UK, Germany | Regression analysis |
| Piva and Rossi-Lamastra (2018) | <ul style="list-style-type: none"> Human capital signals | Italy | Probit model |
| Ralcheva and Roosenboom (2020) | <ul style="list-style-type: none"> Campaign characteristics Company characteristics Characteristics relating to the director Team and its composition | UK | Logistic regression models; parsimonious forecasting models |
| Troise and Tani (2020) | <ul style="list-style-type: none"> Entrepreneurial characteristics Entrepreneurial motivations Entrepreneurial behaviors | Italy | PLS-SEM; SEM structural equation modeling |
| Di Pietro (2021) | <ul style="list-style-type: none"> Financial and non-financial benefits for entrepreneurs | UK | Qualitative study |

Source: own (based on a literature review)

Entrepreneurs' motives can be divided into financial and non-financial ones. Initially, the financial motive was the dominant motive, as the ECF was perceived by companies mainly as a way to quickly raise capital that cannot be obtained from other (mainly traditional) sources.

In addition, the successful campaign was seen as an opportunity to get capital from other sources in the future (Hornuf et al., 2018; Signori & Vismara, 2018). As Di Pietro (2021) emphasizes, many previous studies prove that the commonly accepted view was that entrepreneurs

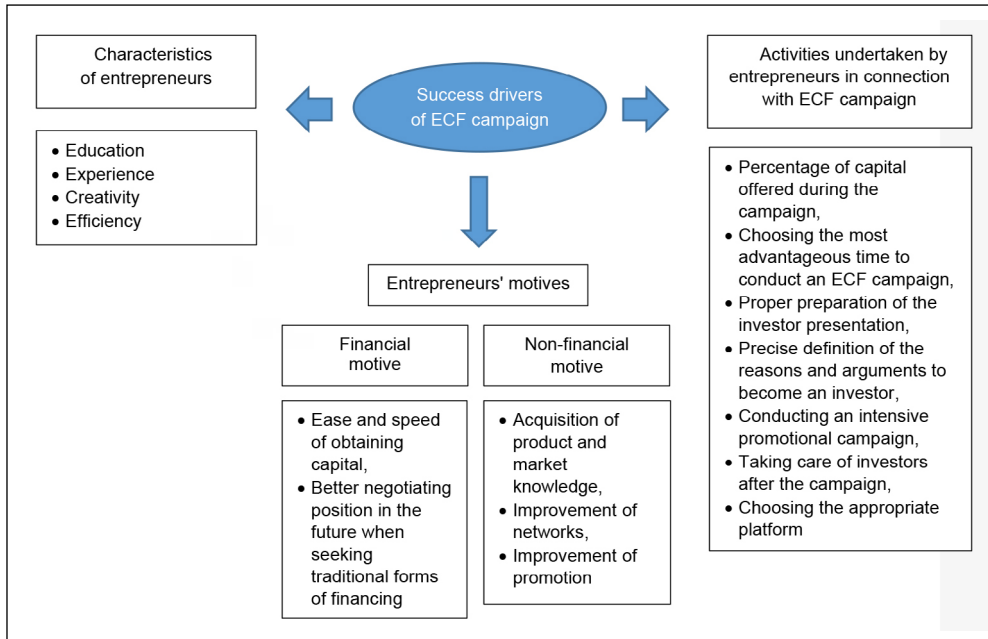


Fig. 1: Success drivers of ECF campaign

Source: Pauka et al. (2023)

perceive crowdfunding as the last resort and only try this form of financing when other sources of funding are not available (Blaseg et al., 2021; Walthoff-Borm et al., 2018). Over time, however, entrepreneurs have become increasingly aware of the wide range of non-financial benefits. The authors of many studies emphasize that ECF is more than a fundraising tool. They analyze a comprehensive catalog of non-financial benefits (Di Pietro, 2021; Di Pietro et al., 2018; Estrin et al., 2018; Troise & Tani, 2020; Wald et al., 2019; Walthoff-Borm et al., 2018). More recent research indicates that ECF can be a strategic choice for companies, an entrepreneur's first choice (Coakley et al., 2022; Cumming et al., 2021; Junge et al., 2022; Stevenson et al., 2022).

Among the benefits of a non-financial nature, the acquisition of product and market knowledge (PMK) deserves special attention. Many authors emphasize the unique role of ECF, which enables testing products, gaining knowledge, and getting feedback, as well as several other benefits that help the company to grow and develop (Belleflamme et al., 2014; Di Pietro et al., 2018;

Estrin et al., 2018; Troise & Tani, 2020). Di Pietro's research (2021), carried out based on data from 38 companies that fundraised via ECF in the UK, proved that the opportunity to validate business market potential is one of the primary motivations for using the ECF. Similarly, Barney (2001) and Meyer (2019) suggest that entrepreneurs should use ECF to gain access to various valuable resources, using this form of capital raising to leverage the knowledge and experience of the crowd. Summarizing the investors' importance for entrepreneurs involved in an ECF, Di Pietro et al. (2018) point out two key areas companies can benefit: knowledge and network exploitation. The interpretation of both issues is presented in Fig. 2.

Taking into account the change in ECF perception by entrepreneurs, i.e., the transition from the last resort financing to the conscious use of non-financial benefits, we decided to adopt the following hypotheses:

H1: Success of an ECF campaign is less likely with the companies that perceive fundraising (FM) as the campaign's primary goal.

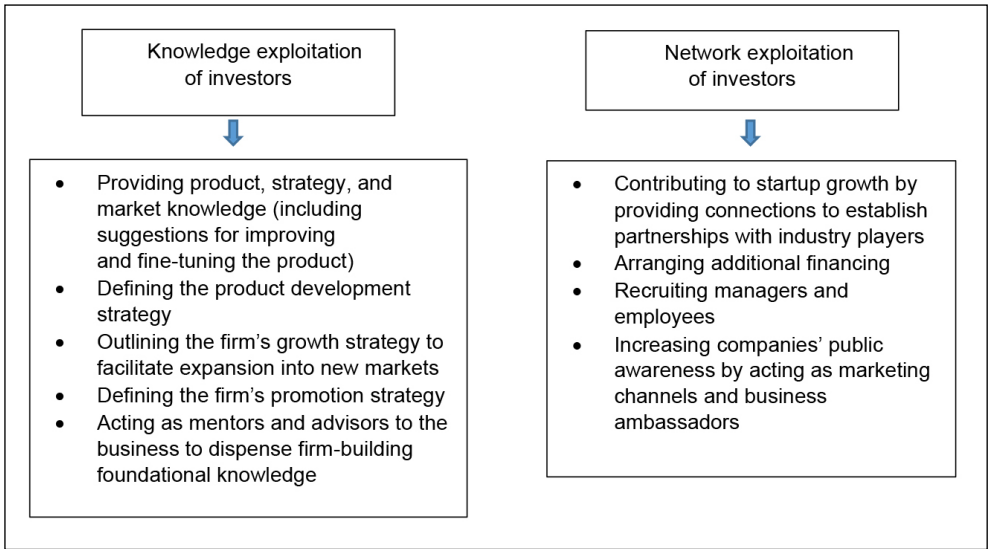


Fig. 2: The role of investors in the ECF

Source: Di Pietro et al. (2018)

H2: Success of an ECF campaign is more likely with the companies that perceive the acquisition of product and market knowledge (PMK) as the campaign's primary goal.

According to the literature, entrepreneurs' behaviors related to an ECF campaign are another critical group of determinants of the ECF's success. Based on the signaling theory (Spence, 1978), the characteristics of a campaign and the way it is conducted, including the method of communication with potential investors, generate meaningful signals, thus affecting the perception of the project/company by potential investors (Ahlers et al., 2015; Piva & Rossi-Lamastra, 2018; Troise & Tani, 2020; Vismara, 2016).

The scope of information used in campaigns is extensive (Polzin et al., 2018). There is information about the project or company, the project/company objectives, the person or organization behind the project/company, previous projects, people or organization behind them, as well as information on the financial plan of the project/company and the associated risks (Ahlers et al., 2015; Bernstein et al., 2017; Cholakova & Clarysse, 2015; Hornuf & Schwienbacher, 2015; Polzin et al., 2018). Business milestones are also presented (Johan

& Zhang, 2022). Entrepreneurs communicate with stakeholders through videos, releases on social media, and investor relations channels (Moritz et al., 2015). Scientists have also identified some components of communication that positively impact a campaign's success, such as language simplicity and the number of updates (Block et al., 2018). Polzin et al. (2018) proved that funders from the in-crowd (who have strong or weak interpersonal ties with the project creator) attach more importance to information on the project owner and the projects previously owned by him than the investors who do not have such connections (out-crowd).

Activities carried out by entrepreneurs during an ECF campaign affect the understanding of the company's objectives and mission as well as of the concept of a given product/project and thus translate into ECF performance, i.e., attracting a sufficient number of investors to ensure that the necessary amount of capital is raised. Taking into account the efforts made by companies to communicate effectively with potential investors, we formulated the following hypothesis:

H3: An ECF campaign success is more likely with the companies that perceive precise

formulation of the reasons and arguments to become an investor (backer) as an essential factor in campaign preparation.

In ECF, investors are not solely the providers of capital. This form of financing allows for a loyal customer base, a large community of people passionate about the business who assist in the brand's development (Di Pietro, 2021; Estrin et al., 2018; Troise & Tani, 2020). That is because ECF enables the transformation of customers into investors. Entrepreneurs wishing to attract investors ready to support their idea with ECF should, therefore, remember that while communicating with potential investors, they should generate clear signals to confirm the presence of their desired values in the project.

Winning the trust of future investors is a fundamental issue. As Hornuf and Schwenbacher

(2015) demonstrated, while deciding to get engaged in a project, investors look at the information provided by the project owners as well as at the investment behaviors and comments from other investors. A crowdfunding campaign's success may be determined not only by the activities carried out during the campaign but also by the level of care offered to investors after the campaign's end to maintain the company's credibility and create/maintain its trustworthiness. Hence, we formulated the final hypothesis as follows:

H4: An ECF campaign success is more likely with those companies that perceive post-campaign investor care (to maintain the company's credibility and trustworthiness) as an activity crucial for using ECF as a funding source.

Fig. 3. presents a conceptual framework for the research model.

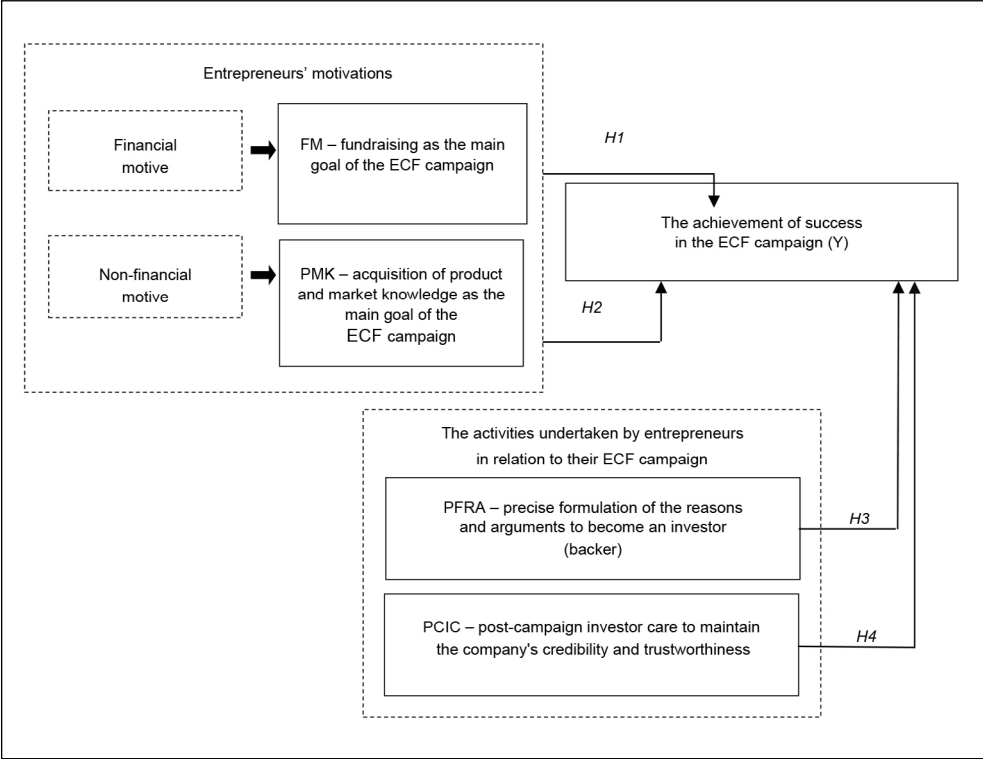


Fig. 3: Conceptual framework

Source: own

2. Research methodology

The variables for the model were selected on the basis of a survey on the determinants of ECF campaign success. We conducted the survey between 24 September 2021 and 24 January 2022 in cooperation with Biostat Research and Development Center (Centrum Badawczo-Rozwojowe Biostat Sp. z o.o.) as

well as Beesfund, Crowdway and FindFunds platforms. The survey was addressed to representatives of all active companies that had raised funds through equity crowdfunding by the time of the research (80 companies). Fifty-six firms accepted the invitation to participate in the survey. When contacting a company, CAWI was the method of first choice, only

Tab. 2: Companies that were successful and those that experienced failure

| Characteristic | Total (49 companies) | Successful (28 companies) | Unsuccessful (21 companies) |
|------------------------------|-------------------------|------------------------------|--------------------------------|
| Legal form | | | |
| Joint-stock company | 40 | 21 | 19 |
| Limited joint-stock company | 1 | 1 | 0 |
| Private limited company | 8 | 6 | 2 |
| Company lifetime | | | |
| Up to one year | 5 | 4 | 1 |
| More than one year | 44 | 24 | 20 |
| Industry | | | |
| Food | 10 | 5 | 5 |
| Gaming | 7 | 7 | 0 |
| IT | 4 | 3 | 1 |
| Financial services | 4 | 2 | 2 |
| Hemp | 3 | 3 | 0 |
| Energy | 3 | 2 | 1 |
| Biotechnology | 2 | 0 | 2 |
| Hospitality | 2 | 1 | 1 |
| Medical | 2 | 1 | 1 |
| Clothing | 2 | 0 | 2 |
| Health and wellness | 2 | 2 | 0 |
| Drones | 1 | 0 | 1 |
| Film | 1 | 0 | 1 |
| Space exploration | 1 | 1 | 0 |
| Automotive | 1 | 0 | 1 |
| Sports | 1 | 0 | 1 |
| Communication and multimedia | 1 | 1 | 0 |
| Websites | 1 | 0 | 1 |
| Airlines and aviation | 1 | 0 | 1 |

Source: own

if the attempt to obtain data by this method was unsuccessful, CATI was used. For 22 companies, the survey was carried out using the CATI (computer-assisted telephone interviewing), while the remaining used the CAWI (computer-assisted web interviewing) method. Strict quality control was adopted for the subjects. Using Cook's distance measure, atypical cases affecting the loading of the regression equation coefficients were diagnosed and removed from the analysis. Finally, the logistic regression model estimation was based on data obtained from 49 firms.

Tab. 2 presents the characteristics of the research sample adopted for the analysis. In 2021, in Poland, as many as 15 out of 16 active crowdfunding platforms cooperated with companies on ECF issuances.

The platforms most frequently used by the companies covered by the study include Beesfund (38.77%) and Crowdway (24.49%). The highest percentage of successful ECF campaigns was recorded for the platforms of CrowdConnect (100%) and FindFunds (81.82%) (Fig. 4).

The survey questionnaire that provided the empirical data used in this article addressed all three main groups of determinants of ECF success listed in Fig. 1. Additionally, we added a fourth factor to the analysis and questionnaire: the success of the previous ECF campaign – in line with the concept that success attracts success (Ralcheva & Roosenboom, 2020; Signori & Vismara, 2018; Vismara, 2018). Finally, the variables that entered the model concerned two groups – entrepreneurs' motives and activities they undertook in connection with the ECF campaign. The unit of our research is a company that has launched a successful ECF campaign. Success is defined as reaching 100% or more of the campaign's financial target. The explanatory variable is the achievement of success in an ECF campaign. The survey results analysis shows that 57.14% of the companies surveyed have succeeded, and 42.86% have experienced failure.

Predictors include:

- FM – fundraising as the main goal of the ECF campaign;

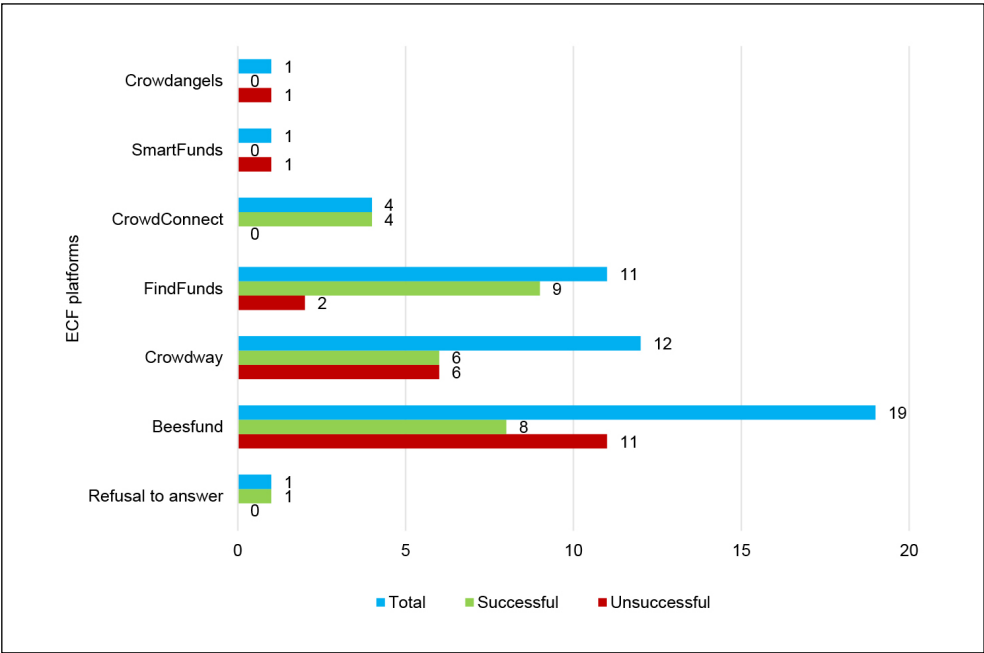


Fig. 4: ECF platforms used by the companies surveyed

Source: own

- PMK – acquisition of product and market knowledge as the main goal of the ECF campaign;
- PFRA – precise formulation of the reasons and arguments to become an investor (backer);
- PCIC – post-campaign investor care to maintain the company's credibility and trustworthiness.

To ensure the reliability and validity of the scale, we used mature scales in the existing literature to measure the PMK construct.

In line with the contributions of previous studies (Di Pietro, 2021; Di Pietro et al., 2018; Estrin et al., 2018; Troise & Tani, 2020), the PMK was created based on responses obtained from respondents agreeing with statements presented in Tab. 3. Cronbach's alpha for the construct is 0.7. Cronbach's alpha coefficient is a measure of the internal consistency of a set of questions in a questionnaire. A coefficient of 0.7 means that it indicates that the questions used reliably measure the same construct.

Tab. 3: PMK construct

| Statements | Respondents agreeing with the statement (%) |
|---|---|
| Market verification of the business credibility (external project evaluation) was an essential factor in selecting ECF as a source of financing. | 59.18 |
| ECF was perceived as an opportunity to find out very quickly if the market would accept the product (crowdfunding enables both the concept valuation against the assumed forecasts and an estimation of the market response to the products or services). | 63.27 |
| ECF made us recognize the need to manage the expectations of the community (investors) engaged in the project, which translates into continuous improvement of the project and increased investor confidence in its success. | 71.43 |
| The ECF campaign was perceived as an excellent opportunity to gain knowledge about the market and identify current market trends. | 65.31 |

Source: own

In the project's assumptions, the authors specified that SEM would be the leading research method for identifying determinants determining the success of ECF campaigns in Poland. However, the relatively small research sample made structural equation modeling impossible.

3. Results and discussion

3.1 Results

The results of the logistic regression model estimation are presented in Tab. 4.

As the regression results presented in the table show, all variables are statistically significant. The goodness of model fit was verified using the following tests: likelihood ratio test, Hosmer-Lemeshow test, Cox-Snell R^2 , and Nagelkerk R^2 . G statistics for model deviance

amounts to 44,355 and is statistically significant. The result of the Hosmer-Lemeshow test turned out to be statistically insignificant ($p > 0.05$). At the same time, the values of Cox-Snell R^2 and Nagelkerk R^2 are higher than 0, proving a good fit between the model and data. Thus, a good fit was confirmed, which indicates that the model provides a new explanation for the behavior of the dependent variable better than in the random model. Taking into account the results of logistic regression model estimation, Tab. 5 shows the results of hypothesis testing.

The model correctly classified 83.67% of the decision classes. In Tab. 6, the rows correspond to the predicted results and the columns represent the observed results (success – 1, failure – 0).

Tab. 4: Results of the logistic regression model estimation

| Variables | B (regression coefficients) | SE (standard error) | OR (odds ratio) | Wald test | p |
|----------------------------|-----------------------------------|---------------------------|--------------------|-----------|-------|
| Constant | 0.770 | 1.861 | 2.160 | 0.171 | 0.679 |
| PFRA | −1.817* | 0.857 | 0.163 | 4.495 | 0.034 |
| PCIC | −3.967* | 1.586 | 0.019 | 6.259 | 0.012 |
| FM | −3.950** | 1.364 | 0.019 | 8.389 | 0.004 |
| PMK | 0.475* | 0.188 | 1.608 | 6.356 | 0.012 |
| R ² Coxa-Snella | 0.369 | | | | |
| R ² Nagelkerka | 0.496 | | | | |

Note: * $p < 0.05$; ** $p < 0.010$; *** $p < 0.001$.

Source: own

Tab. 5: Hypothesis testing

| Hypothesis | Logistic regression results | Results of hypothesis testing |
|------------|---|--|
| H1 | The probability of success in an ECF campaign is lower by 98%, with companies that declared that obtaining funds had been the main objective of launching their ECF campaign. | The results of our study support the hypothesis. |
| H2 | The probability of success in an ECF campaign is higher by nearly 61% with companies for which the acquisition of product and market knowledge was the most crucial objective of launching their ECF campaign. | The results of our study support the hypothesis. |
| H3 | The probability of success in an ECF campaign is lower by nearly 84% with companies for which a precise definition of reasons and arguments to become an investor (backer) is essential, compared to those for which it is not. | The results of our study do not support this hypothesis. |
| H4 | The probability of success in an ECF campaign is lower by 98%, with companies for which investors care after the campaign is vital to maintain the credibility and trustworthiness of the company, compared to those for which it is not. | The results of our study do not support this hypothesis. |

Source: own

Tab. 6: Classification

| Classification | | Observed value | | |
|-----------------|---|----------------|----|----|
| | | 0 | 1 | Σ |
| Predicted value | 0 | 16 | 3 | 19 |
| | 1 | 5 | 25 | 30 |
| | Σ | 21 | 28 | 49 |

Source: own

The area under the ROC curve (AUC) is 0.865; therefore, it is greater than 0.5. The model classifies cases better than the random model.

3.2 Discussion

First, we proved that in Poland, the success of an ECF campaign is more likely in those companies that see the acquisition of product and market knowledge (PMK) as the main objective of ECF. At the same time, our research showed that those companies for which the main objective of using ECF is the acquisition of funds (FM) are less likely to succeed. These results are in line with the insights of Di Pietro et al. (2018), Estrin et al. (2018), Wald et al. (2019), Troise and Tani (2020), and Di Pietro (2021) that due to the wide range of possible benefits, ECF is more than financing tool. Our results highlight the unique role of ECF in acquiring product and market knowledge, thus confirming the results obtained by Belleflamme et al. (2014), Di Pietro et al. (2018), Estrin et al. (2018), and Troise and Tani (2020). Acting as mentors and advisors, investors contribute to the company's performance (most often start-ups). The role of backers in providing knowledge about the product, strategy and market, including suggestions for improving the product, defining the product development strategy, and contributing to the definition of the company's expansion strategy into new markets, cannot be overestimated. Our estimation of the logistic regression model carried out based on 49 companies in Poland confirms the conclusions of Di Pietro et al. (2018) drawn based on their analysis of six European equity crowdfunding platforms (Crowdcube and Seedrs in the United Kingdom, Symbid in the Netherlands, FoundedByMe in Sweden, Wiseed in France, and Seedmatch in Germany) that the more effective are those companies that use knowledge and involvement of funders to obtain feedback on products, strategies and other markets.

Second, taking into account the direction of influence of the two discussed determinants (FM and PMK) on the probability of success of ECF campaigns, our research for Poland confirms that a certain maturity of entrepreneurs and a growing awareness of the achievable benefits associated with this form of financing can already be observed in Poland. This finding for the Polish ECF market is in line with the observation made by Cummings et al. (2021), Ralcheva and Roosenboom (2020),

Junge et al. (2022), Stevenson et al. (2022) or Coakley et al. (2022), who demonstrate that the perception of ECF has been changing recently, and the previously accepted judgment that ECF only benefits companies that have failed to raise funds from other sources has been losing importance.

Third, our research found that precise formulation of the reasons and arguments to become an investor (PFRA) and post-campaign investor care to maintain the company's credibility and trustworthiness (PCIC) reduce the chance of a successful ECF campaign. By using credible signals, entrepreneurs can convey positive information about the project and the company, reducing information asymmetry and allowing investors to better assess the quality of available investment opportunities (Ahlers et al., 2015; Ralcheva & Roosenboom, 2020). However, it depends on the investors' individual motivations, which information, declarations and actions of companies seeking to raise capital are considered. As mentioned earlier, the results of research conducted by Polzin et al. (2018), who compared the behaviors of in-crowd and out-crowd funders, proved that these groups are driven by different information and those who have interpersonal ties with the project owner (even if they are weak ones) are to a larger extent driven by information about the owners of the project and their previous projects. Therefore, these authors suggest that entrepreneurs should adjust the type of information to the recipient when preparing a campaign. Information addressed to potential in-crowd funders should focus on a detailed presentation of project owners and their previous projects and provide only summary information on the current project and its goals, as well as on financial planning and risks. In contrast, information targeted at the out-crowd funders should be developed differently and only briefly present personal information about project owners.

The results of our research show that the probability of success is not increased by attaching great importance to the precise formulation of the reasons and arguments why it is worth becoming an investor (PFRA) or post-campaign investor care (PCIC). The explanation for such results may be that most investors were mainly interested in other signals and other information, e.g., the information

about the project owners and their previous projects was more important to them. It may mean that most of the investors attracted by the companies in question had (strong or weak) interpersonal ties with the project owners. Such an explanation is justified by the research conducted by Vismara (2016), who claims that investors are more likely to engage in the ventures of people they know personally or associate with them through social networks.

Conclusions

Main findings. By examining ECF success factors in Poland based on empirical data, we fill a research gap in the existing literature. In addition, a review of the literature on ECF success factors shows that, in recent times, ECF is no longer perceived by entrepreneurs as a source of financing of last resort, but they appreciate the wide spectrum of non-financial benefits associated with this form of financing (including mainly the use of crowd potential). Our goal, therefore, was to demonstrate whether and how entrepreneurs' conscious use of the non-financial benefits associated with ECF affects the campaign's success in Poland. The results of our research confirm that both the motives of entrepreneurs, the goals they want to achieve by using ECF, and the actions they take in connection with the campaign have an impact on the success of the campaign and the raising of the necessary funds. Analysis of the results proves that the probability of success in an ECF campaign is:

- Lower by 98% with companies that declared that obtaining funds had been the main objective of launching their ECF campaign;
- Higher by nearly 61% with companies for which acquisition of product and market knowledge was the most important objective of launching their ECF campaign;
- Lower by nearly 84% with companies for which a precise definition of reasons and arguments to become an investor (backer) is important, compared to those for which it is not;
- Lower by 98% with companies for which investors care after the campaign is important to maintain the credibility and trustworthiness of the company, compared to those for which it is not.

Comparison of the results of our research and the results conducted by Cummings et al.

(2021), Ralcheva and Roosenboom (2020), Junge et al. (2022), Stevenson et al. (2022) or Coakley et al. (2022) prove that both in Poland and other European countries, entrepreneurs use ECF not only to quickly obtain the needed funds but also consciously use a wide spectrum of non-financial benefits, including, above all, the potential that lies in the power of the crowd (backers). It clearly shows that in Poland, as in other European countries, companies do not reach for this form of financing only when other sources of financing are unavailable to them, but they recognize and appreciate the specificity of this form of financing.

Practical implications. Knowing the drivers of equity crowdfunding campaigns is vital for entrepreneurs who plan to take advantage of this form of financing. One of the objectives of business owners launching ECF campaigns is also to reach other sources of financing (professional investors or traditional sources of financing) after a successful campaign. As Brown et al. (2018), Butticiè et al. (2020), and Ralcheva and Roosenboom (2020) point out, ECF is not limited to quick funding opportunities. A successful campaign also means a better chance of raising funds in the future – using ECF again, venture capital/angel investors, or traditional sources. Bearing in mind that success brings success (Ralcheva & Roosenboom, 2020; Signori & Vismara, 2018; Vismara, 2018), it can be concluded that concern for the proper realization of the ECF campaign affects not only the achievement of desired results but also for the company's future and its future access to financing. The results of our research may be helpful for companies that intend to use ECF in the future. We confirm the conclusion formulated by many authors highlighting ECF's broad potential for non-financial benefits, especially with regard to the acquisition of product and market knowledge, and claiming that ECF constitutes far more than a fundraising tool (Di Pietro, 2021; Di Pietro et al., 2018; Estrin et al., 2018; Troise & Tani, 2020; Wald et al., 2019; Walthoff-Borm et al., 2018). We recommend that entrepreneurs who plan to use this form of financing consider the wide range of benefits it brings to take full advantage of its potential (not limited to benefits of a financial nature). In addition, we recommend considering ECF as a strategic and first-choice tool. We suggest that business owners consciously take advantage of ECF, especially concerning crowd resources

(backers) – knowledge and network exploitation. Experts assume that after a significant slowdown in the development of the ECF market in Poland, which we observed starting in 2022, the changes introduced in the legal environment by the end of November 2023 will improve the situation in this market. Licensed and supervised by the Polish financial supervision authority platforms, as well as many regulations increasing investor protection (such as a reflection period for inexperienced investors), should have an impact on restoring the interest of investors whose activity in the ECF market from 2022 onward has significantly decreased (the number of investors fell by as much as 80% compared to 2021), resulting in their transfer to other markets (Association of Financial Enterprises in Poland, 2023).

Limitations and future directions. Our research is the first of this type for the Polish market. A limitation of the study is the relatively small number of entities that already have experience raising funds using ECF in Poland. It seems worth repeating the survey in a few years, which will allow not only to enlarge the research sample but also to compare the results with those described in this article. A later study will also be valuable because Poland is still changing the legal environment related to ECF. In this way, it will be possible to broaden the analysis by also showing whether and how changes in legal regulations have affected the use and perception of ECF by entrepreneurs in Poland. Furthermore, more extensive research sample will allow the introduction of new research methods (e.g., enable the use of SEM). It would also seem valuable to expand the catalog of success factors adopted for the study and select additional countries to compare results obtained for the Polish ECF market. It could also be useful to look at whether and how the determining factors of success differ depending on the company's industry, size, or age.

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