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Exploring the Role of Financial Literacy in Enhancing Firm Access to Finance: Insights from Romania

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Abstract. *This paper employs Romanian firm-level microdata to assess the impact of financial literacy on access to bank loans on the extensive margin (the probability of being granted a loan) using logit model as estimation method. To pursue this research objective, we use granular and unique data from the Credit Registry, from the financial statements submitted by firms to the Ministry of Finance, while financial literacy data was collected through a survey on 11,000 firms representative nationally, regionally, by sector and size. We fill important gaps in the literature, given that most existing empirical studies are generally based on small samples, of firms mainly located in non-EU areas, while the lack of financial literacy definition standardization has led to inconsistent and unreliable results in the existing literature. We address this issue, by employing internationally accepted definitions, respectively the OECD methodology, for assessing MSMEs financial literacy. We find that firm characteristics, such as size, together with financial standing illustrated in liquidity, profitability and leverage ratios and creditworthiness illustrated in credit history and loan to value are significant predictors of firms' access to finance. More importantly, we provide evidence that financial literacy positively and significantly impacts access to finance, while among financial literacy components, financial attitude and financial knowledge have the strongest influence. This study's findings provide valuable insights for both policymakers and firms for improving access to bank loans, leading to a more inclusive and efficient lending environment, with effects on economic growth and financial stability.*

Keywords: access to credit, financial literacy, SME financing, small and medium-sized enterprises, microdata.

Introduction

Entrepreneurs' financial education has recently attracted attention from both academia and public authorities. Non-financial companies, particularly small and medium-sized enterprises (SMEs), which are prevalent in most economies, play a crucial role in generating innovation and economic growth, while being also essential to job creation. As a result, the financial education of SMEs has gained significant interest in recent years, given their importance in the economy and the significant challenges they face (such as limited access to finance, higher financing costs, lack of collateral, and lower financial literacy levels).

This field has space for further exploration, given that most empirical studies in the existing literature are generally based on small samples, of firms mainly located in non-EU areas, while the results are rather confusing. Despite the recent intensification of research papers on financial

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literacy and efforts to unify the concept, there is still no consensus on its definition. This lack of standardization has led to inconsistent results, given the variety of concepts present in the literature, including the incorrect and interchangeable use of the terms financial knowledge, financial education, and financial literacy.

Several studies have highlighted that SMEs face greater financial constraints than larger firms and are less likely to obtain formal financing (Stiglitz & Weiss, 1981). SMEs are frequently considered less transparent borrowers that generate higher costs for lenders in terms of screening and monitoring. Additionally, they tend to be younger firms that often lack a solid credit history, market reputation, and assets to offer as collateral (Beck et al., 2008). Moreover, SMEs are usually riskier borrowers, characterized by weaker financial metrics and greater uncertainty regarding sales and profits (Petersen & Rajan, 1994; Beck et al., 2006).

This paper examines the impact of entrepreneurs' financial literacy on their ability to access credit from banks. This topic remains largely unexplored, and the reliability of the results is questionable, primarily due to the limited availability of information on access to credit usually available in Credit Registries and also of reliable data assessing entrepreneurs' financial literacy. Leveraging unique and granular databases derived from financial statements submitted by firms to the Ministry of Finance and from the Central Credit Registry, the paper investigates the role of financial literacy on the firms' probability of accessing bank loans. For evaluating financial literacy, we use a comprehensive sample of around 9,000 firms activating in Romania (out of 11,000 invited to participate in the survey), representative at national and regional level, by economic sector and size. The data on financial literacy level was collected via survey, ran by the National Bank of Romania in collaboration with the Romanian National Institute of Statistics, in March – April, 2023.

After this introduction, the paper includes a review of the relevant literature, a section describing the data and methodology used in the analysis, followed by a section presenting the empirical results and discussing their implications. The last section concludes the paper by summarizing the main findings and offering policy recommendations.

Literature review

Banks represent the primary source of external debt financing for SMEs in both developed and developing economies (Carvajal & Didier, 2024). However, firms and in particular SMEs, display a preference for internal funds (Rajan & Zingales, 1995), the reliance on internal funds being more pronounced in countries with weaker financial markets. This is also the case in Romania, where over 80 percent of the firms use internal funds to finance their daily activities (NBR, 2024).

Empirical evidence highlights several factors that limit firms' access to bank loans, starting with firm-specific characteristics such as size, age and ownership structure, collateral availability, financial health and credit history, and continuing with bank specific factors, sectoral specific factors and regional disparities. Briozzo et al. (2016), based on a dataset of firms from Argentina find that the key factors influencing SME financing behavior include firm-specific characteristics, such as age, size, and legal form, as well as owner-related aspects like age, education, and perceived emotional costs of bankruptcy. In addition, Andrieu et al. (2018), based on a probit model, show that age and size are positively influencing SMEs' access to bank credit, while firms in manufacturing are more likely to receive loans compared to non-manufacturing SMEs. In the same direction, Serrasqueiro & Nunes (2012), use panel data models to examine the influence of firms' age on the financing decisions of Portuguese SMEs. Moreover, Jimenez-Rico et al. (2023) identify the key determinants of access to bank financing, based on a sample of 1,480 firms from Mexico,

respectively the firm age, size, ownership, and economic sector. Kumar & Rao (2017) examine the impact of demand-side factors on financing decisions, such as SME owner/manager goals, risk preferences, control over the business, networking ties, and personal characteristics.

In addition, Mac an Bhaird & Lucey (2014) investigates the firms' capital structure determinants of 299 Irish SMEs. It finds that age, size, ownership structure, and collateral provision are key factors. The influence of these variables is consistent across industries, reflecting the universal impact of information asymmetry. Beck et al. (2006) study a sample of 10,000 SMEs from 80 countries over the period 1995-1999 to examine the determinants of financing impediments. Their findings indicate that older, larger, and foreign-owned firms experience fewer financing challenges.

Moreover, Bougheas et al. (2006) using a theoretical model, highlight the firm characteristics that influence access to bank or market financing and their sensitivity to credit tightening during interest rate hikes. Empirical analysis on UK manufacturing firms suggests that smaller, younger, and riskier firms are more adversely affected by monetary conditions tightening compared to their larger, older counterparts. Moreover, Finnegan & Kapoor (2023) show that the unconventional monetary policy ran by ECB after the global financial crisis, had a significant impact on the SMEs access to finance in the most affected countries (PIGS). Specifically, their findings suggest that for leveraged firms the probability to access credit was negatively affected.

Delayed payments pose a considerable risk to the financial stability of European SMEs, (Kaya, 2024). Empirical evidence from 11 European countries shows that SMEs frequently or occasionally affected by late payments report challenges in obtaining financing. The main driver behind this is credit rationing, as banks may perceive cash flow volatility as heightened risk, leading them to tighten lending standards. Lopez-Garcia & Sogrob-Mira (2008) examine the pecking order and trade-off theories in SME financing pattern, using panel data from 3,569 Spanish SMEs. Factors such as growth opportunities, internal resources, size, and age significantly influence SME capital structure, highlighting distinct financing behaviors compared to larger firms.

Although research on financial literacy has expanded, studies focusing on its connection to MSMEs/SMEs remain scarce. Rekha et al. (2024) examines publication trends across different periods and reviews key empirical studies, to define financial literacy, to explore its dimensions, and to identify its impact on key variables. Their bibliometric analysis reveals that business, management, and accounting are the dominant areas approached in the literature in relation to SMEs, with a recent shift toward economics and finance. Their literature review identifies three main insights: (i) financial literacy components mainly used include knowledge, awareness, and skills; (ii) there is no standardized scale to measure the financial literacy; and (iii) financial literacy plays a critical role in determining access to finance and enterprise performance. Another comprehensive and recent review of financial literacy research in SMEs area, which combines bibliometric analysis with a systematic literature review (Molina-García et al., 2023), reveals that SME financial literacy research primarily focuses on five areas: performance, access to finance, innovation, risk attitudes and entrepreneurship, and owner-manager dynamics.

The lack of adequate financial literacy is considered a significant obstacle, representing one of the key barriers to the long-term and sustainable growth of MSMEs (Ye & Kulathunga, 2019). Additionally, financial literacy was identified as a predictor of both access to finance and financial risk attitude. Furthermore, Mabula & Ping (2018) highlight a positive association between the financial literacy of managers and access to finance. The results of Hussain et al. (2018) support the view that financial literacy enhances the ability of SMEs to prepare financial information, which, in turn, improves their capacity to access external funding. Similarly, the results of Duran

Hererra et al. (2023) using Partial Least Square Structural Equation Modeling (PLS-SEM) reveal that financial literacy positively impacts access to finance, financial risk management, competitive advantage, and the overall MSME performance.

Calcagno et al. (2024) examine how the financial literacy of micro-entrepreneurs affects their access to bank credit, using data from a Bank of Italy survey on companies with less than 10 employees. Their findings show that more financially literate micro-entrepreneurs are more likely to apply for a loan, as they are less often discouraged from borrowing. However, financial literacy does not significantly impact loan approval chances. The study also highlights that financially literate entrepreneurs are more inclined to seek professional advice and are aware of public guaranteed schemes, both of which increase their likelihood of applying for a loan.

In the case of Romania, empirical studies are even scarcer. A recent study by Ichim & Vid (2024) emphasizes the significant role that financial education and the training level of executive management play in the success of companies. Using a logistic regression model, the results show that a level of financial literacy and digitalization above the national average, along with executive management possessing higher education degrees in economics or relevant fields for the industry, increases the estimated average probability of success by more than four times.

Methodology

We employ Romanian firm-level microdata to assess the impact of financial literacy on access to bank loans, on the extensive margin (the probability of being granted a loan) using logit model as estimation method. To pursue this research objective, we use granular and unique data from several sources: i) loan level information from the Credit Registry, ii) financial statements from the Ministry of Finance and iii) financial literacy data collected through the Survey on the access to finance of non-financial corporations in Romania (NBR, 2023), which is similar to the European Commission and European Central Bank SAFE survey, the 2023, March exercise comprising a new section assessing financial education following OECD methodology.

Our initial sample includes 8,875 firms activating in Romania (after intersecting the three data sources), a European Union member state. The use of such a comprehensive data set is very important since most existing empirical analyses are generally based on small samples such as in Mabula & Ping (2018) where a sample of 520 firm is employed or 37 SMEs in Hussain et al. (2018), located mainly in non-Europe countries.

Within the sample, 83 percent of the firms are MSMEs, specifically 29 percent are micro-enterprises, 27 percent are small and 27 percent are medium enterprises, the rest representing large companies. The majority of the firms in the sample are privately-owned (97 percent), while 22 percent of them are foreign owned. The median firm age is 17 years. Over half of the firms in the sample (52 percent) has an outstanding loan registered in the Central Credit Registry of the National Bank of Romania as at March 2023, while 37 percent contracted bank loans or credit lines in the past 12 months according to the data collected via survey. As regards the financial literacy score, the average value of the indicator, within the sample, is 78 out of 100, by firm size the mean financial literacy score being as follows: 69 for micro-enterprises, 78 for small firms, 83 for medium enterprises and 86 for large corporations.

We than restrict our sample only to firms that have applied for bank loans and credit lines, reducing it to 4,117 firms, out of which the application of 14.7 percent did not materialize in a loan contract.

Logit models are extensively used to evaluate firms' access to finance, demonstrating versatility in assessing factors influencing access to finance across different contexts and samples

(Guercio et al., 2019; Nguyen et al., 2015; Wang et al., 2020; Moro et al., 2017). Logit models are more widely used in practice, for instance compared to probit models, due to their simplicity and easier interpretation of coefficients.

Our empirical specifications examine the impact of financial literacy on access to finance, for firms that applied for bank loans or credit lines, controlling for differences in firm characteristics. As a measure of access to bank loan we used a dummy variable which equals 1 if a firm applied for bank loans or credit lines in the last 12 months before the survey (specifically the period March 2022 – February 2023), received the entire amount and contracted the loan and 0 otherwise, analogous to Wang et al. (2020) and Moro et al. (2017). The regressors are contemporary firms' characteristics such as size and age similar to other studies (Briozzo et al., 2016; Calcagno et al., 2024; Mertzanis, 2017; Dumitru & Dumitru, 2024; Cehajic & Kosak, 2022), firm's financial standing measures including liquidity, leverage and profitability (ROA) like in Öztürk & Mrkaic (2014), Dumitru & Dumitru (2024), Ichim & Vid (2024), as well as creditworthiness indicators such as credit history and loan to value. All explanatory variables are depicted in **Table 1**. The focus of this study consists in the significance of financial literacy and its components, as defined in **Table 1**, on the probability of accessing bank loans. The lack of financial literacy definition standardization has led to inconsistent and unreliable results in the existing literature, stemming from the variety of concepts present in the literature, including the incorrect and interchangeable use of the terms financial knowledge, financial education, and financial literacy. We address this issue, by employing internationally accepted definitions, respectively the OECD methodology, for assessing MSMEs financial literacy.

The model used to investigate the firms' probability to access bank loans has the following form:

$$L_i = \alpha + \sum_k \delta^k X_i^k + \beta_i + \mu_i + \gamma_i + \epsilon_i$$

where L_i represents the logistic transformation of the probability of access to finance for firm i, and X_i^k are the characteristics of the firm as described in **Table 1** and ϵ_i is the error term, while county (μ_i) and sector (γ_i) capture unobserved heterogeneity in the data.

We also control for supply side, the bank specific factors (β_i), given that banks' risk appetite and the degree of competition in the banking sector can influence loan accessibility (Petersen & Rajan, 1995) and that larger, more diversified banks may offer better access but can impose stricter terms (Berger et al., 2001).

Table 1. Variables included in the model specifications

Variable name	Definition	Source
access to bank loans	Dummy variable which equals 1 if the firm applied for bank loans or credit lines in the past 12 months (before March 2023) and contracted the loan or 0 if the application did not materialize in a lending contract.	National Bank of Romania's Survey on access to finance of the non-financial corporations in Romania (SAFE) – NBR (2023)
size	Firm size computed as the logarithm of total turnover.	Ministry of Finance (annual financial statements)
age	Firm age calculated using the year the company was founded.	National Trade Register Office (ONRC)
leverage	Calculated as debt to total assets, as of 2023. A higher ratio indicates a larger portion of assets is financed through debt.	Ministry of Finance (annual financial statements)
current liquidity ratio	Current assets to current liabilities, as of 2023. A ratio greater than 1 indicates that the company has more	Ministry of Finance (annual financial statements)

Variable name	Definition	Source
	current assets than current liabilities, suggesting good short-term financial health.	
return on assets	Return on assets calculated as net profit to total assets, as of 2023.	Ministry of Finance (annual financial statements)
credit history	Dummy variable which equals 1 if the firm registers negative credit history as of March 2023, respectively non-performing loans according to EBA definition (90+ days past due or unlikely to pay).	Central Credit Registry
loan to value	Mean loan to value for firms' active loans as of March 2023.	Central Credit Registry
multiple loans	Dummy variable which equals 1 if the firm has more than 1 outstanding loan as of March 2023.	Central Credit Registry
financial knowledge	The knowledge score is computed following the OECD methodology as the number of correct responses to five financial knowledge questions, asking respondents to indicate whether a series of statements are true or false. The questions forming the basis of the financial knowledge score assess the understanding of firm owners of key financial concepts that are relevant for their business, such as the functioning of dividends and equity ownership, the relationship between expected risk and expected return, inflation and the time value of money, and the link between interests paid and loan maturity. It represents a continuous variable ranging from 0 to 29.	National Bank of Romania's Survey on access to finance of the non-financial corporations in Romania (SAFE) – ran in March 2023
financial behavior	The financial behavior score is computed following the OECD methodology based on questions regarding firm owner's plan for the future, how they manage business data, how they control financial costs, and whether they demonstrate other financially savvy behaviors such as prudence when making financial decisions. It represents a continuous variable ranging from 0 to 53.	National Bank of Romania's Survey on access to finance of the non-financial corporations in Romania (SAFE) – ran in March 2023
financial attitude	The financial attitude score of firm owners computed following the OECD methodology depends on whether they demonstrate three financially savvy attitudes, namely their ability to plan beyond the short term, to finance the business and to demonstrate a prudent attitude. It represents a continuous variable ranging from 0 to 18.	National Bank of Romania's Survey on access to finance of the non-financial corporations in Romania (SAFE) – ran in March 2023
financial literacy	The financial literacy of firm owners is assessed via the financial literacy score and is the sum of the three components: financial knowledge, financial attitudes, and financial behaviors, previously defined. Financial literacy score range between 0 and 100.	National Bank of Romania's Survey on access to finance of the non-financial corporations in Romania (SAFE) – ran in March 2023
bank	The bank from which the firm has taken out the loan.	Central Credit Registry
sector	The economic sector according to CAEN Rev. 2 in which the firm activates.	Ministry of Finance
county	The county, NUTS-3 level, in which the firm is registered.	Ministry of Finance

Source: Authors' own research.

Database was constructed using Matlab software, while all estimations were performed in Stata. Model specification was tested with *linktest*, which showed the model is properly specified.

We also checked for multicollinearity using VIFs (Variance Inflation Factors). Moreover, robustness of results was highlighted by same sign and significance for coefficients in similar specifications estimated with different methods, respectively probit and linear regression models.

Results and discussions

In this section we present the main results based on three different specifications: firstly, the baseline equation (1) illustrating the main factors influencing firms' success to access bank loans, then we extend this specification with financial literacy variable - specification (2) and the components of financial literacy in specification (3). We present estimations both at coefficient level (**Table 2**) and at marginal effects level (**Table 3**). Results are consistent across all specifications.

We find that firm size is significantly influencing the probability of access to bank loans, showing that smaller firms are less likely to use financing from banks. There is a consensus in the literature that firm size can positively affect the access to credit (Dumitru & Dumitru, 2024; Cehajic & Kosak, 2022), larger firms having increased negotiating power (Cenni et al., 2015), more transparent and audited financial statements (Petersen & Rajan, 2002; Ortiz-Molina & Penas, 2008), while owning more tangible assets that can be used as collateral (Gompers, 1995). However, age is not a significant factor for accessing a loan, a similar result obtained by Dumitru & Dumitru (2024) for firms in the CEE region.

Table 2. Estimation results - coefficients

	(1)	(2)	(3)
VARIABLES	**Probability of accessing bank loans**		
age	0.002	0.002	0.002
	(0.006)	(0.006)	(0.006)
leverage	-0.400***	-0.398***	-0.395***
	(0.136)	(0.136)	(0.136)
size	0.155***	0.141*	0.138***
	(0.032)	(0.032)	(0.032)
liquidity ratio	-0.092*	-0.095*	-0.094*
	(0.055)	(0.055)	(0.055)
return on assets	1.117**	1.117**	1.175**
	(0.508)	(0.509)	(0.511)
negative credit history	-0.593***	-0.597***	-0.605***
	(0.220)	(0.220)	(0.221)
financial knowledge			0.015**
			(0.008)
financial behavior			0.001
			(0.004)
financial attitude			0.016*
			(0.010)
loan to value	-0.003***	-0.004***	-0.004***
	(0.001)	(0.001)	(0.001)
multiple loans	0.216**	0.213**	0.209*
	(0.107)	(0.107)	(0.107)
financial literacy		0.007**	

	(1)	(2)	(3)
VARIABLES	**Probability of accessing bank loans**		
		(0.003)	
Observations	4,043	4,043	4,043
County FE	Yes	Yes	Yes
Sector FE	Yes	Yes	Yes
Bank FE	Yes	Yes	Yes
Robust standard errors in parentheses			
*** p<0.01, ** p<0.05, * p<0.1			

Source: Authors' own research.

Turning to financial position factors, we find that leverage is significantly and negatively associated with the firms' access to finance, with 10 percentage points increase in debt to asset ratio decreasing the probability of accessing bank loans by 47 percentage points (**Table 3**), keeping all other variables unmodified. A similar influence of leverage on access to finance is obtained by Öztürk & Mrkaic (2014) for a sample of firms in euro area and Dumitru & Dumitru (2024) for CEE and Western EU countries.

Another financial indicator influencing the firms' probability to access bank loans is the liquidity position (**Table 2**). We find that increasing the current liquidity ratio by one unit, keeping all other variables constant, increases the probability of accessing financing from banks by 1.1 percentage points (**Table 3**). This result is in line with Ichim & Vid (2024) findings that a firm with a good liquidity position, respectively a value ranging between 100 percent and 200 percent of the indicator increases the firms' chances to success.

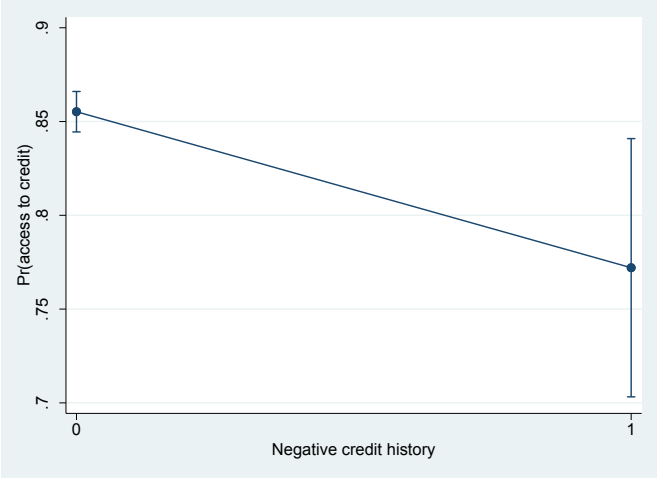

Figure 1. The impact of negative credit history on the predicted probability of access to credit (with 95% confidence interval)

Source: Authors' own research.

Credit history, and more specifically negative credit history, plays a pivotal role in determining a firms' ability to access credit, being significantly and negatively associated with the access to finance. We show that firms with negative credit history (over 90 days past due payments or unlikely to pay flag) are 7 percentage points less likely to secure credit (**Table 3, Figure 1**). This finding is in line with other empirical studies which show that firms with negative credit histories face higher costs and file rejections (Petersen & Rajan, 1994), while companies with longer and cleaner credit history are more likely to access formal credit markets (Berger & Udell, 2006).

Similarly, we find that firms having another ongoing loan, are more likely to access credit (+2.6 percentage points compared to a firm not having other loans, **Table 3**). This is explained by the fact that firms with established borrowing relationships with banks have easier access to new credit due to reduced information asymmetry and lower monitoring costs (Petersen & Rajan, 1994).

Table 3. Estimation results – marginal effects

	(1)	(2)	(3)
VARIABLES	Probability of accessing bank loans		
age	0.001	0.001	0.001
	(0.001)	(0.001)	(0.001)
leverage	-0.047***	-0.047***	-0.047***
	(0.018)	(0.016)	(0.016)
size	0.018***	0.017***	0.016***
	(0.004)	(0.004)	(0.004)
liquidity ratio	0.011*	0.011*	0.011*
	(0.006)	(0.006)	(0.006)
negative credit history	-0.070***	-0.071***	-0.071***
	(0.026)	(0.025)	(0.026)
financial knowledge			0.002*
			(0.001)
financial behavior			0.001
			(0.000)
financial attitude			0.002*
			(0.001)
loan to value	-0.001***	-0.001***	-0.001***
	(0.001)	(0.001)	(0.001)
multiple loans	0.026**	0.025**	0.025*
	(0.013)	(0.013)	(0.013)
financial literacy		0.001**	
		(0.001)	
Observations	4,043	4,043	4,043
County FE	Yes	Yes	Yes
Sector FE	Yes	Yes	Yes
Bank FE	Yes	Yes	Yes
Robust standard errors in parentheses			
*** p<0.01, ** p<0.05, * p<0.1			

Source: Authors' own research.

Another interesting result we find is that loan value to the property pledged as collateral value influences the probability of accessing bank loans (**Table 3**). This result is in line with the existing empirical evidence showing that pledging more collateral improves firms' likelihood to access finance given that collateral mitigates information asymmetry and moral hazard, encouraging lenders to extend credit (Berger & Udell, 1990), while also obtaining better terms of credit such as lower interest rates and longer maturities (Jiménez, et al., 2006). More specifically, Beck et al. (2008) shows that in developing countries, SMEs that have available collateral to pledge are more likely to access formal credit.

Turning to the novelty and the focus of the study, we provide evidence that financial literacy positively and significantly impacts access to finance (**Table 2**). We find that an increase in the firms' financial literacy score by 10 points leads to an increase of 1 percentage points in the probability to access a bank loan. Specifically, the predicted average probability of access to finance increases from 77 percent for a firm with the no financial literacy, to 87 percent for a firm financially literate (a maximum score), keeping all other variables constant, **Figure 2**. Among financial literacy components, financial attitude, respectively the mindset, beliefs, and tendencies of a firm in managing its financial resources and making financial decisions and financial knowledge, have the most important impact on access to finance (**Table 2**, **Table 3**). Financial literacy has a positive impact on access to finance due to some implications of a strong financial education. Among them we mention keeping better financial practices, respectively adequate financial documentation and good creditworthiness, which according to Beck et al. (2008) improves loan approval rates. Financially literate firms make more informed decisions, improving their chances of accessing financing (McKenzie & Woodruff, 2014), while having stronger negotiation power also favoring credit access (Klapper et al., 2012).

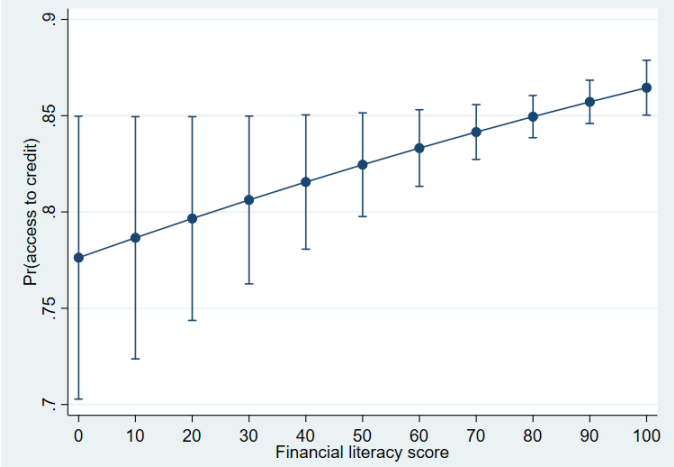

Figure 2. The impact of financial literacy on the predicted probability of access to credit (with 95% confidence interval)

Source: Authors' own research.

This study's findings provide valuable insights for both policymakers and firms to improve access to bank loans, with impact on financial intermediation and economic growth. On one hand, our results can inform the design and implementation of targeted financial education programs, that can be integrated in the national strategies for economic development, especially in underbanked regions and sectors. On the other hand, the study reveals for firms the importance of increasing their financial expertise in order to increase their chances to obtain bank financing. To this end, firms can intensify training and address the gaps in financial knowledge and practices. In this way, both policymakers and businesses can create a more inclusive and efficient lending environment, with effects on economic growth and financial stability.

Conclusion

While financial literacy has been intensively studied recently, empirical evidence on the impact of financial literacy of firms on their access to bank loans remains scarce. Our paper offers substantial innovation by employing a unique and granular dataset of around 9,000 firms located in an EU member state - Romania, combining several reliable data sources to fill the significant gap in the

literature. Most existing empirical studies are generally based on small samples, of firms mainly located in non-EU areas, while the results are rather confusing. Despite the recent intensification of research papers on financial literacy and efforts to unify the concept, there is still no consensus on its definition. The lack of financial literacy definition standardization has led to inconsistent and unreliable results in the existing literature. We address this issue, by employing internationally accepted definitions, respectively the OECD methodology, for assessing MSMEs financial literacy.

By applying a widely employed methodology for studying probabilities, specifically logit models, we find that firm size is significantly influencing the probability of access to bank loans, showing that smaller firms are less likely to access finance from banks. Moreover, the financial standing of the firm, illustrated in the liquidity, profitability and leverage of the firm, pose a significant influence on the firms' chance to access bank loans. Credit history, and more specifically negative credit history, plays a pivotal role in determining a firms' ability to access credit, being significantly and negatively associated with the access to finance.

The novel and most important finding of the study is that we provide evidence that financial literacy positively and significantly impacts access to finance. Among financial literacy components, financial attitude, respectively the mindset, beliefs, and tendencies of a firm in managing its financial resources and making financial decisions, as well as financial knowledge have the most important impact on access to finance.

This study's findings provide valuable insights for both policymakers and firms to improve access to bank loans, with impact on financial intermediation and economic growth. On one hand, our results can inform the design and implementation of targeted financial education programs, that can be integrated in the national strategies for economic development, especially in underbanked regions and sectors. On the other hand, the study reveals for firms the importance of increasing their financial expertise in order to increase their chances to obtain bank financing. To this end, firms can intensify training and address the gaps in financial knowledge and practices. In this way, both policymakers and businesses can create a more inclusive and efficient lending environment, with effects on economic growth and stability.

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