

WHAT FACTORS DRIVE THE SUCCESS IN LITHUANIAN REAL ESTATE CROWDFUNDING? *

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Abstract. The volatility of financial markets, the tightening of financing conditions during the global financial crisis, and the rapid growth of fintech technologies have led to the emergence of a new and innovative financial instrument: real estate crowdfunding. The rapid global spread and growing popularity of real estate crowdfunding among investors and project owners have generated interest in research in this area, especially regarding the success factors of such projects. However, to the best of the authors' knowledge, no previous studies have analysed the factors determining the success of real estate crowdfunding projects in Lithuania, thereby emphasising the relevance of this research. The objective of this research endeavour is twofold: firstly, to identify the factors that may influence the success of real estate crowdfunding projects, and secondly, to empirically investigate the effects of these factors in the context of Lithuania's real estate crowdfunding market. To achieve this objective, data from 812 real estate crowdfunding projects on Lithuania's largest real estate crowdfunding platform were utilised. The success of real estate projects was assessed using two variables: the time from project funding in days and the number of investors per project. In addition to these two variables, five project-related factors that may influence the success of such projects were considered. The OLS regression was employed to investigate these effects, and it was revealed that for both indicators of project success, the amount raised, LTV ratio, and project duration had statistically significant effects. It was found that the annual interest rate was a statistically insignificant determinant of real estate project success for both project success indicators. The findings of this research are of paramount importance for project owners seeking to expeditiously and efficaciously raise funding, as well as for crowdfunding platforms in the selection of prospective projects for lucrative financing and the attraction of additional investors.

Keywords: RECF, crowdfunding platforms, loan-based crowdfunding, success factors.

JEL Classification: G23, O16, R31, G11

1. Introduction

The global financial crisis triggered the instability and inefficiencies of financial markets, causing investors to seek safer, lower-risk investment options (Schweder et al., 2020). Concurrently, the crisis engendered a more arduous environment for investors and project owners in their pursuit of objectives, as traditional lenders adopted stringent financing conditions, significantly complicating the acquisition of project funding. In response to this challenge, real estate crowdfunding (RECF) emerged as a novel financial solution, offering

project owners an alternative means of raising finance and distributing risk across a large number of investors, i.e., the crowd (Borrero-Domínguez et al., 2020). The advent of RECF has been further catalysed by the emergence of novel Fintech technologies, thereby promoting its global adoption (Montgomery et al., 2018). The increasing popularity of RECF among investors and project owners, driven by its accessibility, ease of regulation, and automation (Buttice & Vismara, 2022), confirms the need to identify and analyse the key factors of RECF projects' success. These factors are of pivotal significance for investors seeking to

* The publication is a part of the project "Strengthening the R&D activities of the Vytautas Kavolis Transdisciplinary Institute for Social Sciences and Humanities (SOCMTEP)". The project is funded by the Research Council of Lithuania and the Ministry of Education, Science and Sport of the Republic of Lithuania, Contract No S-A-UEI-23-13 (2023-12-27)

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optimise returns while minimising risk, as well as for project owners seeking to secure funding with maximum efficiency. Moreover, crowdfunding platforms assume a pivotal role in this process, serving as intermediaries that facilitate connections between investors and projects, thereby contributing to the success of financing endeavours.

Despite the growing scientific interest in the success factors of RECF projects, as evidenced by recent studies (Borrero-Domínguez et al., 2020; Gigante & Cozzio, 2021; Mladenow et al., 2019; V. Wachira & E. Wachira, 2022), this study is among the first to examine RECF project success factors in the Baltic countries. The Baltic countries have been marked by a rapid expansion of the RECF market, with an exponential increase in the number of successfully financed projects on an annual basis and rising interest among individual and institutional investors. Moreover, this region ranks among the top regions in Europe in terms of the number of crowdfunding platforms per capita. This indicates that these markets are leaders in financial innovation and have surpassed the limitations of traditional domestic capital markets (Shneor et al., 2024). This highlights the importance of this research. Lithuania was chosen for the study because it is the largest Baltic economy and representative of Europe's Fintech Hub. Thus, the **research aims** to identify factors that may influence the success of RECF projects and to empirically investigate the effects of these factors in the context of Lithuania's RECF market.

The remainder of the paper is structured as follows. The succeeding section of this paper comprises a review of the extant literature on the factors conducive to the success of RECF. The third section of this text sets out the research methodology employed in this study. The fourth section of this study presents the empirical findings of the research and their discussion. The final section of this study presents the main conclusion that has been reached.

2. Literature Review

The global financial crisis resulted in an increase in the regulatory burden on traditional financial institutions, with banks withdrawing from some lending activities due to risk aversion (Schlindler, 2017). Concurrently, as financial institutions curtailed their lending activities, a notable gap emerged within the financial market. This development presented a novel opportunity for new market entrants to propose novel and innovative financial solutions. Nevertheless, the primary catalyst for the proliferation of innovative financial services, such as crowdfunding, has been the rapid advancements in technology, which have profoundly transformed the manner in which financial decisions are made and managed.

As Qamruzzaman and Jianguo (2017) have asserted, financial innovation is a pivotal catalyst of economic growth, enhancing business competitiveness and contributing to the creation of firm value. During the initial years of the 21st century, a plethora of innovative financial services emerged, driven by the integration of diverse technological advancements, including big data technology, machine learning, artificial intelligence, and distributed data technology (Blach, 2011). It is evident that a number of these technologies have been in existence for some time; however, their innovative application has been demonstrated to enhance the processing capabilities of financial services without any concomitant reduction in cost. The advent of technology has served to reduce the barriers to entry into the financial market, thereby resulting in a multitude of new entrants offering innovative financial services, such as crowdfunding.

Crowdfunding can be defined as an innovative financial instrument that connects investors and project owners (Abu Amuna et al., 2019; Griffiths, 2020). The three main participants are investors, project owners and the crowdfunding platform, which acts as an intermediary by providing the infrastructure for the funding process. A salient feature of crowdfunding pertains to its capacity to mobilize financial resources from a substantial number of investors, that is to say, the crowd (Mollick, 2014). Darskuvienė et al. (2022) emphasise the importance of the main project owners' goal of raising sufficient funds. This is due to the fact that main project owners are usually start-ups (Gigante & Cozzio, 2022), which face barriers to accessing funding from traditional sources of finance, such as credit institutions or banks (Borello et al., 2015). Investors typically seek to mitigate risk (Schweder et al., 2020) and capitalise on the opportunities presented by the relatively modest initial investment requirements (Kirby & Worner, 2014). In conclusion, it can be argued that the concept of crowdfunding remains consistent in scientific literature and can be defined as an innovative method of financing projects through a relatively large number of investors using an online platform without traditional financial intermediaries.

There are various forms of crowdfunding, including reward-based, donation-based, loan-based and equity crowdfunding (Hoque, 2024). Compared to other types of crowdfunding, donation-based crowdfunding is unique in that individuals do not contribute money for financial or other benefits, but rather to participate in philanthropic activities (Mamonov & Malaga, 2019). In reward-based crowdfunding, individuals invest funds in exchange for a specific future service or product, becoming the first customers to receive it at an earlier date, at a lower price, or on more favourable terms than other market participants (Mollick, 2014). As the main objective of investors in

both donation- and reward-based crowdfunding is not financial return, these two types are often categorised as non-financial (Kirby & Worner, 2014). Another form of crowdfunding, known as equity crowdfunding, facilitates the participation of investors as co-owners in the projects they are funding (Borello et al., 2015). The return on equity crowdfunding is generated in the event of a successful project, which subsequently generates a profit. This profit is then distributed among investors in proportion to the size of their investment (Cinelli, 2020). Loan-based crowdfunding can be categorised as a financial instrument, whereby investors provide funds to project owners in exchange for predetermined interest rates (Cinelli, 2020). The interest rate is determined by the platform in accordance with the risk level of the project, the loan amount, and the number of periods in which interest is paid (Kirby & Worner, 2014). This financing model bears a resemblance to conventional financial instruments, such as bank loans. However, in this particular instance, the project owner acquires funding from a multitude of investors, namely a group of individuals, as opposed to a single entity (Alhammad et al., 2021). According to Borrero-Domínguez et al. (2020) and Yasar (2021), the market share of alternative financing is dominated by debt-based crowdfunding, with RECF being one example of loan-based crowdfunding.

The interest in research on RECF is growing. Researchers have analysed the main features, risks, and opportunities associated with RECF (Battisti et al., 2020; Montgomery et al., 2018; Schweder et al., 2020), as well as investors' decisions and their rationality in RECF (Jiang et al., 2020; Legenzova & Lecké, 2024). Furthermore, there has been an increasing number of studies examining the success factors for crowdfunding projects in general (Koch & Siering, 2019; Prędkiewicz & Kalinowska-Beszczynska, 2021; Yeh et al., 2019) and specifically for RECF projects (Borrero-Domínguez et al., 2020; Gigante & Cozzio, 2021; Mladenow et al., 2019; V. Wachira & E. Wachira, 2022). Drawing upon extant research, the success factors of crowdfunding projects can be categorised into four overarching groups: investor-related, platform-related, project-related, and project owner-related (Liu et al., 2023). Investor-related factors encompass characteristics such as gender, age, and investment experience. For instance, Greenberg and Mollick (2017) discovered that female investors tend to have a positive impact on the success of crowdfunding projects, while male investors have the opposite effect. However, the majority of studies in this field have focused on reward-based crowdfunding. Research exploring the role of investor-related factors in the success of RECF remains limited, largely due to the paucity of available investor data. In Europe, for instance, investor data is not publicly

available due to the General Data Protection Regulation (GDPR).

Furthermore, the impact of platform-related factors on the success of RECF projects has not been the subject of extensive research in previous studies. However, the majority of studies in this field have concentrated on reward-based crowdfunding, with researchers examining variables such as platform competition (i.e., the number of projects being funded on the platform), the type of crowdfunding platform, and the platform's age (Deng et al., 2022). For instance, Josefy et al. (2017) discovered that projects on Kickstarter were more successful than those on GoFundMe.

Studies on the success of RECF more often analyse project-related and project owner-related factors. One of the most important project owner-related factors is previous experience, usually measured by whether the owner has implemented previous projects or by the number of projects implemented. Consistent research findings indicate that prior experience has a positive impact on the success of reward-based, equity-based, and debt-based crowdfunding projects, including RECF projects (Borrero-Domínguez et al., 2020; Nitani et al., 2019; Martínez-Cháfer et al., 2021). According to Martínez-Cháfer et al. (2021), experience gained from past projects enables owners to refine their approach, rendering future projects more appealing to investors. Additionally, investor confidence in the project owner's ability to carry out future projects successfully is built through a solid owner's experience (Yeh et al., 2019). Other factors such as age, team size, gender and geographic location can also influence crowdfunding success (Liu et al., 2023). For instance, it has been suggested that female project owners tend to attract more investment and support than their male counterparts (Allison et al., 2017).

However, academic literature on the success of RECF has mainly focused on project-related factors. These include the target/raised amount, project duration, property location, visuals, return on investment and risk (Borrero-Domínguez et al., 2020; Gigante & Cozzio, 2022; Moreno-Moreno et al., 2019). Deng et al. (2022) conducted a review of 94 empirical studies and found that 78 of these identified the target amount as a key success factor for crowdfunding projects. However, the impact of this factor on project success was found to be mixed. In contrast, Lukkarinen et al. (2016) and V. Wachira and E. Wachira (2022) found that higher funding targets can increase investor confidence in projects' potential. Strengthening investor confidence increases the probability of successful funding, enabling project owners to take on larger, more ambitious projects with a higher potential return, particularly in the context of equity crowdfunding. However, other

studies present a contrasting view. For example, research by Chen et al. (2020) and Moreno-Moreno et al. (2019) suggests that crowdfunding projects with lower target amounts tend to be more successful than those with larger amounts. As demonstrated in the extant literature, including the works of Prasobpiboon et al. (2021) and Zhao & Vinig (2020), analogous patterns have been observed in donation- and reward-based crowdfunding. One potential explanation for this negative relationship is that higher funding targets may signal greater risk. Consequently, investors are able to select lower-risk projects, where financing targets are more readily attained (Prasobpiboon et al., 2021).

Another factor that has the capacity to influence the success of crowdfunding projects, irrespective of their type, is the duration of the project. The duration of a project is typically measured in months, as specified by the project owner, prior to the anticipated recovery of initial investments and the subsequent return on investment by investors (Moreno-Moreno et al., 2019; Prasobpiboon et al., 2021). The negative impact of longer project durations may be due to investors' reluctance to commit their funds for extended periods. Many investors prefer more liquid investments that offer safer returns and greater financial flexibility. Consequently, longer projects may appear less appealing to investors (Moreno-Moreno et al., 2019). Moreover, researchers suggest that the longer a project is funded, the less likely it is to be successful, i.e., the less likely it is to be realised. This negative relationship was also found by Lukkarinen et al. (2016) and Mollick (2014), who indicate that longer durations send a negative signal to investors, ultimately reducing the probability of a successful crowdfunding project.

The location of a real estate project can also have a negative impact on the success of crowdfunding projects. This means that projects closer to an investor's residence are more likely to be funded (Bade & Walther, 2021). While crowdfunding platforms provide opportunities to invest in projects abroad, previous studies have found that investors often favour local projects (Hornuf et al., 2020). This trend is largely due to local investors having an information advantage, as they can access direct information from project owners, through their networks, or via the local media. This helps them assess project viability more effectively (Bade & Walther, 2021; Gunther et al., 2018).

The role of visualisation in different types of crowdfunding is often analysed, with a focus on whether project owners use photos, descriptions, videos or other visual elements in their campaigns, and the effect these visual aids have on project success. Visualisations have been shown to have a positive effect on project success in equity, donation, and reward-based crowdfunding. However, there is a lack

of empirical studies that address this factor specifically in the context of debt-based crowdfunding. According to Prasobpiboon et al. (2021), visual content helps investors understand project concepts more clearly. Therefore, project owners should use as many visual aids as possible when presenting their projects.

The interest rate or return on investment (ROI) is a frequently discussed topic in scientific literature on debt-based crowdfunding. However, there is no consensus on its effect on the success of crowdfunding projects. Some studies, such as those by Chen et al. (2020), Moreno-Moreno et al. (2019) and Slimane and Rousseau (2020), have found that higher interest rates can positively impact the success of crowdfunding projects, as investors are often willing to take on more risk in exchange for higher returns. However, Li et al. (2020) take the opposite view, suggesting that investors tend to opt for safer projects offering lower interest rates. Yan et al. (2018), on the other hand, provide a more sophisticated view, arguing that the relationship between interest rates and project success follows an inverted U-shaped curve. According to this theory, an increasing interest rate can make a project more attractive up to a certain point; afterwards, however, excessive interest rates signal too high a risk and ultimately scare away investors.

Mamonov and Malaga (2018) argue that there are risks associated with three of the four types of crowdfunding. In reward-based crowdfunding, investors may not receive the product or service. In lending-based crowdfunding, investors may lose the funds they invested. In equity-based crowdfunding, investors may lose their investment. According to Mamonov and Malaga (2018), there is no risk in donation-based crowdfunding. Researchers assessing the impact of risk factors on the success of crowdfunding projects have primarily focused on the lending-based model, with mixed results. Moreno-Moreno et al. (2019), for example, argue that investors are often willing to fund riskier projects in the expectation of earning higher returns. However, Berns et al. (2020) and Chen et al. (2020) offer a different view, suggesting that lower-risk projects are more likely to reach their funding target, and that in some cases, these projects may have higher funding targets than riskier projects. On the other hand, crowdfunding platforms offer projects with a variety of interest rates, credit ratings and LTV ratios, indicating that each investor can select a project that aligns with their risk tolerance.

While previous studies have primarily focused on large economies such as China and the UK (Gigante & Cozzio, 2022), research on smaller economies such as Lithuania remains limited. Lithuania and the other Baltic countries are characterised by the rapid growth of the RECF market, with the number of successfully financed projects growing exponentially each year, alongside increasing interest from individual and

institutional investors alike. This demonstrates the rationale behind choosing Lithuania as the subject of this study.

3. Methodology

In order to achieve the aim of the present study, a substantial database of RECF projects was collected from one of Lithuania's largest RECF platforms, Profitus. The present study has been conducted over the period from July 11, 2017, to April 1, 2023, since the commencement of the platform in 2017. The sample size of the study comprised 812 real estate projects, with the exclusion of a single donation-based project.

In order to analyse the factors influencing the success of RECF, two dependent and five independent variables were selected for the study. These are outlined in Table 1, together with their descriptions.

The present study selected two dependent variables to measure the success of real estate projects: the number of funding days and the number of investors (Borrero-Domínguez et al., 2020; Gigante & Cozzio, 2022; Lukkarinen et al., 2016; Nitani et al., 2019). The study hypothesises that crowdfunding success increases as the number of days required for funding decreases and the number of investors increases. Whilst the prevailing academic consensus defines project success as a binary variable (Deng et al., 2022), i.e., whether or not a project is successfully funded, this approach is not applicable in the present case, since all projects on the analysed platform were successfully funded.

Five independent variables were selected for analysis: total amount raised (equivalent to the target amount, given that all projects within the analysed RECF platform were fully funded), annual interest rate, credit rating, LTV ratio, and project duration. These variables are frequently employed in academic literature as factors pertinent to projects. The frequency of interest payments, another potential success factor, was excluded due to insufficient variation, as

808 projects had quarterly interest payments, while only three had monthly payments and one had semi-annual payments.

In order to empirically test the factors influencing RECF project success, ordinary least squares (OLS) regression was employed. Prior to conducting the regression analysis, the normality and validity of the data were assessed. The normality of the data was ascertained through the utilisation of the excess and the asymmetry coefficient, which are expected to fall within the range of -2 and 2 to ensure a normal distribution within the regression model (George & Mallery, 2010). It was determined that the funding days and amount raised variables were not normally distributed (excess coefficient = 2.906 and 7.385; asymmetry coefficient = 1.754 and 1.919). Consequently, a logarithmic transformation was applied to reduce asymmetry and improve model fit.

Following the methodology of Borrero-Domínguez et al. (2020) and Gigante & Cozzio (2022), two OLS models were constructed:

$$\text{Log}(\text{FUNDD}) = \beta_0 + \beta_1 \log(\text{AMOUNT}) + \beta_2 \text{IR} + \beta_3 \text{RISK} + \beta_4 \text{LTV} + \beta_5 \log(\text{DU}) + \varepsilon \quad (1)$$

$$\text{INV} = \beta_0 + \beta_1 \log(\text{AMOUNT}) + \beta_2 \text{IR} + \beta_3 \text{RISK} + \beta_4 \text{LTV} + \beta_5 \text{DU} + \varepsilon \quad (2)$$

As indicated by the results of the Breusch-Pagan heteroscedasticity test, heteroscedasticity was detected in the initial model. Consequently, a logarithmic transformation was implemented on the project duration variable. In the second model, no issues pertaining to heteroscedasticity were detected, and thus the variables remained untransformed, with the exception of amount raised, which was log-transformed in order to address issues pertaining to data normality.

The data were collected directly from the online RECF platform (Profitus) and processed using Microsoft Excel. The data were then analysed using the IBM Statistical Package for the Social Sciences (SPSS) version 27.0.

Table 1

Study variables and their description

| Variable | Description |
|---------------------------|---|
| Dependent variable | |
| Funding days (FUNDD) | Number of days between posting the project on the platform and reaching the target funding. |
| Investors (INV) | The total number of investors who have invested in the real estate project. |
| Independent variable | |
| Amount raised (AMOUNT) | The total amount raised (EUR) to finance the real estate project. |
| Annual interest rate (IR) | The percentage rate of return that investors expect to receive on the funds allocated to a given project, either at a given periodicity or at the end of the project period. |
| Credit rating (RISK) | Dummy variable that assesses the riskiness of the project, where 0 indicates lower risk of the project (with A+, A, A-, B+, B and B- credit ratings) and 1 – medium risk of the project (with C+, C, C- and D credit ratings) |
| LTV (LTV) | Loan-to-collateral ratio expressed as a percentage. |
| Project duration (DU) | The term of real estate project in months. |

4. Results

Table 2 presents the results of the descriptive statistics.

The descriptive statistics demonstrated that over half of the RECF projects (434 out of 812) were financed within a 24-hour period, indicating a propensity among investors to expedite investment decisions. The project with the fastest funding time was completed in a single minute, while the project with the longest funding time took 25 days. On average, RECF projects on the analysed platform were funded in 3 days, which is significantly faster than the national average of 10 days (Bank of Lithuania, 2023). This finding indicates that the analysed platform is outperforming other platforms in Lithuania with regard to the speed of project funding.

The number of investors per project exhibited significant variation, ranging from 2 to 783, with an average of 160 investors. During the study period, investors on the analysed platform executed over 130,000 transactions, involving a total of 7,217 investors (Profitus, 2023), indicating a pattern of repeated investment behaviour. This emphasises the necessity for crowdfunding platforms to prioritise not only the attraction of new investors but also the retention of existing ones, with a view to optimising overall performance.

The total amount of money raised ranged from 11,000 EUR to 1.1 million EUR, with an average of approximately 126,000 EUR. This is relatively low when considering the substantial financial resources typically required for real estate projects. This phenomenon

may be influenced by project owners leveraging crowdfunding towards the conclusion of a project, with the objective of covering outstanding expenses, avoiding interest payments to creditors, or securing more favourable loan terms by distributing the required funding across multiple crowdfunding campaigns.

The annual interest rates ranged from 4 per cent to 14 per cent, with an average of approximately 9 per cent. Conversely, the average interest rate in the Lithuanian crowdfunding market was 5.49 percent in 2022 (Bank of Lithuania, 2023), suggesting that the Profitus platform offered higher returns, likely attributable to reduced funding times and a more substantial investor base.

The credit rating variable was employed to categorise projects into lower risk (A+, A, A-, B+, B, B-) and medium risk (C+, C, C-, D). It is evident that none of the projects under scrutiny were categorised as high risk. This is most likely attributable to the fact that all of the projects were secured by mortgages, thereby minimising investor risk. A total of 510 out of 812 real estate projects were classified as low risk, indicating a predominance of lower-risk projects that were assigned A and B credit ratings.

The risk associated with a crowdfunding real estate project can be evaluated by utilising the loan-to-value (LTV) ratio, wherein a higher LTV denotes a heightened level of risk. Investors with a lower risk tolerance are advised to select projects with lower LTV ratios. In this study, LTV ratios ranged from 1 per cent to 95 per cent, with an average of almost 53 per cent,

Table 2
The results of the descriptive statistics

| Variable | Min | Max | Mean | SD |
|----------------------|--------|-----------|------------|------------|
| Funding days | 0.0007 | 25 | 2.97 | 4.25 |
| Investors | 2 | 783 | 160.65 | 93.29 |
| Amount raised | 11 000 | 1 100 000 | 126 026.25 | 129 251.30 |
| Annual interest rate | 4 | 14 | 8.98 | 1.56 |
| LTV | 1 | 95 | 52.98 | 17.57 |
| Project duration | 3 | 36 | 10.92 | 3.56 |

Table 3
The first OLS model results

| Dependent variable – log funding days | | |
|---------------------------------------|-------------|---------|
| Variable | Coefficient | p-value |
| Constant | -16.926 | <0.001 |
| Log amount raised | 1.252 | <0.001 |
| Annual interest rate | -0.109 | 0.064 |
| Credit rating | 1.057 | <0.001 |
| LTV | -0.009 | 0.037 |
| Log project duration | 1.528 | <0.001 |
| R Squared | 0.179 | |
| Wooldridge test (p-value) | <0.001 | |

indicating medium risk across the real estate projects analysed. The results of the initial OLS model are presented in Table 3.

The initial OLS model, which utilised the number of funding days as a metric to assess the success of RECF projects, demonstrated statistical significance at the 0.001 level of significance. The five independent variables in the model accounted for 17.9 percent of the variation in the dependent variable. This outcome is presumably attributable to the model's exclusive reliance on project-related factors for which data were available, while excluding investor-, project owner-, and platform-related factors, which are also imperative for the success of RECF projects. Following a comprehensive analysis, it was determined that a single variable, the annual interest rate, was identified as statistically insignificant. While the rate of return is often considered a key factor in investors' decision-making, it did not appear to be the primary determinant of how quickly RECF projects were funded, and thus, their success. Four statistically significant variables with p-values below the critical level of significance (p-value = 0.05) were identified: the logarithm of the amount raised, the credit rating, LTV, and the logarithm of the project duration. Maintaining all other independent variables constant, a one percentage point increase in the amount raised and project duration leads to an average increase in financing time of approximately 1.25 times and 1.53 times, respectively. This finding suggests that projects with smaller target amounts and shorter durations tend to be more successful. Medium-risk projects, that is to say those with C+, C, C-, or D credit ratings, experienced a roughly one-fold increase in financing time compared to low-risk projects (that is to say those with A+, A, A-, B+, B, and B- credit ratings), with all other variables held constant. Consequently, investors are more inclined to finance RECF projects with a higher credit rating, which is indicative of a lower risk profile. The LTV ratio, another risk-related variable, exhibited an antithetical trend, exerting a favourable influence on the success of real estate projects. This finding indicates that projects with a higher loan-to-value

ratio, deemed to be riskier, were funded more expeditiously. One potential explanation for this phenomenon is that investors do not anticipate the failure of these projects, which would otherwise necessitate the sale of collateral. Furthermore, an elevated LTV ratio has the potential to elevate investor expectations regarding returns by assuming an increased level of risk. However, the annual interest rate was not found to be a statistically significant factor in the model. The results of the second OLS model are presented in Table 4.

The second OLS model, which measured the success of RECF projects by the number of investors per project, where projects attracting more investors were considered more successful, was statistically significant (p-value < 0.001). The five independent variables in the model accounted for 36.1 percent of the variation in the dependent variable. As was the case with the initial model, the annual interest rate was determined to be a statistically insignificant success factor, along with credit rating. Three variables were found to be statistically significant (p-value < 0.05) and to have a positive influence on the success of RECF projects: the logarithm of the amount raised, the LTV ratio and project duration. Holding all other independent variables constant, an increase of one percentage point in the amount raised led to an average increase of 75 investors. Additionally, projects with a higher LTV ratio (indicating higher risk) were financed by a larger number of investors, with this number increasing as project duration lengthened. While both models showed a positive effect of the amount raised and project duration on RECF success, the LTV ratio had contrasting effects: it was negative in the first model (funding time) but positive in the second model (number of investors).

5. Discussion

The present study found that, although setting a higher target amount attracts a larger number of investors, it also increases the time required to fund the RECF project. Similar findings were reported by Lukkarinen

Table 4

The second OLS model results

| Dependent variable – number of investors | | |
|--|-------------|---------|
| Variable | Coefficient | p-value |
| Constant | -747.54 | < 0,001 |
| Log amount raised | 75.001 | < 0,001 |
| Annual interest rate | -0.424 | 0.815 |
| Credit rating | 4.944 | 0.387 |
| LTV | 0.412 | 0.004 |
| Project duration | 2.714 | < 0.001 |
| R Squared | 0.361 | |
| Wooldridge test (p-value) | <0.001 | |

et al. (2016) and Slimane and Rousseau (2020), who identified a positive relationship between the project target amount and the number of investors. These results suggest that larger funding targets encourage greater investor participation. Lukkarinen et al. (2016) argue that, in the context of equity crowdfunding, this effect may arise because investors perceive projects with higher funding targets to be more ambitious and capable of delivering higher financial returns. In the Lithuanian context, it was observed that projects with higher funding targets tend to attract a larger number of investors, since investors in Lithuania typically contribute smaller amounts spread across multiple RECF projects. However, Koch and Siering (2019) suggested that a higher target amount might indicate to investors that a project is complex. This could lead to concerns about whether the project owner will be able to fulfil their obligations on time. This hesitation could result in projects taking longer to be financed, which is a trend that was also evident in Lithuania.

In line with previous research results (Berns et al., 2020; Borrero-Domínguez et al., 2020; Chen et al., 2020), this study confirmed that lower credit ratings were negatively correlated with the success of RECF projects. According to Chen et al. (2020), investors tend to prefer lower-risk projects, despite the lower interest rates they offer. However, Moreno-Moreno et al. (2019) found the opposite, indicating that investors were more likely to fund higher-risk projects in expectation of a higher financial return. Notwithstanding these contrasting perspectives, the annual interest rate variable was not statistically significant in the present study, thereby suggesting that observed discrepancies in findings may be attributable to cultural divergences in risk tolerance across nations. Furthermore, the loan-to-value (LTV) ratio was identified as a statistically significant factor in both models, a variable that has not been examined in previous studies. This finding indicated that investors consider the LTV ratio to be an important risk assessment tool, in conjunction with credit ratings. The paucity of studies on this factor may be due to data limitations, as RECF platforms in other countries may not disclose this risk indicator.

The study established a negative correlation between project duration and the success of RECF projects, with the finding that longer repayment periods necessitated more time to secure funding. These findings are consistent with those of previous studies that have identified analogous detrimental effects on both reward- and lending-based crowdfunding (Moreno-Moreno et al., 2019; Prasobpiboon et al., 2021) and specifically on RECF projects (Borrero-Domínguez et al., 2020; Gigante & Cozzio, 2022). This suggests that

investors tend to prefer shorter-term RECF projects, as they provide a quicker return, allowing investors to reinvest it into new opportunities. This perspective is further substantiated by the findings of Gigante & Cozzio (2022), who contend that the condensed nature of project durations enables investors to optimise their returns. In a similar vein, Prasobpiboon et al. (2021) discovered that projects utilising reward-based crowdfunding mechanisms are prone to expedited investment, owing to the diminished perceived risk associated with the imminent completion of the project. However, this conclusion does not necessarily apply to debt-based RECF projects, where the duration of the project is primarily dependent on the repayment of interest and principal, rather than on the completion of the real estate development itself.

6. Conclusions

The present paper makes a contribution to the existing literature on crowdfunding by providing evidence on the effect of project-related factors on the success of RECF projects in the Lithuanian market. While the amount raised, the LTV ratio, and project duration had statistically significant effects and were found to be both indicators of RECF projects' success, the annual interest rate was only one statistically insignificant determinant of RECF projects' success.

The present study was subject to certain limitations, namely the analysis of solely project-related success factors and the utilisation of data from a solitary platform. Borrero-Domínguez et al. (2020) and Gigante and Cozzio also analysed project-related success factors, while Jiang et al. (2020) analysed project owner-related factors. It is recommended that this limitation of the study be eliminated in future research, and that all categories of success factors be investigated. This would include not only those related to projects, but also those related to investors, project owners, and platforms. The majority of researchers, as is evidenced in this study, have analysed data from a single crowdfunding platform (Borrero-Domínguez et al., 2020; Jiang et al., 2020). In this context, a potential avenue for future research is the analysis of data from multiple platforms, with the objective of identifying the factors associated with platform success and determining the factors that differentiate one platform from another.

The results of this study are of crucial importance for two distinct groups. Firstly, project owners seeking to raise funding in an expeditious and effective manner will find the results invaluable. Secondly, crowdfunding platforms that aim to select projects with high potential for success and attract a large number of investors will also find the results pertinent.

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Received on: 17th of October, 2025
Accepted on: 07th of December, 2025
Published on: 26th of January, 2026