FACULTY OF ECONOMICS, TECHNICAL UNIVERSITY OF LIBEREC

Proceedings of the 17th International Conference

LIBEREC ECONOMIC FORUM

2025

Tomas KRTICKA, Ivan SOUKAL

Structural Determinants of Crowdfunding Adoption Across Countries

10.15240/tul/009/lef-2025-08

MOTTO: New Horizons in Economics and Business

Liberec Economic Forum 2025: Proceedings of the 17th International Conference
Publisher: Technical University of Liberec, ISBN 978-80-7494-747-6

Tomas KRTICKA[a]*, Ivan SOUKAL[b]

[a]University of Hradec Králové, Faculty of Informatics and Management, Department of Economics
Rokitanského 62, 500 03 Hradec Králové
tomas.krticka@uhk.cz, **ORCID 0009-0003-6904-4482** *(corresponding author)*

[b]University of Hradec Králové, Faculty of Informatics and Management, Department of Economics
Rokitanského 62, 500 03 Hradec Králové
ORCID 0000-0003-3468-0270

Structural Determinants of Crowdfunding Adoption Across Countries

Abstract

This study is focused on the structural determinants influencing crowdfunding volumes (total digital capital raising) across countries using macroeconomic and institutional variables. A dataset was consisted of 31 countries over a three-year period, the analysis investigates how GDP per capita (PPP), Ease of Doing Business Score, income inequality (GINI coefficient), digital infrastructure, and innovation capacity affect the intensity of digital capital raising per capita. Pearson correlation and multiple linear regressions were employed to assess the explanatory power of each factor. Results show that economic development, ease of doing business, and income inequality are significant predictors of crowdfunding activity, while online banking penetration and the Global Innovation Index did not show statistical significance. The findings suggest that crowdfunding adoption is shaped primarily by systemic and structural readiness rather than narrow technological access. The study contributes to the literature by highlighting the compensatory role of crowdfunding in more unequal societies and using credit card penetration as a proxy of credit market.

Key Words: Digital Finance, Alternative Financing, Crowdfunding

JEL Classification: **G23, E44, O57**

Introduction

A modern crowdfunding is close to celebrate its twenty-fifth anniversary as the platform ArtistShare was founded in 2001. This USA-based platform, unknown to most outside of the USA, was a "fan-funding" platform which became later the blueprint for many of today's well-known crowdfunding websites such as KickStarter, IndieGoGo and PledgeMusic (Camelio Group, 2001). Crowdfunding moved far from raising funds for artists and today it exhibits tremendous potential to support entrepreneurial activities (Cai et al., 2020). The event of global financial crisis in 2008 global financial crisis had significant consequences, particularly in

DOI: 10.15240/tul/009/lef-2025-08

depleting investment capital for small and medium-sized enterprises. Crowdfunding stepped in as an alternative channel which assisted projects in raising funds (Wille, 2025). Since then crowdfunding manifested strong growth rates over the years (Dushnitsky & Zunino, 2018). Pašalić and Pepur (2022) gave crowdfunding as an example of the digital transformation of financial intermediation, yet emphasized that it transcends the boundaries of mere financial transactions. As a result, crowdfunding has gained considerable traction over the last two decades and it became a phenomenon for which both academicians and policy-makers were trying to identify and create a thriving environment.

This article investigates the phenomenon of crowdfunding, with a particular focus on identifying the structural, economic, and institutional factors that influence its level of use across countries. Crowdfunding, a digital and decentralized way to raise money, grows differently in each region. Adamek et al. (2022) offered a compelling macroeconomic perspective on the determinants of crowdfunding, which directly aligns with efforts to understand how structural factors influence digital capital raising. In their analysis of 27 OECD countries, they demonstrated that the development of crowdfunding, specifically the reward-based model is significantly shaped by the institutional depth of the traditional banking sector and macroeconomic indicators such as GDP growth. Outside of OECD in less developed economies more factors starts to interact as structural readiness and technological infrastructure is more pronounced in shaping crowdfunding adoption (Adjakou, 2021).

Which of factors such as the economic output, digital access, and how many people use financial services explain crowdfunding usage? Understanding the wider context in which crowdfunding platforms operate becomes important for explaining national differences. The main objective of this study is to uncover what drives the adoption and intensity of crowdfunding in various national contexts and to describe how these drivers interact.

1. Literature research, methods and data

Pašalić and Pepur (2022) emphasized the role of crowdfunding in creating a closer connection between investor and creator. At the same time, it places greater demands on the creation of a collaborative ecosystem in which the interests of all actors are aligned and effectively managed (Maraglino, 2024).

Adamek et al. (2022) offered a compelling macroeconomic perspective on the determinants of crowdfunding, which directly aligns with efforts to understand how structural factors influence digital capital raising. In their analysis of 27 OECD countries, they demonstrated that the development of crowdfunding, specifically the reward-based model is significantly shaped by the institutional depth of the traditional banking sector and macroeconomic indicators such as GDP growth. It was indicated by their findings that in environments where conventional financial intermediation is either inefficient or access to credit is constrained, crowdfunding

DOI: 10.15240/tul/009/lef-2025-08

emerges as a more appealing alternative for entrepreneurial finance. This observation substantiates the broader hypothesis that financial inclusion and systemic access barriers are central to explaining the adoption of non-traditional financing tools. Crucially, their macroeconomic framework emphasizes the role of structural financial infrastructure rather than merely individual or firm-level characteristics as a key explanatory domain for cross-country variance in crowdfunding activity. In parallel, Adjakou (2021) expanded this structural focus by exploring crowdfunding in the context of a lower income economy where structural readiness and technological infrastructure is even more pronounced in shaping adoption. Taken together, these studies show that macroeconomic fundamentals, institutional quality, and digital trust infrastructure all play a key role in shaping both the demand for and the viability of crowdfunding platforms, making them crucial factors. It was pointed out by Cicchiello et al. (2022) that national welfare models had a strong impact on how widely crowdfunding is adopted. According to Halim (2024), crowdfunding is a growing force in digital financial inclusion, transforming access to finance when supported by strong digital infrastructure, policies, and public trust.

Building on the macroeconomic and institutional insights especially of Adámek et al. (2022), Adjakou (2021) and Cicchiello et al. (2022), this study investigates whether key national characteristics, both economic and institutional, act as significant predictors of digital capital raising across countries. In doing so, it formulates a set of hypotheses reflecting the anticipated relationships between selected macroeconomic, financial, and technological indicators and the intensity of crowdfunding use. This served as our dependent variable: total digital capital raised per capita in USD PPP (later abbreviated as LNDIGF) representing the intensity of crowdfunding use.

As for independent variables, or in general a possible factors of crowdfunding usage, we employed first, Gross Domestic Product per capita in PPP (GDPPC). The variables was used in the analysis due to its empirically established influence on crowdfunding volumes. This relationship was demonstrated by Kukk and Laidroo (2020) as well as Cicchiello et al. (2022), that identified a statistically significant and positive association across multiple model specifications. Their findings indicated that higher GDPPC correlates with increased crowdfunding activity per capita, particularly when controlling for cultural-cognitive variables such as digital service adoption. Second, drawing on insights from Baber (2021) and Rau (2017), the analysis also includes online banking penetration (OBP), which has been recognized as both a relevant determinant of digital finance adoption and a suitable proxy for the maturity of financial infrastructure. Third, Ziegler et al. (2020) suggested that countries with higher innovation capabilities which was reflected in strong Global Innovation Index (GII) scores and a tendency to have more developed crowdfunding ecosystems. Thus GII index was selected as a factor possibly influencing the digital capital raising in a country. Fourth, the relationship between the Ease of Doing Business (EASEOFDB) and crowdfunding was selected. Business friendly regulations and strong investor protections often foster crowdfunding growth. Di Pietro and Butticè (2020) found that the market is larger in countries with a

DOI: 10.15240/tul/009/lef-2025-08

business friendly legal environment. On the other hand, Rau (2017) observed a negative correlation between a country's EASEOFDB rank and crowdfunding volume. Accordingly, EASEOFDB is included in the model to reflect the regulatory and institutional environment. Following Melton et al. (2020), crowdfunding tends to expand where formal finance is hindered by regulatory barriers, suggesting that lower EASEOFDB scores may correspond with greater crowdfunding activity. Finally, we added two novel dimensions: the Gini Coefficient (GINI), representing income inequality that may drive demand for alternative financing, and Credit Card Penetration (CCPEN), capturing the level of financial infrastructure and digital readiness necessary for participation in crowdfunding.

The research question stands as a determination to what extent specific national, above discussed, variables contribute to the intensity of digital capital raising. This research question breaks into subsequent hypotheses, each of which examines and empirically tests one dimension of this broader relationship:

- *H_1: GDP per capita (PPP) is a factor of digital capital raising per capita (USD PPP) in a given country.*
- *H_2: The online banking penetration rate is a factor of digital capital raising per capita (USD PPP) in a given country.*
- *H_3: The Global Innovation Index is a factor of total digital capital raising per capita (USD PPP) in a given country.*
- *H_4: The Ease of Doing Business Score is a factor of total digital capital raising per capita (USD PPP) in a given country.*
- *H_5: The credit card penetration rate is a factor of total digital capital raising per capita (USD PPP) in a given country.*
- *H_6: The Gini coefficient is a factor of total digital capital raising per capita (USD PPP) in a given country.*

The scope of the analysis is cross-national and macro-level, based on data from 31 countries over a three-year period. This measure includes only alternative financing mechanisms intended for small and medium-sized enterprises (SMEs) and self-employed individuals who do not rely on the traditional banking sector. Specifically, the dataset incorporates volumes associated with equity-based crowdfunding (crowdinvesting), reward-based crowdfunding, loan-based crowdfunding, online marketplaces for personal loan requests funded by private investors, and peer-to-peer lending platforms. Traditional bank loans and classic venture capital investments from institutional or private equity sources are explicitly excluded, as their operational logic and market structures differ fundamentally from the emerging, digitally mediated financing methods on which this analysis is centered.

The dataset consists of 31 countries that represent a diverse mix of economic contexts over the past three years, with the aim of quantifying the structural and macroeconomic determinants of crowdfunding adoption. It includes advanced economies such as the United States, the United Kingdom and Germany alongside major emerging markets like Brazil, South Africa, India, and Indonesia, as well as resource-driven and regionally distinctive economies including Saudi Arabia,

DOI: 10.15240/tul/009/lef-2025-08

Nigeria. The sample contains both OECD and non-OECD members, with the goal of variety across Europe, Asia, Africa, the Middle East, and the Americas. Data was used only from past three years, because period 2019–2021 represents an exceptional structural break in the crowdfunding market and therefore should not be treated as part of the normal trend. During COVID-19, the global alternative finance market (excluding China) expanded by 24% in 2020 to $113 billion. Donation-based crowdfunding rose by 160%, MSME funding increased by 51%, and equity crowdfunding grew by nearly 47%. This shows growth far exceeding ordinary growth patterns. (Ziegler et al., 2021).

The data for Gross Domestic Product per capita in PPP, the Ease of Doing Business Score, and the GINI coefficient were retrieved from the World Bank. The online banking penetration rate and credit card penetration figures were sourced from the Statista database. The Global Innovation Index (GII) was obtained from the World Intellectual Property Organization.

The quantitative analysis was conducted using IBM SPSS 30.0. To ensure a more normalized distribution and allow for elasticity-based interpretation of the results, total digital funding per capita was transformed into its natural logarithmic (LN) form creating LNDIGF variable as dependent variable. In the first phase, a Pearson correlation matrix was generated to examine the strength and direction of linear relationships between the dependent variable and a set of explanatory variables. The correlation matrix served as an initial diagnostic tool to reveal potential associations and detect correlations among independent variable pairs. In the second step, the Variance Inflation Factor (VIF) was calculated to evaluate the extent of collinearity among the independent variables, ensuring the robustness of subsequent regression modeling. As the final step, a multiple linear regression analysis was conducted to assess how the selected variables together affect the logarithmic value of digital funding per capita in PPP (LNDIGF).

2. Results of the Research

The empirical analysis focused on identifying macroeconomic and institutional factors that influence the volume of digital capital raised per capita across countries. In the first stage, the Pearson correlation matrix was used to explore pairwise relationships between variables, see Tab. 1.

The strongest and statisticaly significant correlation with LNDIGF was observed for GDP per capita (r = 0.653*), followed by Ease of Doing Business (r = 0.622*), online banking penetration (r = 0.593*), and credit card penetration (r = 0.575*). The Global Innovation Index was weakly correlated with LNDIGF (r = 0.192*), while the GINI coefficient was negatively correlated (r = -0.118), though the result was not statistically significant.

Among the independent variables notable correlations were observed, especially between include GDP per capita and OBP (r = 0.684*), OBP was strongly correlated

DOI: 10.15240/tul/009/lef-2025-08

with EASEOFDB (r = 0.736*) suggesting a possible multicollinearity. The VIF calculation showed 2.73 as the highest value in the case of OBP. The multicollinearity issue was found to be without a notable influence on the result, see Tab. 2.

Tab. 1: The correlation matrix between the independent variables

	LNDIGF	GDPPC	OBP	GII	EASEOFDB	CCPEN	GINI
LNDIGF	1.000						
GDPPC	0.653*	1.000					
OBP	0.593*	0.684*	1.000				
GII	0.192*	0.186*	0.177	1.000			
EASEOFDB	0.622*	0.643*	0.736*	0.250	1.000		
CCPEN	0.575*	0.588*	0.579*	0.226*	0.536*	1.000	
GINI	-0.118	-0.322*	-0.366*	-0.109*	-0.436*	-0.281*	1.000

* p < 0.05 *Source: authors' calculations in IBM SPSS 30.0*

Several models were created based on variables that showed a significant correlation coefficient toward the dependent variable of logarithmic value of digital funding per capita in PPP (LNDIGF). The Gini coefficient was included in the two final models because it manifested statistically significant coefficient in spite of not being significantly correlated directly to explained variable. Model 1 included all the chosen variables, while Model 2 excluded credit card penetration variable. The results of both models are shown in Tab.2 and Tab. 3.

Tab. 2: Regression coefficients and collinearity statistics – Model 1

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	-12.647	3.007		-4.206	0.000		
GDPPC	0.000	0.000	0.327	3.092	0.003*	0.450	2.221
OBP	0.009	0.014	0.079	0.675	0.502	0.365	2.736
GII	0.001	0.007	0.009	0.127	0.899	0.923	1.083
EASEOFDB	0.118	0.041	0.329	2.874	0.005*	0.383	2.610
CCPEN	0.024	0.010	0.221	2.367	0.020*	0.579	1.728
GINI	6.942	2.470	0.222	2.811	0.006*	0.804	1.244

* p < 0.05 *Source: authors' calculations in IBM SPSS 30.0*

The results show that the variable GDPPC has a positive and significant effect (Beta = 0.327), indicating its moderate positive relationship with crowdfunding activity. Weaker, yet significant, positive relationship was found for Ease of Doing Business

DOI: 10.15240/tul/009/lef-2025-08

EASEOFDB (Beta = 0.329), CCPEN (Beta = 0.221), and GINI (Beta = 0.222). On the other hand, the model 1 did not produce significant result for parameters of online banking penetration (OBP) and the Global Innovation Index (GII). Therefore, the results of our hypotheses are as follows:

- *H_1: GDP per capita (PPP) is a factor of digital capital raising per capita (USD PPP) in a given country. RETAINED*
- *H_2: The online banking penetration rate is a factor of digital capital raising per capita (USD PPP) in a given country. REJECTED*
- *H_3: The Global Innovation Index (GII) is a factor of total digital capital raising per capita (USD PPP) in a given country. REJECTED*
- *H_4: The Ease of Doing Business Score is a factor of total digital capital raising per capita (USD PPP) in a given country. RETAINED*
- *H_5: The credit card penetration rate is a factor of total digital capital raising per capita (USD PPP) in a given country. RETAINED*
- *H_6: The GINI coefficient is a factor of total digital capital raising per capita (USD PPP) in a given country. RETAINED*

Tab. 3: Regression coefficients and collinearity statistics – Model 2

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	-13.010	3.082		-4.222	0.000		
GDPPC	0.000	0.000	0.397	3.811	0.000	0.488	2.047
OBPEN	0.016	0.014	0.135	1.149	0.254	0.381	2.624
GII	0.003	0.007	0.030	0.392	0.696	0.936	1.069
EASEOFDB	0.126	0.042	0.353	3.018	0.003	0.386	2.590
GINI	6.752	2.533	0.216	2.666	0.009	0.805	1.243

** $p < 0.05$* *Source: authors' calculations in IBM SPSS 30.0*

The Model 2 excluded the credit card penetration variable from the set of predictors. In this setting, GDP per capita (GDPPC) remained a statistically significant and positive predictor (Beta = 0.397) with a slightly higher standardized coefficient than in Model 1 (Beta = 0.327). The Ease of Doing Business Score (EASEOFDB) and Gini coefficient remained significant with very limited change in the relationship strength.

Both variables, online banking penetration (OBP) and the Global Innovation Index (GII), remained without a significant beta parameter. However, in comparison to Model 1, the p-value for OBP decreased, indicating a small shift in explanatory power. This suggests a partial reduction in overlapping explanatory variance between the two financial access indicators.

DOI: 10.15240/tul/009/lef-2025-08

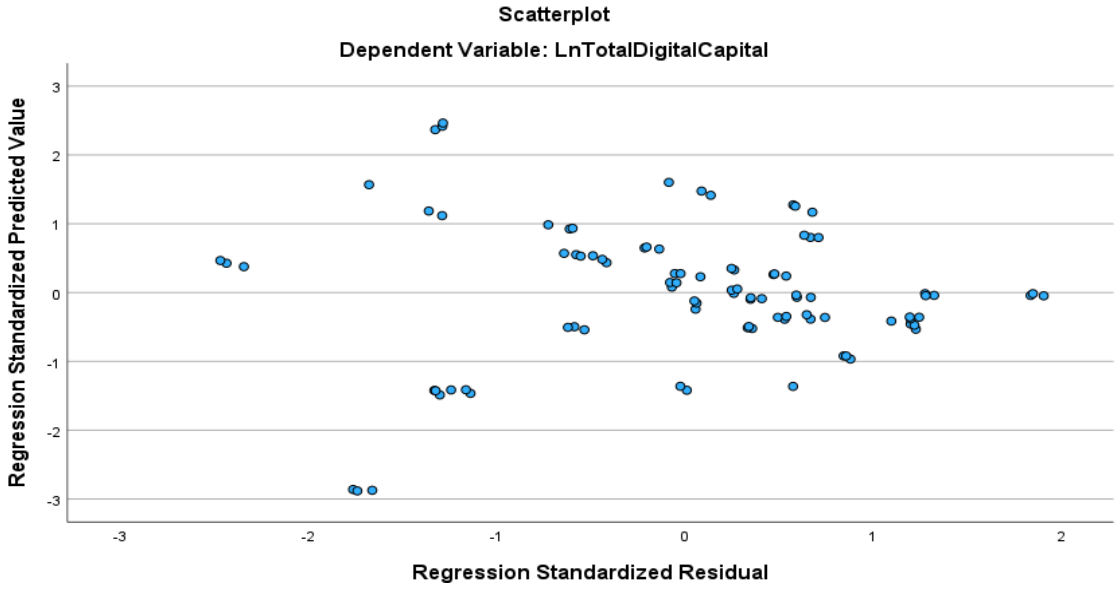
The model quality was assessed by index of determination of 0.567, indicating that approximately 56.7% of the variance was explained by the included predictors. See tab. 4 for more details. Final quality assessment included the resudial analysis, see Fig. 1. A fairly random distribution around zero and without a clear linear pattern or several compact and separated clusters confirmed that the assumptions of linearity and homoscedasticity were not violated.

Tab. 4: Model 2 summary

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
2	,753	0.567	0.537	1.62788

Source: authors' calculations in IBM SPSS 30.0

Fig. 1: Residual Plot for Model 2



** α = 0,05*

Source: authors' calculations in IBM SPSS 30.0

3. Discussion

Based on the results of model 1, we retained H1, H4, H5 and H6 hypotheses. Therefore, we claim that GDP per capita in PPP (GDPPC), Ease of Doing Business Score (EASEOFDP), Credit Card Penetration (CCPEN), and the Gini coefficient (GINI) are predictors of total digital capital raising per capita in PPP (LNDIGF). These results are consistent with Adámek et al. (2022), who emphasized the role of economic development and institutional strength, and Cicchiello et al. (2022), who described the importance of a supportive regulatory environment. The positive

DOI: 10.15240/tul/009/lef-2025-08

effect of GDPPC is in accord with findings by Kukk and Laidroo (2020) and Baber (2021), while the significance of EASEOFDP supports the conclusions of Di Pietro and Butticè (2020). The result of H6 related to Gini coefficient suggests that income inequality may contribute to greater crowdfunding uptake, as crowdfunding often serves populations excluded from traditional finance. The exact mechanism likely varies with the structure of the economy, levels of social trust, and the dominant type of crowdfunding. The findings suggest that inequality does not necessarily suppress crowdfunding. This is in line with Adjakou (2021). It suggests that alternative finance may serve a compensatory role in contexts of high inequality.

We rejected H2 and H3 covering Online Banking Penetration (OBP) and the Global Innovation Index (GII). They did not reach statistical significance, despite being highlighted by Rau (2017) and Ziegler et al. (2020) as potentially supportive of digital finance ecosystems. Their insignificance in this model may reflect varying levels of user engagement or lag effects between infrastructure availability and platform usage. Given these findings, further research is recommended to better understand the role of income inequality measured by the Gini coefficient in shaping crowdfunding behavior, as well as to re-evaluate the influence of Credit Card Penetration (CCPEN) through more granular or behavioral-level data.

Although credit card penetration initially appeared statistically significant in the full regression model, due to its theoretical overlap with online banking penetration, we created a separate model 2. An overlap in a form of multicollinearity was not confirmed by VIF, however, the Occam's blade approach prevailed as model quality changed almost unnoticeably. Moreover, the conceptual distinction between credit card usage and broader digital banking infrastructure may be less relevant in countries where mobile or online payments dominate without relying on credit-based instruments. Credit card penetration may also act more as a proxy for the general economic advancement of a country, rather than capturing a unique, independent dimension of crowdfunding behavior. More in depth research on the matter is needed because it cannot be ruled-out that a specific pro-crowdfunding behavior might be captured by the credit card usage as a proxy.

Overall, the results support the idea that crowdfunding is shaped by broad macroeconomic and institutional frameworks rather than narrow technological measures. The findings provide confirmation of the expectations derived from prior literature except from online banking penetration and the Global Innovation Index which for more in depth research that for example performs segmentation prior to model construction or an analysis of a possible moderation effect instead of a direct linear influence. There are also other variables that may increase the model quality or serve as more precise predictors such as (central) bank interest rates, economic uncertainty, microcredit volume, default rate, HDI or IHDI, financial system type, corruption index, and others. Shneor et al. (2020) also suggests that crowdfunding may not be best to evaluated only by traditional financial indicators to evaluate its performance and development. As an alternative dependent variable a socio-economic benefits are suggested.

DOI: 10.15240/tul/009/lef-2025-08

Conclusion

Crowdfunding provides an opportunity for projects and businesses that may otherwise struggle in fundraising. We investigated which variables contribute to the intensity of digital capital raising and to what extend. We modelled the total digital capital raising per capita in PPP being explained by a set of GDP per capita in PPP, online banking penetration rate, Global Innovation Index, and Ease of Doing Business Score all employed in a previous literature. We contribute by testing credit card penetration rate and the Gini coefficient.

The findings provided confirmation of the expectations derived from prior literature with the exception of Global Innovation Index and online banking penetration rate. GDP per capita in PPP, Ease of Doing Business Score and both card penetration rate and the Gini coefficient showed positive weak-to-moderate effects on total digital capital raising per capita in PPP. The results reinforce the conclusions drawn by Adámek et al. (2022) and Cicchiello et al. (2022), who emphasized the role of structural capacity over individual-level digital adoption in explaining cross-country differences in alternative finance uptake. The results suggest that alternative finance may serve a compensatory role in contexts of high inequality as proposed by Adjakou (2021). An inequality plays a role in shaping demand for alternative finance and, in certain contexts, it may even stimulate its use by encouraging excluded individuals to seek alternative financial channels.

The analysis confirms that structural and macroeconomic conditions influence the level of digital capital raised per capita. The findings suggest that crowdfunding adoption is shaped primarily by systemic and structural readiness rather than narrow technological access. Economic development and regulatory quality proved to be consistent predictors of crowdfunding activity, while digital access do online banking and innovation indicators showed no significant effect when considered alongside aforementioned variables. That raises the need of a further research.

The article faces several limitations that should be considered. First, the analysis relies on data from a three-year period, which restricts the ability to capture long-term patterns or structural changes in crowdfunding dynamics. Second, the study includes a relatively small number of countries, which may reduce the generalizability of the findings and weaken the reliability of statistical conclusions. Third, the countries in the sample represent a wide variety of economic contexts, from highly developed to low-income economies, each operating under different institutional, financial, and cultural conditions. This diversity introduces heterogeneity that a single model may not fully accommodate, potentially affecting the consistency of the observed relationships. Moreover, we did not employ a control variables for a geographical or institutional influence.

DOI: 10.15240/tul/009/lef-2025-08

Acknowledgment

The research/work was supported by the internal project "SPEV – Economic Challenges and Opportunities within Industry 4.0 and the Societal Concepts of 5.0 and 6.0", 2025, University of Hradec Králové, Faculty of Informatics and Management, Czech Republic.

References

ADAMEK, E., & JANKU, J. (2022). What drives small business crowdfunding? Impact of macroeconomic and financial factors. *Czech Journal of Economics and Finance, 72*(2), 172–196. https://doi.org/10.32065/CJEF.2022.02.04

ADJAKOU, O. J. L. (2021). Crowdfunding adoption in Benin: Influencing factors and recommendations towards an adapted model. *Open Journal of Business and Management, 9*(1), 233–254. https://doi.org/10.4236/ojbm.2021.91013

BABER, H. (2021). Financial inclusion and crowdfunding – A study of European countries. *Review of Applied Socio-Economic Research, 22*(2), 37–48. https://doi.org/10.54609/reaser.v22i2.104

CAI, W., POLZIN, F., & STAM, E. (2020). Legal institutions, social capital, and financial crowdfunding: A multilevel perspective. In *Advances in crowdfunding* (pp. 183–205). Springer International Publishing. https://doi.org/10.1007/978-3-030-46309-0_9

CAMELIO GROUP. (2001). Artist Share About Us. https://www.artistshare.com/about

CICCHIELLO, A. F., GALLO, S., & MONFERRÀ, S. (2023). Financing the cultural and creative industries through crowdfunding: The role of national cultural dimensions and policies. *Journal of Cultural Economics, 47*(1), 133–175. https://doi.org/10.1007/s10824-022-09452-9

DI PIETRO, F., & BUTTICÈ, V. (2020). Institutional characteristics and the development of crowdfunding across countries. *International Review of Financial Analysis, 71,* 101543. https://doi.org/10.1016/j.irfa.2020.101543

DUSHNITSKY, G., & ZUNINO, D. (2018). The role of crowdfunding in entrepreneurial finance. *SSRN Electronic Journal.* https://doi.org/10.2139/ssrn.3237356

HALIM, M. A. (2024). Does crowdfunding contribute to digital financial inclusion? *Research in Globalization, 9,*100238. https://doi.org/10.1016/j.resglo.2024.100238

KUKK, M.-L., & LAIDROO, L. (2020). Institutional drivers of crowdfunding volumes. *Journal of Risk and Financial Management, 13*(12), 326. https://doi.org/10.3390/jrfm13120326

MELTON, A., DAMRON, T., MCCARTHY, V., & RUPP, W. (2020). Leveraging technology through crowdfunding to ease barriers of entry into the marketplace. *International Journal of Applied Management and Technology, 19*(1). https://doi.org/10.5590/ijamt.2020.19.1.06

PAŠALIĆ, I., & PEPUR, S. (2022). Development of crowdfunding literature: A review study. *Ekonomska Misao i Praksa, 31*(1), 141–162. https://doi.org/10.17818/emip/2022/1.7

SHNEOR, R., FLÅTEN, B.-T., & ZHAO, L. (2020). The future of crowdfunding research and practice. In *Advances in crowdfunding* (pp. 499–519). Springer International Publishing. https://doi.org/10.1007/978-3-030-46309-0_21

WILLE, N. (2025). A comprehensive framework for understanding the influence of macroeconomic factors on crowdfunding and directions for future research. *Journal of Economic Analysis, 4*(3), 111–141. https://doi.org/10.58567/jea04030006

ZIEGLER, T., SHNEOR, R., & ZHANG, B. Z. (2020). The global status of the crowdfunding industry. In *Advances in crowdfunding* (pp. 43–61). Springer International Publishing. https://doi.org/10.1007/978-3-030-46309-0_3

ZIEGLER, T., SHNEOR, R., WENZLAFF, K., SURESH, K., DE CAMARGO PAES, F. F., MAMMADOVA, L., WANGA, C., KEKRE, N., MUTINDA, S., WANG, B. W., LÓPEZ CLOSS, C., ZHANG, B. Z., FORBES, H., SOKI, E., ALAM, N., & KNAUP, C. (2021). *The 2nd global alternative finance market benchmarking report.* Cambridge Centre for Alternative Finance, University of Cambridge. https://ssrn.com/abstract=3878065

DOI: 10.15240/tul/009/lef-2025-08